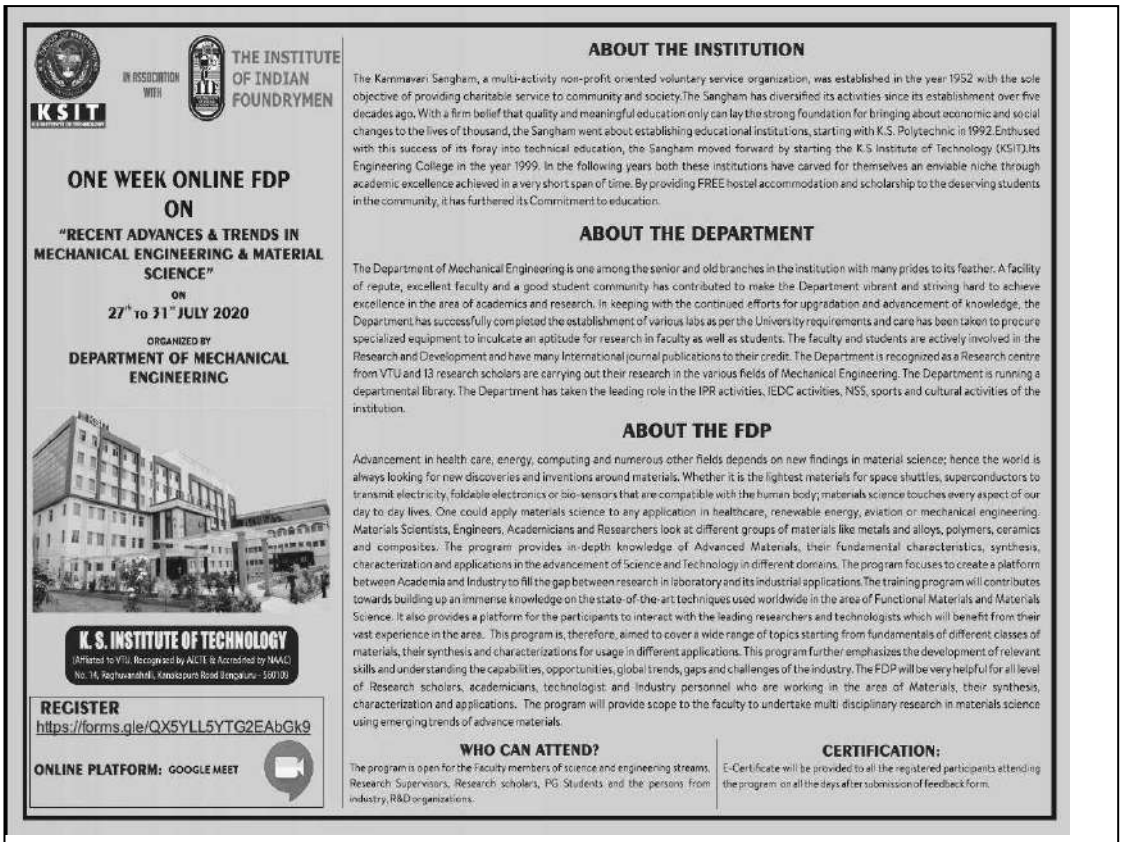
K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109

#14, Raghuvanahalli, Kanakapura Main Road, Bengaluru-5600109

DEPARTMENT OF MECHANICAL ENGINEERING

FDP: One Week Online Faculty Development Programme on Recent Advances &Trends in Mechanical Engineering & Material Science.

BROCHURE



IN ASSOCIATION WITH THE INSTITUTE OF INDIAN FOUNDRYMEN

ONE WEEK ONLINE FDP ON

"RECENT ADVANCES & TRENDS IN MECHANICAL ENGINEERING & MATERIAL SCIENCE"

ON

27th TO 31st JULY 2020

ORGANIZED BY

DEPARTMENT OF MECHANICAL ENGINEERING

K. S. INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Recognized by AICTE & Accredited by NAAC)
No. 14, Raghuvanahalli, Kanakapura Road Bengaluru - 560109

REGISTER
https://forms.gle/QX5YLL5YTG2EAbGk9

ONLINE PLATFORM: GOOGLE MEET

ABOUT THE INSTITUTION

The Kammavari Sangham, a multi-activity non-profit oriented voluntary service organization, was established in the year 1952 with the sole objective of providing charitable service to community and society.The Sangham has diversified its activities since its establishment over five decades ago. With a firm belief that quality and meaningful education only can lay the strong foundation for bringing about economic and social changes to the lives of thousand, the Sangham went about establishing educational institutions, starting with K.S. Polytechnic in 1992.Enthused with this success of its foray into technical education, the Sangham moved forward by starting the K.S Institute of Technology (KSIT).Its Engineering College in the year 1999. In the following years both these institutions have carved for themselves an enviable niche through academic excellence achieved in a very short span of time. By providing FREE hostel accommodation and scholarship to the deserving students in the community, it has furthered its Commitment to education.

ABOUT THE DEPARTMENT

The Department of Mechanical Engineering is one among the senior and old branches in the institution with many prides to its feather. A facility of repute, excellent faculty and a good student community has contributed to make the Department vibrant and striving hard to achieve excellence in the area of academics and research. In keeping with the continued efforts for upgradation and advancement of knowledge, the Department has successfully completed the establishment of various labs as per the University requirements and care has been taken to procure specialized equipment to inculcate an aptitude for research in faculty as well as students. The faculty and students are actively involved in the Research and Development and have many International journal publications to their credit. The Department is recognized as a Research centre from VTU and 13 research scholars are carrying out their research in the various fields of Mechanical Engineering. The Department is running a departmental library. The Department has taken the leading role in the IPR activities, IEDC activities, NSS, sports and cultural activities of the institution.

ABOUT THE FDP

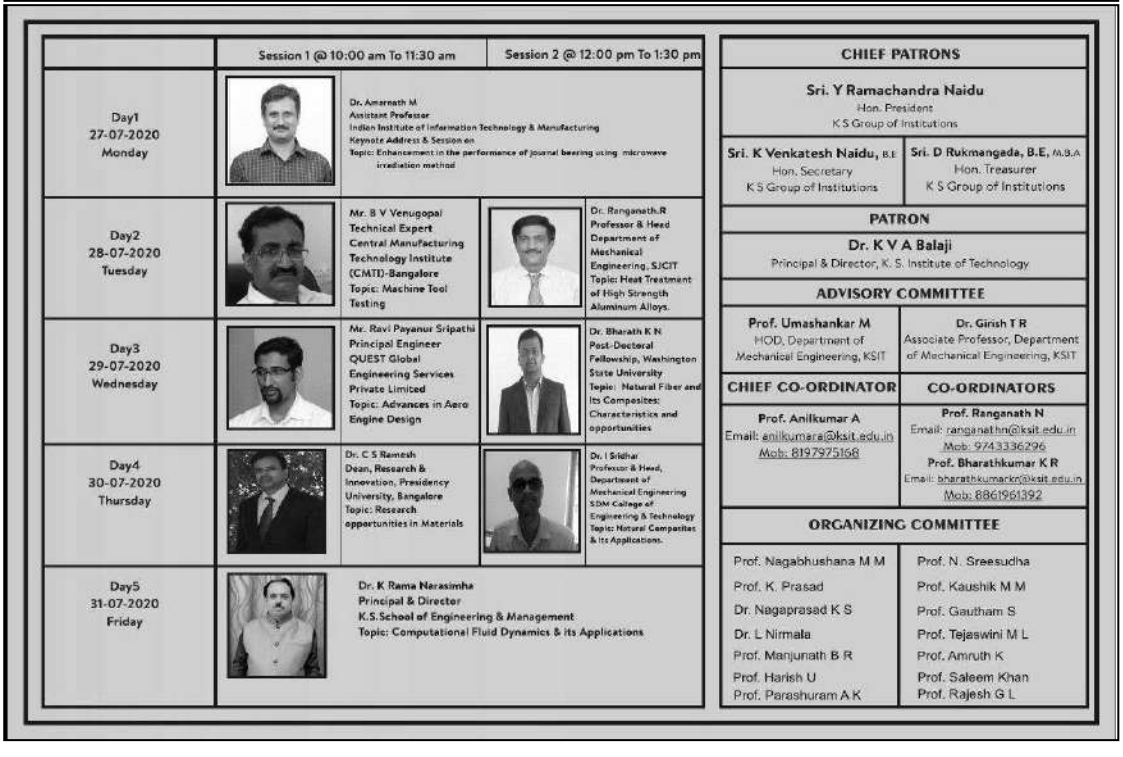
Advancement in health care, energy, computing and numerous other fields depends on new findings in material science; hence the world is always looking for new discoveries and inventions around materials. Whether it is the lightest materials for space shuttles, superconductors to transmit electricity, foldable electronics or bio-sensors that are compatible with the human body; materials science touches every aspect of our day to day lives. One could apply materials science to any application in healthcare, renewable energy, aviation or mechanical engineering. Materials Scientists, Engineers, Academicians and Researchers look at different groups of materials like metals and alloys, polymers, ceramics and composites. The program provides in-depth knowledge of Advanced Materials, their fundamental characteristics, synthesis, characterization and applications in the advancement of Science and Technology in different domains. The program focuses to create a platform between Academia and Industry to fill the gap between research in laboratory and its industrial applications. The training program will contributes towards building up an immense knowledge on the state-of-the-art techniques used worldwide in the area of Functional Materials and Materials Science. It also provides a platform for the participants to interact with the leading researchers and technologists which will benefit from their vast experience in the area. This program is, therefore, aimed to cover a wide range of topics starting from fundamentals of different classes of materials, their synthesis and characterizations for usage in different applications. This program further emphasizes the development of relevant skills and understanding the capabilities, opportunities, global trends, gaps and challenges of the industry. The FDP will be very helpful for all level of Research scholars, academicians, technologist and Industry personnel who are working in the area of Materials, their synthesis, characterization and applications. The program will provide scope to the faculty to undertake multi disciplinary research in materials science using emerging trends of advance materials.

WHO CAN ATTEND?

The program is open for the Faculty members of science and engineering streams, Research Supervisors, Research scholars, PG Students and the persons from industry, R&D organizations.

CERTIFICATION:

E-Certificate will be provided to all the registered participants attending the program on all the days after submission of feedback form.



	Session 1 @ 10:00 am To 11:30 am	Session 2 @ 12:00 pm To 1:30 pm
Day1 27-07-2020 Monday	Dr. Amarnath M Assistant Professor Indian Institute of Information Technology & Manufacturing Keynote Address & Session on Topic: Enhancement in the performance of journal bearing using microwave irradiation method	
Day2 28-07-2020 Tuesday	Mr. B V Venugopal Technical Expert Central Manufacturing Technology Institute (CMTI)-Bangalore Topic: Machine Tool Testing	Dr. Ranganath.R Professor & Head Department of Mechanical Engineering, SJCIT Topic: Heat Treatment of High Strength Aluminum Alloys.
Day3 29-07-2020 Wednesday	Mr. Ravi Payanur Sripathi Principal Engineer QUEST Global Engineering Services Private Limited Topic: Advances in Aero Engine Design	Dr. Bharath K N Post-Doctoral Fellowship, Washington State University Topic: Natural Fiber and its Composites: Characteristics and opportunities
Day4 30-07-2020 Thursday	Dr. C S Ramesh Dean, Research & Innovation, Presidency University, Bangalore Topic: Research opportunities in Materials	Dr. I Sridhar Professor & Head, Department of Mechanical Engineering SDM College of Engineering & Technology Topic: Natural Composites & its Applications.
Day5 31-07-2020 Friday	Dr. K Rama Narasimha Principal & Director K.S.School of Engineering & Management Topic: Computational Fluid Dynamics & its Applications	

CHIEF PATRONS

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K S Group of Institutions

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PATRON

Dr. K V A Balaji
Principal & Director, K. S. Institute of Technology

ADVISORY COMMITTEE

Prof. Umashankar M
HOD, Department of Mechanical Engineering, KSIT

Dr. Girish T R
Associate Professor, Department of Mechanical Engineering, KSIT

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ORGANIZING COMMITTEE

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Prof. K. Prasad
Dr. Nagaprasad K S
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Prof. Manjunath B R
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Prof. Amruth K
Prof. Saleem Khan
Prof. Rajesh G L

One Week Online Faculty Development Programme on Recent Advances & Trends in Mechanical Engineering & Material Science.

This One Week Online Faculty development programme (FDP-2020) was successfully conducted by Department of Mechanical Engineering, K.S.Institute of Technology in association with Indian Institute of Foundry Men (IIF), from 27th – 31st July 2020. The FDP programme received an overwhelming response with 250 participants from Faculty, Academicians, and Research Scholars, Industrialist from Various Institutions.

Opening remarks for the FDP were given by Dr. K V A Balaji, Principal / CEO KSIT, which was followed by an introduction to the programme by Prof. Umashankar M, HOD, MED. He also gave a glimpse of the activities going on in K.S.Institute of Technology.

The programme progressed with the inaugural lecture at 10:30 am by Dr. Amarnath M, in which he mainly focussed on the material research going on in Journal Bearing and he also gave few glimpses of the test facilities available at Indian Institute of Information Technology & Manufacturing, Jabalpur.

The speaker for session one of second Day was Mr. B V Venugopal from Central Manufacturing Technology Institute (CMTI)-Bangalore. He mainly talked about the research in the area of Machine tool testing and test facilities at CMTI. After the first session, Dr. Ranganath.R mainly talked about his research in the area of Heat Treatment of High Strength Aluminum Alloys and its applications.

e next lecture on session 1 of Day-3 was given by Mr. Ravi Payanur Sripathi, Principal Engineer from QUEST Global Engineering Services Private Limited in which he gave highlights of the advances in Aero-Engine Design & Gas turbines. Discussions with the speakers also continued post session-1 with another speaker Dr. Bharath K N, Post-Doctoral Fellowship, Washington State University, where emphasized on the Research oppurtunities in the field on Natural Composites and its Applications. This marked the end on Day-3 programme.

The Fourth day started off with the lecture of Dr. C Ramesh, Dean, Research & Innovation from Presidency University, Bangalore. His talk was based on the funding opportunities in the area of Material Characterization. Participants discussed over various aspects with the speaker. The next lecture was given by Dr. P S Shiva Kumar from SDM College of Engineering & Technology, Darwad on Green Composites and its application.

The final day started off with a very informative lecture Dr. K Rama Narasimha, Principal & Director, K.S.School of Engineering & Management from Bangalore on Computational Fluid Dynamics & its Applications. This led to the end of the series of lectures in the Five days programme.

Most of them talked about their enriching experience at the FDP. Thereafter Prof. Umashankar M, gave his concluding remarks. In the end Dr. Girish T R gave the vote of thanks and concluded the three days faculty development programme.

Analysis and evaluation of the FDP

is One Week Online FDP helped to stimulate thought process, arousing interest and motivating further inquiry and discussion among faculties. The FDP provided a platform for faculty members to enrich their teaching skill and research in the field of Engineering Materials. The One Week Online FDP provided a better insight into the recent trends in the field of Advanced Materials and its application in various fields. The program broadly focused on enhancing functional area expertise, improving one's classroom performance in latest subjects and enriching the abilities for

conducting meaningful research. The FDP focused on the latest technologies and systems in the field of Material Science.

SUBMITTED BY:

Mr.NAGAPRASAD .K.S

Kammavari Sangham (R) - 1952

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Certificate of Participation

This is to certify that

Mr./Ms./Dr./Prof. NAGAPRASAD K S of

K S Institute of Technology has attended One Week online Faculty Development programme on "*Recent Advances & Trends in Mechanical Engineering & Material Science*", Organized by Department of Mechanical Engineering, KSIT from 27/07/2020 to 31/07/2020.

Dr. GIRISH. T. R, Assoc. Prof, ME | Prof. UMASHANKAR. M, HOD, ME | Dr. K. V. A. Balaji, Principal / CEO

Mr.PARASHURAM.A.K

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This is to certify that

Mr./Ms./Dr./Prof. PARASHURAM A KUTAKANAKERI of

KSIT Bangalore has attended One Week online Faculty Development programme on "*Recent Advances & Trends in Mechanical Engineering & Material Science*", Organized by Department of Mechanical Engineering, KSIT from 27/07/2020 to 31/07/2020.

Dr. GIRISH. T. R, Assoc. Prof, ME | Prof. UMASHANKAR. M, HOD, ME | Dr. K. V. A. Balaji, Principal / CEO

Mr.NAGABHUSAN.M

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Dr. GIRISH. T. R
Assoc Prof, ME

Prof. UMASHANKAR. M
HOD, ME

Dr. K. V. A. Balaji
Principal / CEO

Mr.BHARAT KUMAR.K.R

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This is to certify that

Mr./Ms./Dr./Prof. Bharath Kumar K R of

K S Institute of Technology has attended One Week online Faculty Development programme on "*Recent Advances & Trends in Mechanical Engineering & Material Science*", Organized by Department of Mechanical Engineering, KSIT from 27/07/2020 to 31/07/2020.

Dr. GIRISH. T. R

Prof. UMASHANKAR. M

Dr. K. V. A. Balaji

Mr.UMASHANKAR.M

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K S Institute of Technology has attended One Week online Faculty Development programme on "*Recent Advances & Trends in Mechanical Engineering & Material Science*", Organized by Department of Mechanical Engineering, KSIT from 27/07/2020 to 31/07/2020.

Dr. GIRISH. T. R, Assoc. Prof, ME | Prof. UMASHANKAR. M, HOD, ME | Dr. K. V. A. Balaji, Principal / CEO

Mr.GIRISH.T.R

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Dr. GIRISH. T. R, Assoc. Prof, ME | Prof. UMASHANKAR. M, HOD, ME | Dr. K. V. A. Balaji, Principal / CEO

Mr. PRASAD.K

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KSIT

60 Years 1952 - 2012

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This is to certify that

Mr./Ms./Dr./Prof. Mr. Prasad K of

K S Institute of Technology has attended **One Week online Faculty Development programme on "*Recent Advances & Trends in Mechanical Engineering & Material Science*"**, Organized by Department of Mechanical Engineering, KSIT from 27/07/2020 to 31/07/2020.

Dr. GIRISH. T. R
Assoc. Prof, ME

Prof. UMASHANKAR. M
HOD, ME

Dr. K. V. A. Balaji
Principal / CEO

Dr.RENUKA .C

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This is to certify that

Mr./Ms./Dr./Prof. Dr. Renuka C of

K S Institute of Technology has attended **One Week online Faculty Development programme on "*Recent Advances & Trends in Mechanical Engineering & Material Science*"**, Organized by Department of Mechanical Engineering, KSIT from 27/07/2020 to 31/07/2020.

Dr. GIRISH. T. R
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KAVYA.T.N

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This is to certify that

Mr./Ms./Dr./Prof. Ms. Kavya T N of

K S Institute of Technology has attended **One Week online Faculty Development** programme on "***Recent Advances & Trends in Mechanical Engineering & Material Science***", Organized by Department of Mechanical Engineering, KSIT from 27/07/2020 to 31/07/2020.

Dr. GIRISH. T. R, Assoc. Prof, ME | Prof. UMASHANKAR. M, HOD, ME | Dr. K. V. A. Balaji, Principal / CEO

Ms.NEELAM PATIL RADHIKA

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This is to certify that

Mr./Ms./Dr./Prof. Ms. Neelam Patil Radhika of

K S Institute of Technology has attended **One Week online Faculty Development** programme on "***Recent Advances & Trends in Mechanical Engineering & Material Science***", Organized by Department of Mechanical Engineering, KSIT from 27/07/2020 to 31/07/2020.

Dr. GIRISH. T. R, Assoc. Prof, ME | Prof. UMASHANKAR. M, HOD, ME | Dr. K. V. A. Balaji, Principal / CEO

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Head of the Department
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SIGNATURE OF PRINCIPAL

PRINCIPAL
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BENGALURU - 560 109.

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DEPARTMENT OF MECHANICAL ENGINEERING

FDP: ADDITIVE MANUFACTURING

Report

Title: FDP: ADDITIVE MANUFACTURING

Organizer: PRESIDENCY UNIVERSITY
DATE: 29-08-2020 to 02-09-2020

Program Highlights:

Day One:Innaguration and basics of additive manufacturing

- **Day Two:** sessions on materials for additive manufacturing and advanced tools. The day culminated with engaging hands-on sessions.
- **Day Three:** importance of metallurgy, advancements in additive manufacturing, and the intriguing world of reverse engineering. The day concluded with hands-on experiences in cutting-edge additive manufacturing technologies.
- **Day Four:** industrial visit to witnessing 3D printing machines in action on live projects was an awe-inspiring experience.
- **Day Five:** research and innovation in AM, the future of additive manufacturing, and its applications in biomedical fields. The afternoon session, graced by our Principal and a team of doctors from GIMS, explored the remarkable possibilities in additive manufacturing for orthopaedic, dental, and other medical applications. The program concluded on a high note with the distribution of well-deserved certificates.

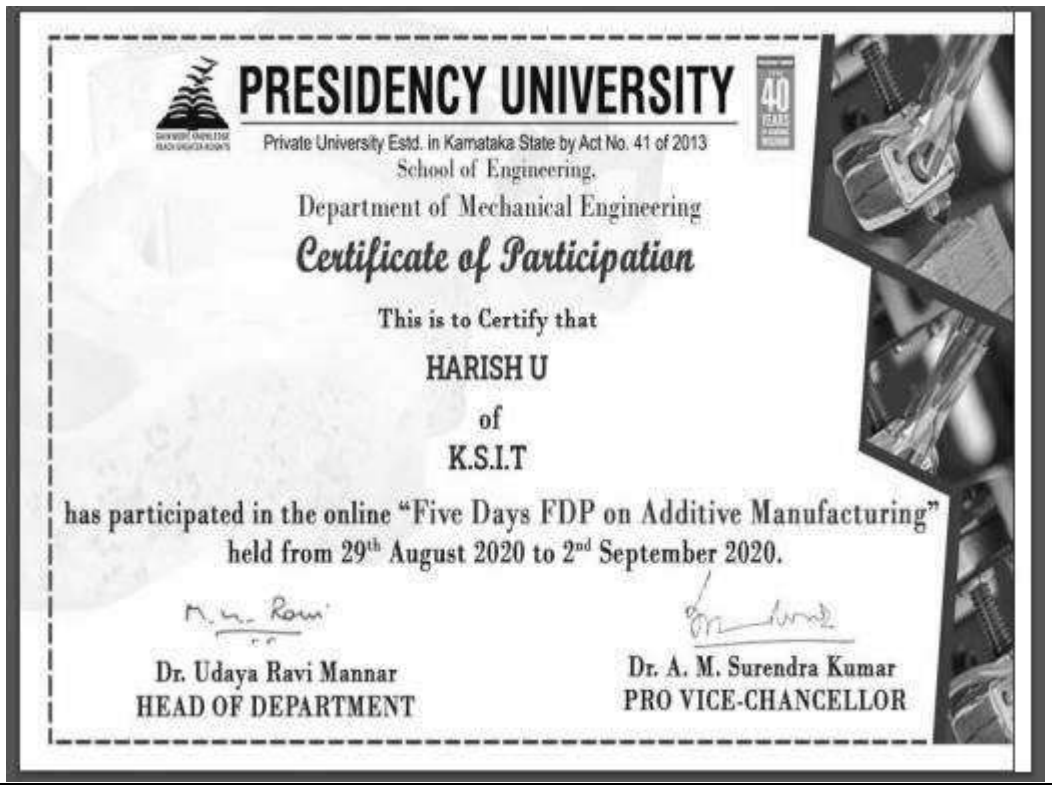
Objectives of Additive manufacturing

It aims to coordinate the creation of standards related to materials, processes, equipment and finished-part properties while also supporting specific standards for aerospace, medical devices, automotive and other industries.

OUTCOMES OF FDP

- Describe additive manufacturing and explain its advantages and disadvantages
- Explain the processes used in additive manufacturing for a range of materials and applications
- Understand the role of additive manufacturing in the design process and the implications for design
- Describe the effects of surface finish and microstructural properties on behaviour for components produced using additive manufacturing
- Display an awareness of residual stresses that may occur during additive manufacturing and their effects

SUBMITTED BY :
HARISH U



PRESIDENCY UNIVERSITY

Private University Estd. in Karnataka State by Act No. 41 of 2013

School of Engineering.

Department of Mechanical Engineering

Certificate of Participation

This is to Certify that

HARISH U

of

K.S.I.T

has participated in the online "Five Days FDP on Additive Manufacturing" held from 29th August 2020 to 2nd September 2020.

Dr. Udaya Ravi Mannar
HEAD OF DEPARTMENT

Dr. A. M. Surendra Kumar
PRO VICE-CHANCELLOR

SIGATURE OF HOD

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Dept. of Mechanical Engg.
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Bengaluru - 560 109

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DEPARTMENT OF MECHANICAL ENGINEERING

REPORT OF FDP: 'Building Emotional Intelligence and Resilience Case Method of Experiential Teaching and Learning'

Report

Faculty Development Program (FDP) Report

Title: 'Building Emotional Intelligence and Resilience Case Method of Experiential Teaching and Learning'

Date: 10th – 14th May 2021,.

Program Coordinator: Dr. W.G. PRASANNA KUMAR, Chairman, Mahatma Gandhi national council of rural education.

Participant: Tejaswini.M.L from KS Institute of technology

Summary:

The main aim of the FDP was to inculcate experiential teaching and learning process. In developing Asia, learning losses range from eight percent (where schools were able to mostly stay open) to 55% in areas with the longest closures and is estimated to be $1.25 trillion or 5.4% of the region's gross domestic product in 2020. School dropout within the year 2020 has also resulted in low numeracy and reading outcomes in low- and lower-middle-income countriesVarious speakers spoke about wide range of teaching and learning process. In this rapid growth of technology, experiential learning becomes very essential. In order to have expertise learning, one must learn in dealing with practical problems. Any discipline in education must include the process of resolving realistic issues. There are various sectors like surveying, mining, agriculture, industries, navy, army etc., under which people work in the nation to bring out prosperity in life, some among them are really challenging. Youths must come forward to knock such issues.

Objectives of the FDP

There is a need to provide directions for studies that could help enhance the education systems capable of overcoming adversities and are resilient to disruptions. Resilience should be part of the continuous quality improvement processes of education systems subject to environmental dynamicity.

SUBMITTED BY:

TEJASWINI.M.L

Certificate no. By

Ministry of Education
Government of India

Faculty Development Centre

Mahatma Gandhi National Council of Rural Education

(Department of Higher Education, Ministry of Human Resource Development, Govt. of India, Hyderabad)

Sponsored by

Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching

Certificate

This is to certify that

TEJASWINI ML, KSIT

has successfully completed Faculty Development Program and submitted Action Research Project Report

on

'Building Emotional Intelligence and Resilience Case Method of Experiential Teaching and Learning'

May 10 - 14, 2021

Dr. W G Prasanna Kumar
Chairman
Mahatma Gandhi National Council of Rural Education
Ministry of Human Resource Development
Government of India

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DEPARTMENT OF MECHANICAL ENGINEERING

FDP: Strength of Materials – An Effective Teaching Methodology

Brochure

REGISTRATION FORM

AICTE - ISTE Sponsored
One Week Online
Refresher Programme
on
"STRENGTH OF MATERIALS - AN EFFECTIVE TEACHING METHODOLOGY"

Name:
Designation:
Department:
Organization:
Address:

Phone:
Select the Phase (Please tick one phase)
Phase-I : 05-04-2021 to 10-04-2021 ☐
Phase-II : 26-04-2021 to 01-05-2021 ☐
Phase-III : 17-05-2021 to 22-05-2021 ☐

Signature of the Candidate

Dr./Mr./Ms./Mrs._____ is a faculty/research scholar of our institution and is hereby permitted to attend One Week Online Refresher Programme on **"Strength of Materials - An Effective Teaching Methodology"** at Nalla Narasimha Reddy Education Society's Group of Institutions, Hyderabad during the above-mentioned dates.

Place:
Date:

HOD / PRINCIPAL
(With SEAL)

*mail the scan copy of the registration form to
anrgmech2009@gmail.com

Organizing Committee

Chief Patron
Shri Nalla Narasimha Reddy, Secretary, NNRG.

Patron
Dr. C.Vkrishna Reddy, Director, NNRG.

Convener
Dr. G. Janardhana Raju, Dean-SoE, Chairman– ISTE Chapter, NNRG.

Coordinator
Dr. S. Surendarnath, Assoc. Professor, MED, NNRG

Co - Coordinators
Mr. A. Venkata Vishnu, Assoc. Professor, MED, NNRG
Mr. G Guruviah Naidu, Assoc. Professor, MED, NNRG
Mr. K. Suresh Kumar, Assoc. Professor, MED

Organizing Members
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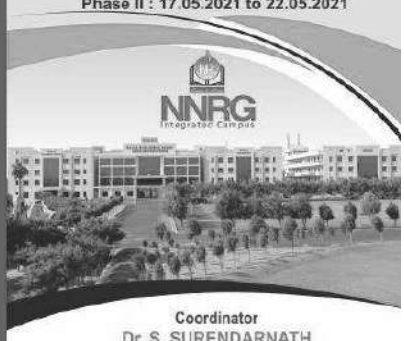
Ms. P. Srilatha, Assoc. Professor, MED
Mr. L. Sunil Kumar, Assoc. Professor, MED
Mrs. T. Savitha, Asst. Professor, MED
Mr. Y. Narsa Reddy, Asst. Professor, MED
Mr. T. Mahesh, Asst. Professor, MED
Mr. M. Chandra Kanth, Asst. Professor, MED
Mr. G. Kiran Kumar, Asst. Professor, MED
Mr. Jagilam Kumar Chandra, Asst. Professor, MED
Mrs. M. Poojitha, Asst. Professor, MED
Mr. G. Gops, Asst. Professor, MED

AICTE - ISTE Sponsored
One Week Online
Refresher Programme
on

"STRENGTH OF MATERIALS - AN EFFECTIVE TEACHING METHODOLOGY "

Phase I : 05.04.2021 to 10.04.2021
Phase II : 26.04.2021 to 01.05.2021
Phase II : 17.05.2021 to 22.05.2021



Coordinator
Dr. S. SURENDARNATH
Associate Professor, MED

NALLA NARASIMHA REDDY
EDUCATION SOCIETY'S GROUP OF INSTITUTIONS
(INTEGRATED CAMPUS)
(Approved by AICTE, PCI, New Delhi. Affiliated to JNTU-Hyderabad)

Accredited by NAAC & NBA

Chowdariguda(V), Korremula 'X' Road, Ghatkesar (M), Medchal (D), Hyderabad. - 500 088, T.S.
www.nnrg.edu.in

About the Institution
Nalla Narasimha Reddy Education Society's Group of Institutions (NNRG) - an Integrated Campus was established in the year 2009 with sole objective of providing world class technical education. From the time of its initiation, the Integrated Campus including-School of Engineering, School of Pharmacy and School of Management Sciences has been striving to scale the heights of excellence through the consistent efforts of the management headed by Sri Nalla Narasimha Reddy, Secretary and the dedicated members of the faculty and staff. The Institute is accredited by the National Assessment and Accreditation Council (NAAC) with A+ Grade and National Board of Accreditation (NBA) for CSE, ECE, ME. The UGC has recognized the Institution under section 2(f) of the UGC Act 1956 and ISO 9001:2015 certified. NNRG aims at being one of the most premier educational institutions in Telangana.

About the Department
Mechanical Engineering Department is a part of School of Engineering (SOE), was established in 2009, with the prime motto to offer surreal education to the aspirants. The department has highly qualified and experienced faculty members with the state-of-the-art laboratories enable the students to participate in the practical sessions effectively. The department is equipped with the Robotics laboratory, High end CNC Milling Machine, Design and Simulation Software's such as Pro-E, CATIA, ANSYS, MATLAB etc., to improve the practical skills of the students.

About the Programme
The aim of this refresher program is to impart the knowledge of Strength of Materials among the young budding teachers through experienced professionals from academia and industries. This Program for sure will bring good potential for the teachers to improve the teaching learning process. It helps the faculty members to take the concepts of strength of material to the students in a lucid way and make the understandable to get in to real time problems. It enhances the ability of the faculty members to apply their minds to apply the fundamental concepts strength of material in all real time design engineering problems. Also, the program is aimed to identify and fulfill the basic requirements faculty members for analyzing structural designs failures.

Topics of STTP

- Stress, Strain and Deformation of Solids
- Principal stresses and principal planes
- Transfer of Loads and Stresses in Beams
- Bending Theory
- Deflection of Beams, SFD and BMD
- Torsion – Solids and Hollow Circular Shafts
- Columns and Struts
- Springs
- Unsymmetrical bending of beams
- Analysis and design of thin and thick shells

Resource Persons

Eminent speakers from premier institutes like IIT's, NIT's, State Universities and Industries will deliver the lectures.

Eligibility Criteria

This programme is open to all AICTE approved Engineering college faculty Members. Selection of participants will be FIRST-CUM-FIRST-SERVE basis.

Application Process

Applicants are required to submit the Google form. After the registration of the candidatesA TEMPORARY IDENTIFICATION NUMBER (TIN) will be allotted to the candidates and will be intimated to all through WhatsApp groups one day before.All participants should attend sessions using their TIN only and should use that for any reference.

No Registration Fee

Faculty members can register using the following link.

https://forms.gle/KNMn6M338VA3azaHA

Other Information

- Submission of day-wise feedback is mandatory.
- A Test will be conducted at the end of the Programme.
- The certificate shall be issued to the participants who have minimum 80% attendance and 60% marks in the Test.
- Maximum number of participants allowed is 100 per program and minimum should be 40.
- Priority should be given to ISTE Life Members.
- Last Date for Submission of Google form **02.04.2021**

Contact

Dr. S. SURENDARNATH, Associate Professor
Email: anrgmech2009@gmail.com
Phone: 8667025422
Mr. A. VENKATA VISHNU, Associate Professor
Email: venkat666vishnu@gmail.com
Phone: 9985652237

NNRG
Integrated Campus
NALLA NARASIMHA REDDY
EDUCATION SOCIETY'S GROUP OF INSTITUTIONS
(INTEGRATED CAMPUS)
Chowdariguda(V), Korremula 'X' Road, Ghatkesar (M), Medchal (D), Hyderabad. - 500 088, T.S.

Report

Title: One Week Online Refresher Programme on "Strength of Materials - An Effective Teaching Methodology."

Organizer: Nalla Narasimha Reddy Education Society's Group of Institutions, Hyderabad, Telangana.

Phases:

- Phase I: 05.04.2021 to 10.04.2021
- Phase II: 26.04.2021 to 01.05.2021
- **Phase III: 17.05.2021 to 22.05.2021**

Organizing Committee:

- **Chief Patron**: Shri Nalla Narasimha Reddy, Secretary, NNRG.
- **Patron**: Dr. C.V. Krishna Reddy, Director, NNRG.
- **Convenor**: Dr. G. Janardhana Raju, Dean-SoE, Chairman-ISTE Chapter, NNRG.
- **Coordinator**: Dr. S. Surendarnath, Assoc. Professor, MED, NNRG.

Program Highlights:

- No registration fee was required.
- The program was conducted in three phases.
- The focus was on strengthening teaching methodologies related to Strength of Materials.
- The faculty members were expected to have a minimum of 80% attendance and 60% marks in the test to receive a certificate.
- Resource persons were eminent speakers from premier institutes like IITs, NITs, and state universities.

Participant Details:

- **Name**: MR. MANJUNATHA B.R, Asst Professor, KSIT
- Successfully completed the programme during Phase III (17.05.2021 to 22.05.2021).

Program Objectives:

To impart knowledge of Strength of Materials among young academic teachers.

To ensure the program would bring good potential for teachers to improve the teaching-learning process

To enable the faculty to tackle the concepts of strength of material members in a lucid way and make the students in real-time problems

Additional Information:

- The program was open to a maximum of 100 participants with a minimum requirement of 40.
- Priority was given to ISTE Life Members.
- A test was conducted at the end of the program.

Topics Covered:

- Stress, Strain, and Deformation of Solids
- Principal stresses and principal planes
- Transmission of Loads and Stresses in Beams
- Bending Theory
- Torsion of Beams, SFD and BMD
- Deflection of Beams and Hollow Circular Shafts
- Columns and Struts
- Springs
- Unsymmetrical bending of beams
- Analysis and design of thin and thick shells

Outcomes: The program aimed to enhance the understanding and teaching efficiency of faculty membersin the field of Strength of Materials. By covering a comprehensive list of topics, from basic stress and strain concepts to more complex analysis of beams and design of structural elements, participants were expected to:

- Gain an in-depth understanding of the mechanical behavior of materials under various loadingconditions.
- Improve pedagogical strategies for effectively conveying complex engineering concepts to students.
- Apply new techniques and methodologies in classroom and laboratory settings.
- Develop the ability to solve real-world problems related to the strength of materials.
- Integrate modern educational tools and software in teaching, such as CNC Milling Machines,Design and Simulation Software's like PRO-E, CATIA, ANSYS, MATLAB, etc.
- Network with eminent resource persons from renowned institutions, fostering professional development and collaboration opportunities.
- Meet the necessary competency requirements to take on current and future academic challenges in the engineering field.

The successful completion of this program signifies a step forward in the continuing education of faculty members, equipping them with modern methodologies to enhance their teaching capabilities in the fieldof engineering mechanics.

SUBMITTED BY:

MANJUNATHA.B.R

Certificate

This is to certify that ***MR. MANJUNATHA B.R*** has successfully completed the AICTE-ISTE approved Orientation/Refresher Programme on ***"Strength of Materials - An Effective Teaching Methodology"*** held during **17.05.2021** to **22.05.2021** organized by ***Nalla Narasimha Reddy Education Society's Group of Institutions, Hyderabad, Telangana.***

Director (FDC)
AICTE, ND

Executive Secretary
ISTE, ND

Program Coordinator
NNRESGI, Hyderabad

Director
NNRESGI, Hyderabad

SIGATURE OF HOD

Head of the Department
Dept. of Mechanical Engg.
K.S. Institute of Technology
Bengaluru-560 109

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DEPARTMENT OF MECHANICAL ENGINEERING

REPORT OF FDP: TRENDS IN AUTOMOTIVE TECHNOLOGY

Brochure:

INTERNATIONAL FACULTY DEVELOPMENT PROGRAM ON TRENDS IN AUTOMOTIVE TECHNOLOGY

JOINTLY ORGANIZED BY

*WOLLO UNIVERSITY - KOMBOLCHA INSTITUTE OF TECHNOLOGY, ETHIOPIA

*MEDI-CAPS UNIVERSITY, INDORE, INDIA

*SATHYABAMA INSTITUTE OF SCIENCE & TECHNOLOGY, CHENNAI, INDIA

*GALGOTIAS UNIVERSITY, GREATER NOIDA, INDIA

* Date: 17/5/2021 – 22/5/2021

*6 DAYS
*NO REGISTRATION FEE
*OPEN TO ALL
*PARTICIPANTS SHOULD ATTEND PROGRAM FOR THE ENTIRE DURATION THROUGH ONLINE
*E – CERTIFICATE FOR THE PARTICIPANTS
REGISTRATION LINK : https://forms.gle/i8xGyV9r8VvnQXBGA

ONLINE PLATFORM – ZOOM MEETING LINK		
SESSION-1 May 17, 2021 May 18, 2021 May 19, 2021 May 20, 2021 May 21, 2021 May 22, 2021	**INDIAN STANDARD TIME :** 11.30 AM – 12.30 PM **ETHIOPIA INTERNATIONAL TIME** : 9.00 AM – 10.00 AM **ETHIOPIA LOCAL TIME :** 3.00 – 4.00	**Join Zoom Meeting** https://zoom.us/j/93973313601?pwd=bGw2dmU2eW11TGxqRFhqYS9GK3kydz09 Meeting ID: 939 7331 3601 Passcode: 819075
SESSION-2 May 17, 2021 May 18, 2021 May 19, 2021 May 20, 2021 May 21, 2021 May 22, 2021	**INDIAN STANDARD TIME :** 1.30 PM – 2.30 PM **ETHIOPIA INTERNATIONAL TIME** : 11.00 AM – 12.00 NOON **ETHIOPIA LOCAL TIME :** 5.00 – 6.00	**Join Zoom Meeting** https://zoom.us/j/98601879408?pwd=V2x5WHZrRnRrblU3cHcxcldvZ1prUT09 Meeting ID: 986 0187 9408 Passcode: 831710

GUIDELINES TO THE PARTICIPANTS

1. Log in to the link at least 10 minutes in advance using your name as it appears in the registration form.
2. Participants should attend the program for the entire duration through online.
3. Mute your audio and off your video throughout the program.
4. Kindly refrain from introducing and greeting each other or with the speaker in the chat box.
5. Please write your comments or questions to the speakers with your name and College at any time in the public chat space.
6. This allows publicly-visible chat, keeping your contributions helpful and considerate of the host and other participants.
7. **THE PARTICIPATION E-CERTIFICATE SHALL BE ISSUED ONLY UPON SUCCESSFUL SUBMISSION OF THE FEEDBACK FORM WHICH SHALL BE POSTED AT THE END OF THE SIXTH DAY FINAL SESSION ONLY.**
8. The feedback form link for the certificate will be active only for 1 hour. Post which it will be deactivated automatically.
9. The certificate will be emailed to the registered email ID.
10. The certificates are auto generated, so take utmost care while filling the feedback form, your name and institution name correctly to avoid mistakes.
11. If you fail to receive your E-certificate, kindly contact us on prabhakar@kiot.edu.et

FACILITATORS

***Dr. RAVINDRA PATHAK**
Prof. in Charge - Office of International affairs)
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FOR ONLINE EVENTS UPDATES PLEASE JOIN
TELEGRAM GROUP LINK: **https://t.me/joinchat/YXJOgO47tahjODZk**
WHATS APP GROUP-1 LINK: https://chat.whatsapp.com/CCYJi13633UBxswLON2mPy
WHATS APP GROUP-2 LINK: https://chat.whatsapp.com/IPmusevtBV7KGclyN4hoXB
WHATS APP GROUP-3 LINK: https://chat.whatsapp.com/HVfxLm3N5GAJ5NBrPyqzOa

Report

Faculty Development Program (FDP) Report

Title: TRENDS IN AUTOMOTIVE TECHNOLOGY

Date: 17th to 22nd May 2021, Wollo University, Ethiopia.

Program Coordinator: Dr. RAVINDRA PATHAK Prof. in Charge - Office of International affairs)

Participant: **Mr. Rajesh G.L, KSIT Bengaluru.**

Summary:

The main objective of the FDP is to provide awareness for faculty on automotive and energy systems. Automotive technology is the thrust area where heaps of changes being made for improving the overall efficiency of a vehicle. Electric vehicles technology has gained focus of the researchers and industry in recent times. Electric vehicles are expected to increase from 2% of global share in 2016 to 22% in 2030. In this context, it is imperative that we, as engineers and academicians, become well versed in the art of designing and developing EV technology. Currently, the technology is focusing on many new areas like engines
and alternative fuels, vehicle safety, advanced electric propulsion, energy storage system, intelligent transportation and vehicular communication systems, autonomous vehicles, vehicle electrification, hybridization, improved battery managements systems and new battery chemistries. The automotive industries are in line with these technological changes. Also, in the current era, computational intelligence and optimization techniques have been employed in various applications of non-conventional energy systems for maximum power extraction.

This FDP intended to address the uncertainties and challenges in EV and associated technologies through knowledge and information exchange. This in due course will lead to

acquiring deep knowledge in the development and implementation of low-cost and eco-friendly electric mobility and charging systems. The academia is yet to change its curricula to cope up with these rapid changes in the technology. The gap between the academia and industry might be reduced by arranging some workshops/ FDP programs to faculty by industry experts in relevant areas. The main aim of this FDP is to expose the faculty to new developments in the above areas of technology and the same may be imparted in the student community.

Objectives of the FDP

- Acquire Knowledge on advances in automobile sector.
- Acquire knowledge on applications of advance control techniques in automobile.
- Gain knowledge on energy systems and its applications.
- Gain knowledge on thermal energy storage systems.
- Gain research exposure on emerging trends in Automobile and energy systems.

SUBMITTED BY:

RAJESH G.L

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Bengaluru-560 109

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#14, Raghuvanahalli, Kanakapura Main Road, Bengaluru-5600109

DEPARTMENT OF MECHANICAL ENGINEERING

FDP: Recent Innovation in Design and Manufacturing

Brochure

Six Days Faculty Development Program
on
RECENT INNOVATIONS IN DESIGN & MANUFACTURING
(24th to 29th MAY, 2021)

Organized by
Department of
Mechanical Engineering
MALLA REDDY ENGINEERING COLLEGE
(AUTONOMOUS) MAIN CAMPUS

An UGC Autonomous Institution, Approved by AICTE & Affiliated to JNTUH-Hyderabad Reaccredited by NAAC with'A'Grade (II Cycle) Maisammaguda, Gundlapochampally, Medchal - Malkajgiri District Telangana - 500100, India

About the Institution

Malla Reddy Engineering College (Autonomous) is one of the reputed engineering colleges in Hyderabad, Telangana. MREC (A) is part of Malla Reddy Group of Institutions (MRGI), founded by Sri. Ch. Malla Reddy, currently Hon'ble Minister, Labor and Employment, Factories, Women and Child Welfare and Skill Development, Govt. of Telangana State. The college is situated in a serene, lush green environment in Maisammaguda, Gundlapochampally,Medchal, Malkajgri District Telangana – 500100.

The college was established in 2002 and is an autonomous institution approved by UGC and affiliated to JNTUH. The college is re-accredited by NAAC with 'A' Grade (II Cycle) and was conferred autonomous status by JNTUH in 2011 and by UGC in 2014 for a period of 6 years. Our eligible UG and PG programs received NBA accreditation and some of them received reaccreditation too. The college caters to wide ranging aspirations and goals of student communities by offering new courses in UG- Cyber Security, Artificial Intelligence and Machine Learning, Data Science and IOT along with programs in various streams of Engineering & Technology and Management. It boasts of world-class infrastructure and well-equipped laboratories all departments and is skillfully and smartly guided by Dr. A. Ramaswamy Reddy, Director, MREC(A)&Dr.A.Raveendra,Principal, MREC(A) who have a rich teaching and industrial experience.

Advisory Committee:

Chief Patron: **Sri. Ch. Malla Reddy, Minister,Telangana State, India.** Founder & Chairman **Malla Reddy Group of Institutions,MRGI**

Patrons: **Sri.Ch. Mahender Reddy** Secretary, MRGI **Dr.Ch.Bhadra Reddy** President, MRGI

Co-Patrons: **Dr.A.Ramaswamy Reddy** Director, MREC (A) **Dr. A. Raveendra** Principal, MREC (A)

Convener : **Dr. N. Rishi Kanth** Professor&HOD –ME E-Mail:nrmehod@mrec.ac.in

Coordinators: **Dr.A.Paul Praveen** Associate Professor,ME E-Mail:a.paulpraveen@mrec.ac.in **Dr.Sape Udaya Bhaskar** Professor & Dean Academics,ME E-Mail:deanacademics@mrec.ac.in

Co-Coordinators:

Dr.T.Zaheer Ahamed, Prof.,ME

Dr.ISNVR Prashanth, Assoc.Prof., ME

Dr.N.Tulasi Radha, Assoc.Prof., ME

Dr.T.Venkata Deepthi, Assoc.Prof., ME

Dr.Jakeer Hussian, Assoc.Prof., ME

Dr.I.Satish, Assoc.Prof., ME

About the Department:

The Department of Mechanical Engineering has been established since the inception of the institution in the year 2002. The Department has good infrastructure facilities and is equipped with full-fledged laboratories to fulfill the curriculum needs. The Department has well experienced faculty. Around one-third of the faculty members in the department are Doctorate. The department has good number of sanctioned projects, funded by different agencies/industries. The Department is intended to be allotted a Research Centre by JNTU Hyderabad.

Course Objective:

The main objective of our program is to educate engineers on all aspects of product realization from product design to manufacturing technologies and operations, and to provide students with the ability to provide students with the ability to integrate various design and manufacturing processes into an effective system.

Topics Covered:

- Additive Manufacturing
- Surface Engineering
- Rotor Dynamics
- Future Manufacturing Systems
- Product designer's responsibility in smart manufacturing scenario
- Tribological aspects of coatings

Course Outcomes:

On completion of this course, participants are expected to gain better understanding on various types of manufacturing systems, concepts of rotor dynamics and knowledge on responsibilities of product designer. The participants will also gain knowledge on aspects of coatings.

Resource Persons:

- Dr.R.L.Narayan Assistant Professor,IIT Delhi
- Dr.Ravi Kumar Dumpala Assistant Professor,VNIT Nagpur
- Dr.Rajasekhara Reddy Mutra Sr.Assistant Professor,VIT Vellore
- Dr.M.Vijay Kumar Assistant Professor,NIT Wrangal
- Dr.Boorla Srinivas Murthy General Manager,Group Antolin India Pvt. Ltd.
- Dr.Nitesh Vashishtha Joint Manager,NBC Bearings Ltd. Jaipur

Who should attend?

- The participants to the course will be Faculties, Ph.D. Scholars and PG Students.

Selection and Certification Criteria:

- Selection is made based on the first-come, first- serve basis.
- Minimum 80% of attendance and 60% of marks in the online test at the end of each day session of the FDP are compulsory for certification.

How to Apply?

- The participant can register through the link given below: https://forms.gle/ZiRgLiALkitdzUXb9
- No Registration Fee!

Mode: Online
Platform: Zoom with 500 Participants only.

For query contact:

Name: Dr.N.Rishi Kanth
Cell no: +91 7780726746

Name : Dr.A.Paul Praveen
Cell no: +91 9345777727

Name: Dr.Sape Udaya Bhaskar
Cell no: +91 6303622066

Report

Title: Recent Innovations in Design & Manufacturing

Organized By: Department of Mechanical Engineering, Malla Reddy Engineering College (Autonomous)

Duration: 24th to 29th May, 2021

Objective: To provide educators with an in-depth understanding and teaching capacity in cutting-edge design and manufacturing practices, focusing on additive manufacturing, surface engineering, and rotor dynamics.

Program Highlights:

- Emphasis on future manufacturing systems and product design responsibility.
- Insight into smart manufacturing and technological aspects of coatings.

Course Outcomes: Participants gained knowledge on various manufacturing systems, design principles, and the role of a product designer in innovation.

Around 400 enthusiastic learners from academia and research have enrolled for the FDP. The following eminent faculty and industry experts agreed to act as resource persons.

- Dr. R. L. Narayan, Assistant Professor, IIT Delhi
- Dr. Ravi Kumar Dumpala, Assistant Professor, VNIT Nagpur
- Dr. Rajasekhara Reddy M, Sr. Assistant Professor, VIT Vellore
- Dr. M. Vijay Kumar, Assistant Professor, NIT, Warangal
- Dr. Boorla Srinivas Murthy, General Manager, Group Antolin India Pvt. Ltd.
- Dr. Nitesh Vashishtha, Joint Manager, NBC Bearings Ltd., Jaipur.

Methodology: The program utilized interactive lectures, practical workshops, and expert panels conducted online via Zoom.

The following topics are covered in the FDP

- ✓ Additive Manufacturing
- ✓ Surface Engineering
- ✓ Rotor Dynamics
- ✓ Future Manufacturing Systems
- ✓ Product designer's responsibility in smart manufacturing scenario
- ✓ Tribological aspects of coatings

Acknowledgments: The successful organization of the FDP is credited to the coordinators, Dr. A. Paul Praveen and Dr. N. Rishi Kanth, with guidance from the principal, Dr. A. Raveendra, and the director, Dr. A. Ramaswamy Reddy.

Conclusion: This Faculty Development Program has empowered educators with innovative strategies and knowledge on the forefront of design and manufacturing, significantly contributing to the enhancement of technical education quality.

SUBMITTED BY :

Mr.Ranganath.N

MALLA REDDY ENGINEERING COLLEGE

Main Campus, an Autonomous Institution

Certificate No: MRECA052021304

PARTICIPATION CERTIFICATE

This is to Certify that

Mr. N RANGANATH

of

K S INSTITUTE OF TECHNOLOGY, BANGALORE

has successfully attended six days Faculty Development Program on "RECENT INNOVATIONS IN DESIGN & MANUFACTURING" from 24th to 29th May - 2021 organized by the Department of Mechanical Engineering, Malla Reddy Engineering College (Autonomous).

Dr.A.Paul Praveen, Coordinator | Dr. N. Rishi Kanth, Convener | Dr. A.Raveendra, Principal | Dr.A.Ramaswamy Reddy, Director

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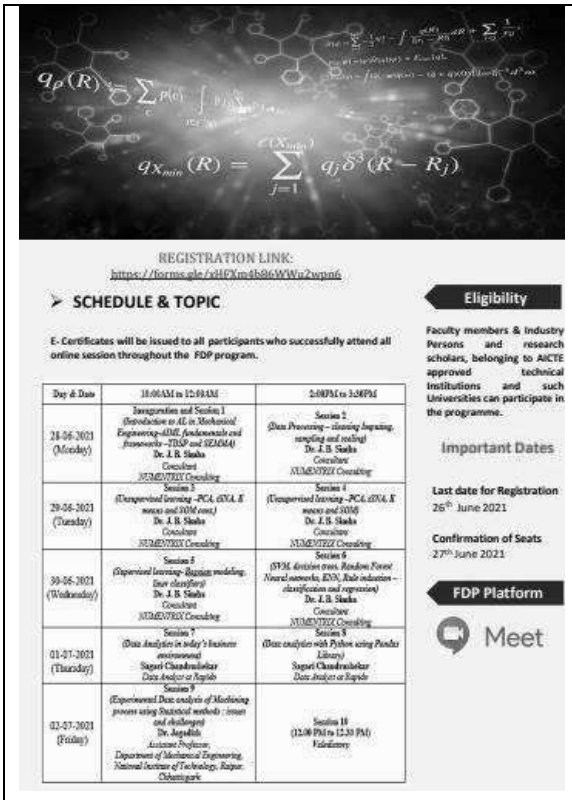
DEPARTMENT OF MECHANICAL ENGINEERING

REPORT OF FDP: "Data Analysis and Artificial Intelligence for Mechanical Engineers"

Brochure



Report

Faculty Development Program (FDP) Report

Title: Data Analysis and Artificial Intelligence for Mechanical Engineers

Date: 28th June– 2nd July 2021, NITTE Meenakshi Institute of Technology, Bangalore .

Program Coordinator: Dr. Vijay Kumar S, Department of Mechanical Engineering, NMIT.

.

Participant: **Dr. Saleem Khan** of KSIT

Summary:

Artificial Intelligence (AI) has attracted interest in recent years due to AI's technological advancements and its increased ability to process large amounts of data. Mechanical engineering faces several challenges today, such as designing systems and components for our future, respectful of sustainability and energy efficiency. Incorporating advanced technologies into their designs can help mechanical engineering. An example of such a technology is AI and data analytics. There has been tremendous progress in AI in areas such as autonomous vehicles. Focusing more specifically on upfront mechanical design, we will see the application of a machine learning algorithm by Neural Concept in a collaborative scenario; taken not from the future, but from the present.

Some of the mechanical engineering challenges are: Sustainability, Energy-efficient systems, Competition between companies and profitability for shareholders, Finally, engineers must keep updated with new technologies and incorporate them into their designs.

To overcome the above challenges, AI & DA helps in the following:

AI simulates human intelligence in devices programmed to think and learn like humans.

AI focuses on making machines perform specialized tasks that usually need human intelligence such as recognizing speech, understanding natural language (NLP) and, in

general, learning from experience.
The most common process to get a usable AI is to use algorithms and statistical models to let a machine learn from data.
This FDP focuses on understanding the concept of making machines perform specialized tasks that usually need human intelligence such as recognizing speech, understanding natural language (NLP) and, in general, learning from experience.

Objectives of the FDP

The FDP is aimed at imparting knowledge on the fundamentals of Artificial Intelligence with a insight to machine learning and its applications.
The main objective is to make the participants familiar with machine learning and information retrieval techniques

SUBMITTED BY:

Dr. Saleem Khan

NITTE | NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY
An Autonomous Institution Approved by UGC/AICTE/Govt. of Karnataka
Accredited by NBA (Tier-I) and NAAC 'A+' Grade
Affiliated to Visvesvaraya Technological University, Belagavi
Post Box No. 6429, Yelahanka, Bengaluru-560064, Karnataka, INDIA

DEPARTMENT OF MECHANICAL ENGINEERING

Presents this

CERTIFICATE OF PARTICIPATION

Dr. Saleem Khan

Assistant Professor, K S Institute of Technology

For his active and invaluable participation during the conduct of Five Day National Level Online Faculty Development Programme on **"Data Analysis and Artificial Intelligence for Mechanical Engineers"** held on 28th June to 2nd July 2021 organized by **Department of Mechanical Engineering, Nitte Meenakshi Institute of Technology, Bengaluru, Karnataka.**

Dr. H. C. Nagaraj
Principal,
NMIT

Dr. Sudheer Reddy J
Head, Dept. Of Mech Engg.
NMIT

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Head of the Department
Dept. of Mechanical Engg.
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DEPARTMENT OF MECHANICAL ENGINEERING

REPORT OF FDP: Recent Trends In Mechanical Engineering

Broucher

THE ICFAI UNIVERSITY JAIPUR

IcfaiTech

Minute to Minute Program Schedule of

Five Days Faculty Development Program (FDP) on Recent Trends in Mechanical Engineering
In Association with IET (UK) Delhi Local Network
Venue- Virtual
(July 20 – July 24, 2021)

Day 1
20th July, 2021

Time (in IST)	Function
02:35 PM – 02:38PM	Welcome
02:39PM-02:40 PM	Saraswathi Vandana
02:41PM-02:44 PM	Video, Introducing The ICFAI University Jaipur by Host
02:45PM-02:50 PM	Introduction of Faculty Development Program by **Dr. A. K. Saini**, Associate Dean, IcfaiTech
02:51 PM-02:56 PM	Welcome Note by Hon'ble President, **Dr. H P Singh, VSM**
02:57 PM-03:12 PM	Introduction of Guest of Honor – **Mr. Mahtab Singh**, Chairman, IET(UK) , Delhi Local Network followed by his message
03:13 PM-04:15 PM	Introduction of Keynote Speaker **Dr. N. N. Sharma**, Pro-President , Manipal University , Jaipur followed by his deliberation
04:16 PM–05:16 PM	Speaker 1. **Dr. Inturi Vamsi**, Chaitanya Bharathi Institute of Technology, Hyderabad
05:17 PM-05:19 PM	Vote of Thanks by Dr. Jyotsna Verma

Day 2
21st July, 2021

Time(in IST)	Function
12:55PM-01:00 PM	Event Descriptions Day 2 by host
01:00 PM-02:00 PM	Speaker 1 **Mr. Arvind Tomar**, Scientific officer-D, Engineer at Institute For Plasma Research, Gandhinagar
02:00 PM-03:00 PM	Speaker 2. **Dr. Dungali Sreehari** , NIT, Uttarakhand
03:00 PM-04:00 PM	Speaker 3. **Dr. Manoj Kumar Gupta**,MNNIT Allahabad
04:00PM-04:02 PM	Vote of Thanks by Dr. P. K. Arya

Day 3
22nd July, 2021

Time(in IST)	Function
01:55PM-02:00 PM	Event Descriptions Day 3 by host
02:00 PM-03:00 PM	Speaker 1. **Dr. Nevine Makram Labib** Global Forum for Higher Education and Scientific Research Cairo, EGYPT
03:00 PM-04:00 PM	Speaker 2.**Prof. Vijay Kumar**,Govt. Engineering College , Azamgarh
04:00 PM-05:00 PM	Speaker 3. **Dr. R K Gupta** , Professor, Manipal University , Jaipur
5:00PM-5:02 PM	Vote of Thanks by Dr. Narendra Kumar

Day 4
23rd July, 2021

Time(in IST)	Function
01:55PM-02:00 PM	Event Descriptions Day 4by host
02:00 PM-03:00 PM	Speaker 1 **Dr. Arvind Kumar Verma** Professor , Production and Industrial Engineering , JNV University, Jodhpur, Rajasthan, India
03:00 PM-04:00 PM	Speaker 2 **Dr. Srikanta Routroy** Professor, Mechanical Engineering Department Birla Institute of Technology & Science, Pilani
4:00PM-4:02 PM	Vote of Thanks by Dr. R. K Chaurasia

Day 5
24th July, 2021

Time(in IST)	Function
11:25AM-11:27 AM	Event Descriptions Day 5 by host
11:27 AM-11:30 AM	Welcome Note by President Sir
11:30AM-12:45 PM	Speaker 1. **Dr Rajeev Nayan Gupta**, NIT, Silchar ,Assam
12:45PM-02:00 PM	Speaker 2. **Dr. Tej Pratap** , MNNIT, Allahabad
02:00PM-03:00 PM	Speaker 3. **Mr. Pradeep Chaturvedi,** Chairman, Integrated Coordination Committee of The Institution of Engineers
03:00PM-03:07 PM	Vote of Thanks by Dr. Rana Mukherji

Report
Faculty Development Program (FDP) Report
Title: Recent Trends In Mechanical Engineering
Date: 20th to 24th July2021 online
Program Coordinator: Programme Convener: Dr. P K Arya, IcFAi TECH, Jaipur
Programme President: Prof. H P Singh , IcFAi TECH university, Jaipur
Participant:Dr.Nirmala L, KSIT
Summary:
The FDP dealt with the interdisciplinary nature of modern mechanical engineering, which integrates principles from physics, materials science, computer science, and other fields to

address complex challenges and drive innovation in diverse industries. The topics discussed were about green engineering, additive manufacturing, automation, IOT, IOE and various other topics. The FDP effectively gave insight about various sectors advanced in mechanical field and also fostering a deeper understanding and teaching capability of modern mechanical engineering technologies amongst participants.

Objectives of the FDP

To enhance the knowledge of latest technologies used in manufacturing sector.

To create awareness of IOT and IOE

SUBMITTED BY:
Dr.Nirmala L

The ICFAI University, Jaipur

ICFAI UNIVERSITY

Five Day Online Faculty Development Program (FDP) on

Recent Trends in Mechanical Engineering

Certificate of Participation

This is to certify that Nirmala L from
Ksit
has actively participated in **Five Day Online Faculty Development Program (FDP) on**
Recent Trends in Mechanical Engineering
organized by IcfaiTech, ICFAI University, Jaipur in collaboration with IET(Uk), Delhi Local Network
during **July 20 – July 24 , 2021.**

Jointly organized by

IET The Institution of Engineering and Technology | IcfaiTech Faculty of Science & Technology (FST)

Dr. P. K. Arya	Dr. Narendra Kumar	Dr. Rana Mukherji	Dr. A K Saini	Prof(Dr.). H.P.Singh, VSM
Convener IcfaiTech	Convener IcfaiTech	ExCom Member IET(Uk), Delhi Local Network	Associate Dean IcfaiTech	President The ICFAI University, Jaipur

SIGATURE OF HOD

Head of the Department
Dept. of Mechanical Engg.
K.S. Institute of Technology
Bengaluru - 560 109

SIGNATURE OF PRINCIPAL

PRINCIPAL
K.S. INSTITUTE OF TECHNOLOGY
BENGALURU - 560 109.

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109

#14, Raghuvanahalli, Kanakapura Main Road, Bengaluru-5600109

DEPARTMENT OF MECHANICAL ENGINEERING

REPORT OF FDP:

Short term course on, "Enduring Trends in Hydraulic Control Systems: Past, Present & Future",

Broucher

BACKGROUND AND SCOPE

The field of fluid power technology is assuming increasing importance in every sphere of industry. Two of the most important advantages of fluid power transmission are the ability to multiply force and the flexibility to change direction quickly without damage to the system. The importance of the fundamental knowledge of hydraulic components in various fields like aerospace, production, and system controls has been widely felt.

The latest trend in hydraulic component development is the energy and weight saving technologies for hydraulic drives that are favorable in many industrial applications. With the complexity of today's industrial processes, the early fault identification and diagnosis through electro hydraulic control system is gaining importance. With the advent of electronics integration to hydraulic valves, most of the operations are carried out through proportional and servohydraulics precisely. Similarly, computational tools are applied for analysis and optimization of various parameters in hydraulic system. The latest is the use of MEMS (Micro Electro Mechanical Systems) application in the fluid power technology. Keeping in view the above developments, a one week short term training module is developed for faculty and practicing engineers who wish to have an insight into the components and operation of hydraulic and pneumatic systems. The mathematical content has been kept simple with the aim of making the course good rather than rigorous.

COURSE OBJECTIVES

The proposed STC is aimed to make the participants aware of the Fluid Power Technology globally prevailing in the area of Industries/Defense in general and multi domain applications in particular.

COURSE CONTENTS

The course will deal with the fundamentals and diversified industrial /Defense applications. Course would also cover demonstration of the existing know-how and facilities in the lab. The major contents are as follows -

- Enduring trends in Fluid Power Technology-Past and Present
- Introduction to Fluid Power Technology-Components, Application and Basic Laws
- Pumping Theory. Construction and Operational features of Hydraulic pumps and Efficiencies
- Constructional features, selections and Applications of Control Elements - Direction Control, Pressure Control and Flow control Valves
- Construction and Operational features of Fluid Power Actuators and Their Efficiencies
- Design and Analysis of Fluid Power Circuits
- Electro-pneumatics
- Proportional and Servohydraulics
- Modeling of Fluid Power Components
- Accessories- Filters Accumulators, Seals and Maintenance

DELIVERY MODE

Online through Google Meet. Link will be shared upon acceptance.

RESOURCE PERSONS

The experts from the R&D Labs, Industry and Faculty from Department of Mechanical Engineering IIT Madras.

ABOUT THE DEPARTMENT OF MECHANICAL ENGINEERING, IIT Madras

Mechanical Engineering is one of the major activities in the engineering profession and its principles are involved in the design, study, development and construction of nearly all of the physical devices and systems. Continued research and development have led to better machines and processes helping the mankind.

The Department of Mechanical Engineering at IIT Madras is as old as the Institute itself. Its impact on the institute and on society is easily demonstrated by noting the alignment of the department's evolution with key events and technological advances in the India and elsewhere. Today, the department of Mechanical engineering of IIT Madras attracts and features an extraordinary rich diversity and quantity of talented individuals, with nearly 700 undergraduates, 500 graduate students and over 60 faculty members. The impressive array of students makes the department as the largest in the country and one of the largest in Asia.

In addition to teaching undergraduate and graduate students, the faculty of Mechanical Engineering actively pursues research through graduate students. The current graduate students include nearly 150 Master of Technology students (M.Tech), 170 Master of Science (by research) students (M.S.) and 300 students pursuing their doctoral programme (Ph.D).

AICTE Sponsored

Short Term Course (STC) on

"Enduring Trends in Hydraulic Control Systems: Past, Present and Future"

Co-Sponsored by FPSI, Madras Chapter

March 22-27, 2021

Registration Form

1. Name
2. Designation
3. Educational Qualification
4. Department
5. Organization
6. Teaching Experience
7. Favorite Subjects
8. No. of STCs attended so far

   At IIT Madras ____ At other places ___ Total ____
9. Mailing Address
10. Telephone
11. E-mail

Date: Signature of the Applicant

SPONSORSHIP CERTIFICATE

Certified that Dr/Mr/Mrs _____

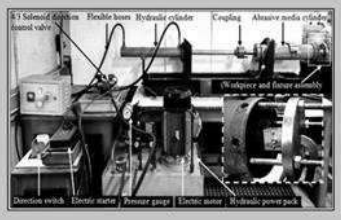
_____is being sponsored hereby for attending the AICTE Sponsored Short Term Course (STC) on "Enduring Trends in Hydraulic Control Systems: Past, Present and Future" to be conducted at Indian Institute of Technology Madras, Chennai from March 22-27, 2021, if selected. Also this is to certify that this institute is recognized by AICTE.

Signature and seal of Sponsoring Authority
(Head of the Institution)

Place:
Date:

PLEASE SEND THE SCANNED SOFT COPIES TO

Mr. Ishwar Bhiradi: me17d025@smail.iitm.ac.in
WhatsApp Contact: 8497040087



ABOUT THE MANUFACTURING ENGINEERING SECTION

The Manufacturing Engineering Section is spread over three laboratories, one housed in Ranganathan Building, one in the Machine Tool Laboratory and third one Precision Engineering and Instrumentation laboratory in Mechanical Sciences Block. Faculty members, technical staffs and research scholars are focused on the development of next generation advanced manufacturing processes and cutting tools, machining of difficult-to machine materials, machining and forming at micro and nano scales, friction and laser based surface engineering, microstructural alterations to improve the material properties, infusing smartness into the processes and machines, automation of processes at different levels, high precision measurement and characterization at all length-scales

ELIGIBILITY & ENTITLEMENT

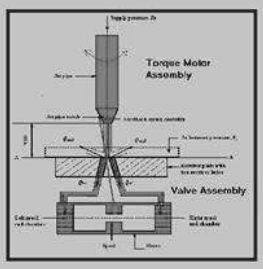
Faculty of Mechanical, Industrial Production, Mechatronics, Automobile, Ocean Engineering, Aerospace and ECE departments from AICTE recognized Engineering Colleges only are eligible to apply.

Participation certificate will be issued on successful completion of the course.

DATES TO REMEMBER

- ***Registration Form*** duly signed by the Head of the Institution should reach the organizers before **18th March 2021.**
- ***Notification of Acceptance*****: 18th March 2021 (through email only).**

AICTE Sponsored
Short Term Course (STC) on
"Enduring Trends in Hydraulic Control Systems: Past, Present and Future"
Co-Sponsored by FPSI, Madras Chapter
March 22-27, 2021



Course Coordinator
Dr Somashekhar S Hiremath

Organized by

Department of Mechanical Engineering
Indian Institute of Technology Madras
Chennai-600 036 India
www.iitm.ac.in

One Week AICTE Sponsored Short Term Course (STC) on
Enduring Trends in Hydraulic Control Systems: Past, Present and Future
22 - 27 March 2021

Coordinator: Dr Somashekhar S Hiremath

Time / Day	09:00 - 11:00	11:00 - 11:30	11:30 - 1:30	1:30 - 2:30	2:30 – 4:30
Monday (22-03-2021)	Inauguration **Lecture - 1** **Topic** – Introduction to fluid power systems **Speaker** – Dr. S. S. Hiremath	Tea Break	**Lecture - 2** **Topic** – Fluid Power Systems-Status and Development Trends in Hydraulics **Speaker** – Dr. M. Singaperumal	Lunch Break	**Lecture - 3** **Topic** – Acousto-microfluidics - handling of small objects using sound waves **Speaker** – Dr. A. K. Sen
Tuesday (23-03-2021)	**Lecture - 4** **Topic** – Effects of system parameters in series hydraulic hybrid system with hydrostatic regenerative braking **Speaker** – Dr. R. Ramakrishnan		**Lecture - 5** **Topic** – Surface topography and wettability of the metallic surface machined through abrasive flow finishing **Speaker** – Dr. Santhosh Kumar		**Lecture - 6** **Topic** – Digital Hydraulics **Speaker** – Dr. M. Singaperumal
Wednesday (24-03-2021)	**Lecture - 7** **Topic** – The role of fluid power in machine tools Speaker – Dr. G. L. Samuel		**Lecture - 8** **Topic** – Open surface microfluidics: controlling droplets motion **Speaker** – Dr. Pallab Sinha Mahapatra		**Lecture - 9** **Topic** – Investigation on the performance evaluation of EHA **Speaker** – Dr. Navatha Alle
Thursday (25-03-2021)	**Lecture - 10** **Topic** – Pressure measurements in the IC engines Speaker – Dr. J. M. Mallikarjuna		**Lecture - 11** **Topic** – Hydraulic circuits development and analysis **Speaker** – Dr. S. S. Hiremath		**Lecture - 12** **Topic** – IOT implementation on Hydraulic systems **Speaker** – Dr. K. R. Prakash
Friday (26-03-2021)	**Lecture - 13** **Topic** – Role of system simulation modelling in fluid power systems **Speaker** – Dr. S. S. Hiremath		**Lecture - 14** **Topic** – Generation, characterization of Nanoparticle using micro-EDM **Speaker** – Dr. R. K. Sahu		Interaction with Research Scholars (Micromachining Facilitates)
Saturday (27-03-2021)	**Lecture - 15** **Topic** – Role of Smart Material Actuators in Hydraulic Control Valves **Speaker** – Dr. Karunanidhi		**Lecture - 16** **Topic** – Bond graph modelling of hydraulic components **Speaker** – Dr. T. Asokan		**Lecture - 17** **Topic** – Experimental investigation on cryogenic tank pressurization system **Speaker** – Dr. A. Manimaran Valedictory

Report

Faculty Development Program (FDP) Report

Title: Short term course on, "Enduring Trends in Hydraulic Control Systems: Past, Present & Future",

Date: 22-03-2021 to 27-03-2021 online

Participant: Mr .Anil Kumar. A

SUMMARY

In field of fluid power technology is assuming increasing importance in every sphere of industry. Two of the most important advantages of fluid power transmission are the ability to multiply force and the flexibility to change direction quickly without damage to the system. The importance of the fundamental knowledge of hydraulic components in various fields like aerospace, production, and system controls has been widely felt. The latest trend in hydraulic component development is the energy and weight saving technologies for hydraulic drives that are favorable in many industrial applications. With the complexity of today's industrial processes, the early fault identification and diagnosis through electro hydraulic control system is gaining importance. With the advent of electronics integration to hydraulic valves, most of the operations are carried out through proportional and servo hydraulics precisely. Similarly, computational tools are applied for analysis and optimization of various parameters in hydraulic system. The latest is the use of MEMS (Micro Electro Mechanical Systems) application in the fluid power technology. Keeping in view the above developments, a one week short term training module is developed for faculty and practicing engineers who wish to have an insight into the components and operation of hydraulic and pneumatic systems. The mathematical content has been kept simple with the aim of making the course good rather than rigorous**.**

COURSE OBJECTIVES:

The proposed STC is aimed to make the participants aware of the Fluid Power Technology globally prevailing in the area of Industries/Defense in general and multi domain applications in particular

COURSE CONTENTS

The course will deal with the fundamentals and diversified industrial / Defense applications. Course would also cover demonstration of the existing know-how and facilities in the lab. The major contents are as follows - Enduring trends in Fluid Power Technology-Past and Present Introduction to Fluid Power Technology Components, Application and Basic Laws Pumping Theory. Construction and Operational features of Hydraulic pumps and Efficiencies Constructional features, selections and Applications of Control Elements - Direction Control, Pressure Control and Flow control Valves Construction and Operational features of Fluid Power Actuators and Their Efficiencies Design and Analysis of Fluid Power Circuits Electro-pneumatics Proportional and Servo hydraulics Modeling of Fluid Power Components Accessories- Filters Accumulators, Seals and Maintenance

DELIVERY MODE Online through Google Meet. Link will be shared upon acceptance.

RESOURCE PERSONS The experts from the R&D Labs, Industry and Faculty from Department of Mechanical Engineering IIT Madras

SUBMITTED BY:

Mr .Anil Kumar. A

Centre for Continuing Education

Indian Institute of Technology Madras

This is to certify that

Anil Kumar A.

KSIT Bangalore, Bangalore

has participated in an AICTE Sponsored Short Term Course

"Enduring Trends in Hydraulic Control Systems:

Past, Present and Future"

organized by the Department of Mechanical Engineering

from 22 March to 27 March, 2021

(Somashekhar S Hiremath)
Coordinator
Mechanical Engineering

(A. Seshadri Sekhar)
Head
Mechanical Engineering

(Devendra Jalihal)
Chairman
Centre for Continuing Education

SIGATURE OF HOD

Head of the Department
Dept. of Mechanical Engg.
K.S. Institute of Technology
Bengaluru-560 109.

SIGNATURE OF PRINCIPAL

PRINCIPAL
K.S. INSTITUTE OF TECHNOLOGY
BENGALURU - 560 109.

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109

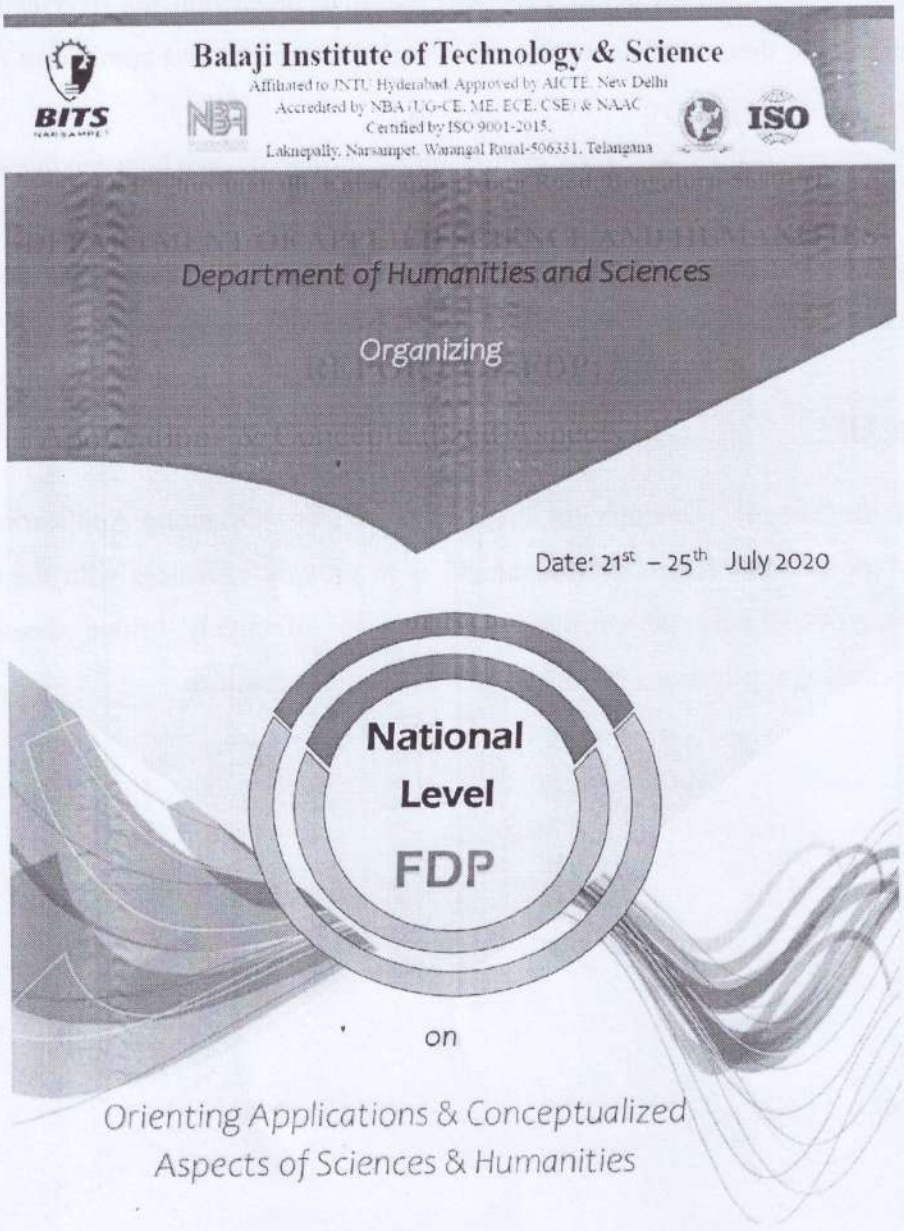
#14, Raghuvanahalli, Kanakapura Main Road, Bengaluru-5600109

DEPARTMENT OF APPLIED SCIENCE AND HUMANITIES

REPORT OF FDP:

"Orienting Applications & Conceptualized Aspects of Sciences & Humanities"

Brochure:



Report

Faculty Development Program (FDP) Report

Title: Orienting Applications & Conceptualized Aspects of Sciences & Humanities

Date: 21st July 2020 to 25th July 2020, Balaji Institute of Technology, Telangana

Participants: 1) Dr. Jalaja P

Summary:

The topic "Orienting Applications & Conceptualized Aspects of Sciences & Humanities" in the context of an FDP (Faculty Development Program) seems to delve into the intersection of practical applications and theoretical concepts within both the sciences and humanities fields.

In this FDP, educators and researchers likely explore how to bridge the gap between theoretical knowledge and real-world applications across various disciplines. They may discuss strategies for integrating practical, hands-on experiences with conceptual understanding to enhance learning outcomes.

Objectives of the FDP

The objective of the Faculty Development Program (FDP) on "Orienting Applications & Conceptualized Aspects of Sciences & Humanities" is to provide educators with the tools, strategies, and interdisciplinary perspectives necessary to effectively bridge theoretical knowledge with practical applications in both the sciences and humanities.

Submitted by

Balaji Institute of Technology & Science

Affiliated to JNTU Hyderabad, Approved by AICTE, New Delhi
Accredited by NBA (UG-CE, ME, ECE, CSE) & NAAC
Certified by ISO 9001-2015,
Laknepally, Narsampet, Warangal Rural-506331, Telangana

Certificate of Participation

This is to certify that **Mrs.JALAJA P, Assistant Professor , Mathematics, K.S.INSTITUTE OF TECHNOLOGY** has successfully completed the National Level One Week Confederated Online Faculty Development Program on **"Orienting Applications & Conceptualized Aspects of Sciences & Humanities"** organized by Dept. of Humanities & Sciences from 21 to 25 July, 2020.

CONVENER
Dr. V. Narayana
Assoc. Prof & HoD

PRINCIPAL
Dr. V. S. Hariharan

Dr. Jalaja P

SIGNATURE OF HOD
Head of the Department
Dept. of Science and Humanities
Institute of Technology
Bengaluru - 560 109

SIGNATURE OF PRINCIPAL
PRINCIPAL
K.S. INSTITUTE OF TECHNOLOGY
BENGALURU - 560 109.

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109

#14, Raghuvanahalli, Kanakapura Main Road, Bengaluru-5600109

DEPARTMENT OF APPLIED SCIENCE AND HUMANITIES

REPORT OF FDP:

"Advanced Manufacturing Techniques for Medical and Precision Engineering"

Brochure:

AICTE

MVJ COLLEGE OF ENGINEERING

An Autonomous Institution

Whitefield ◆ Bangalore

(Affiliated to VTU, Belagavi, Approved By AICTE, New Delhi
Recognized by UGC under 2(f) & 12(B)
Accredited By NBA and NAAC)

AICTE Sponsored STTP

"Advanced Manufacturing Techniques for Medical and Precision Engineering"

Organized by

Department of Mechanical Engineering, IIC and IQAC

Guest Speaker

Dr. J. Ram Kumar

Professor, Department of Mechanical Engineering, IIT Kanpur

Presided by

Dr. P. Mahabaleswarappa

Principal,
MVJCE, Bangalore

Prof. Vaman B. Gudi
Registrar & COE
MVJCE, Bangalore

Prof M. Brindha
Vice Principal
MVJCE, Bangalore

Report

Faculty Development Program (FDP) Report

Title: Advanced Manufacturing Techniques for Medical and Precision Engineering

Date: 4th January 2021 to 9th January 2021, MVJ College of Engineering, Bangalore.

Participants: 1) Dr. Kiran Kumar S.R

Summary:

The training program "Advanced Manufacturing Techniques for Medical and Precision Engineering" is designed to provide participants with specialized knowledge and skills in the application of advanced manufacturing methods within the fields of medical and precision engineering.

Through a series of interactive workshops, hands-on training sessions, and expert-led lectures, participants will explore cutting-edge manufacturing technologies and techniques tailored specifically for the production of medical devices and precision-engineered components.

Objectives of the FDP

The objective of the "Advanced Manufacturing Techniques for Medical and Precision Engineering" training program is to provide participants with specialized knowledge, practical skills, and industry insights necessary to excel in the application of advanced manufacturing methods within the domains of medical device manufacturing and precision engineering.

Submitted by

INSTITUTION'S INNOVATION COUNCIL
(Ministry of HRD Initiative)

MVJ COLLEGE OF ENGINEERING
Engineering A Better Tomorrow

An Autonomous Institute
(Affiliated to VTU, Belagavi, Approved By AICTE, New Delhi,
Recognized by UGC with 2(f) & 12(B) Status
Accredited By NBA and NAAC)

AICTE

Participation Certificate

This is to certify that Dr. DR. KIRAN KUMAR S.R from ksit has attended A One Week AICTE Sponsored Short Term Training Program titled "Advanced Manufacturing Techniques for Medical and Precision Engineering", organized by the Department of Mechanical Engineering in association with IIC and IQAC, MVJ College of Engineering Bengaluru, from 04 - 09 January 2021.

Dr. G. Anand
HOD ME, MVJCE

Dr. P. Mahabaleswarappa
Principal, MVJCE

Dr. Kiran Kumar S. R

SIGNATURE OF HOD

Head of the Department
Dept. of Science and Humanities
Institute of Technology
560 109

SIGNATURE OF PRINCIPAL

PRINCIPAL
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BENGALURU - 560 109.

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109

#14, Raghuvanahalli, Kanakapura Main Road, Bengaluru-5600109

DEPARTMENT OF APPLIED SCIENCE AND HUMANITIES

REPORT OF FDP:

"Application of Mathematics in Engineering"

Brochure:

KPR Institute of Engineering and Technology
Learn Beyond (Autonomous, NAAC "A")

Department of Civil Engineering
Born to Build

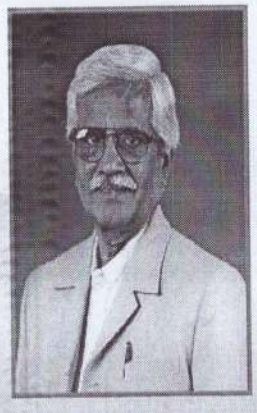
Great Place To Work. Certified MAR 2022 - MAR 2023 INDIA

Organizes

Six Days Faculty Development Programme

on

"Applications of Mathematics in Engineering"



Chief Guest

Dr. S. Jeyachandran

Vice President Marutham Groups

20-07-2020 to 25-07-2020

The Legend, KPRIET

Convenors:
Dr. V. Rajeshkumar AP(Sl.G)
Mr. S. Yuvaraj AP (Sr.G)

17 PARTNERSHIPS FOR THE GOALS

kpriet.ac.in/ /KPRIETonline

Report

Faculty Development Program (FDP) Report

Title: Application of Mathematics in Engineering

Date: 20th July 2020 to 25th July 2020, KPR Institute of Engineering &Technology, Coimbatore

Participants: 1) Mr. Venkataramana B S

Summary:

The Faculty Development Program (FDP) on "Application of Mathematics in Engineering" is designed to explore the vital role of mathematics in various engineering disciplines and equip educators with the knowledge and skills to effectively integrate mathematical concepts into engineering curricula.

Throughout the program, participants will delve into the diverse applications of mathematics in engineering, ranging from fundamental concepts such as calculus, linear algebra, and differential equations to advanced topics such as numerical methods, optimization, and mathematical modeling. They will gain insights into how mathematical principles underpin engineering theories, design methodologies, and problem-solving approaches across fields such as mechanical, civil, electrical, and chemical engineering.

Objectives of the FDP

The objective of the Faculty Development Program (FDP) on "Application of Mathematics in Engineering" is to enhance the pedagogical and practical understanding of mathematics among engineering educators, enabling them to effectively integrate mathematical concepts into engineering curricula and prepare students for successful careers in engineering practice.

Submitted by

KPR INSTITUTE OF ENGINEERING AND TECHNOLOGY
(Autonomous)
Avinashi Road, Arasur, Coimbatore - 641 407
+91 422 2635600 | info@kpriet.ac.in | www.kpriet.ac.in

ONLINE WEBINAR

Certificate Of Participation

This is to certify that

Venkataramana B.S of K.S. Institute of Technology

has participated in the

SIX DAY FACULTY DEVELOPMENT PROGRAMME ON

"APPLICATIONS OF MATHEMATICS IN ENGINEERING"

conducted by DEPARTMENT of MATHEMATICS

KPRIET held from 20-07-2020 to 25-07-2020

HoD, Mathematics
Dr.K.S.Ramaswami

Principal
Dr.M.Akila

Mrs. Venkataramana B.S

SIGNATURE OF HOD
Head of the Department
Dept. of Science and Humanities
K.S. Institute of Technology
Bengaluru - 560 109

SIGNATURE OF PRINCIPAL
PRINCIPAL
K.S. INSTITUTE OF TECHNOLOGY
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K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109

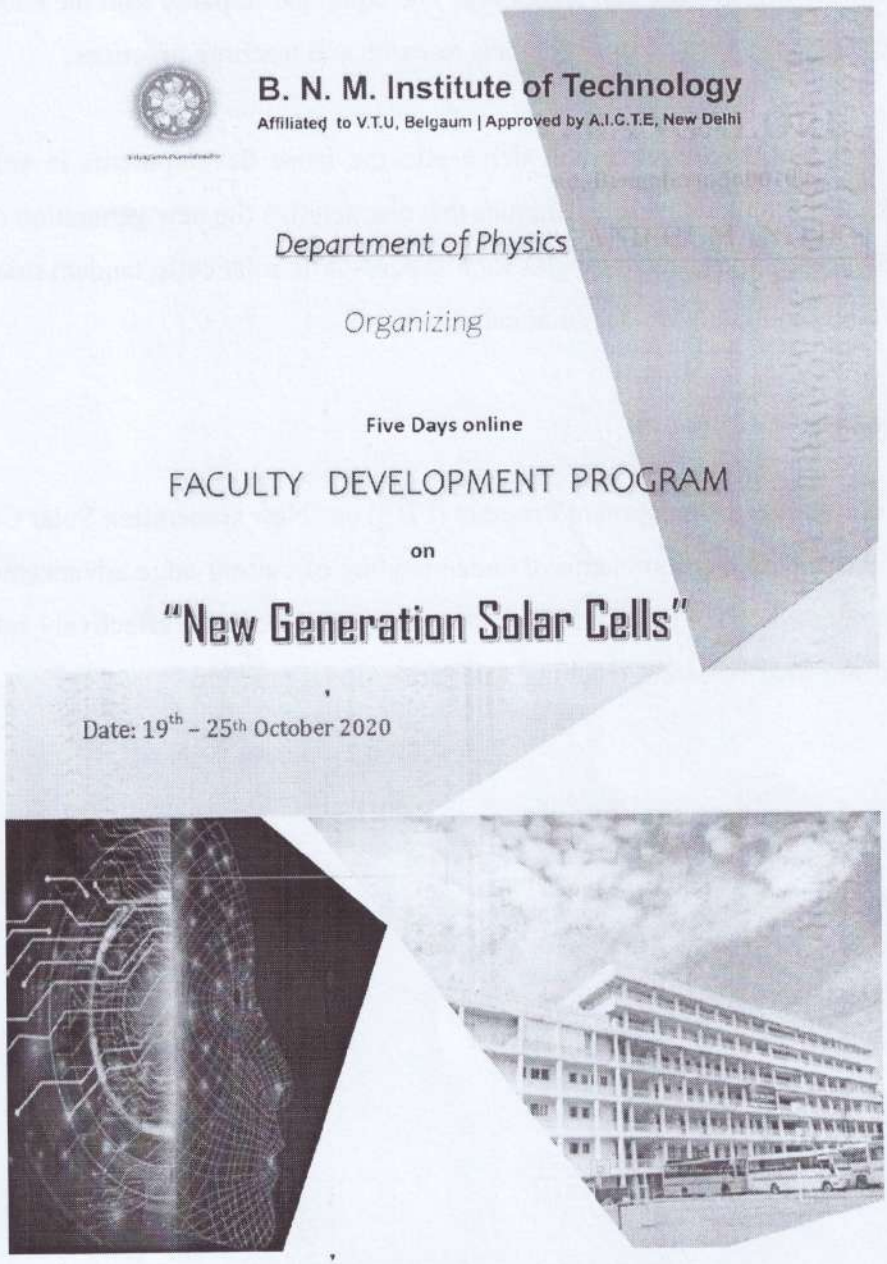
#14, Raghuvanahalli, Kanakapura Main Road, Bengaluru-5600109

DEPARTMENT OF APPLIED SCIENCE AND HUMANITIES

REPORT OF FDP:

"New generation solar cells"

Brochure:



Report

Faculty Development Program (FDP) Report

Title: New generation solar cells

Date: 19th October 2020 to 23rd October 2020, BNM Institute of Technology, Bangalore.

Participants: 1) Mr. Sunil Kumar N

Summary:

The Faculty Development Program (FDP) on "New Generation Solar Cells" aims to explore cutting-edge advancements in solar cell technology and equip participants with the knowledge and skills to integrate these innovations into their research and teaching practices.

Throughout the program, participants will delve into the latest developments in solar cell materials, designs, and manufacturing techniques that characterize the new generation of solar cells. This may include emerging technologies such as perovskite solar cells, tandem solar cells, organic photovoltaics, and quantum dot solar cells.

Objectives of the FDP

The objective of the Faculty Development Program (FDP) on "New Generation Solar Cells" is to provide participants with a comprehensive understanding of cutting-edge advancements in solar cell technology and equip them with the knowledge and skills to effectively integrate these innovations into their research, teaching, and professional practice.

Submitted by

B. N. M. Institute of Technology

27th Cross, 12th Main, Banashankari 2nd Stage, Bengaluru - 560 070, INDIA
Ph: 91-80-26711780/81/82 E-mail: principal@bnmit.in, www.bnmit.org

BNMIT

DEPARTMENT OF PHYSICS

Certificate

This is to certify that Dr./Mr./Mrs./Ms. SUNIL KUMAR N *of* K S INSTITUTE OF TECHNOLOGY *has participated in Online Five-Day Faculty Development Program on* ***"New Generation Solar Cells"****, organized by the Department of Physics, B.N.M. Institute of Technology, Bengaluru from 19th to 23rd October 2020.*

Dr. Deepa H. R
HOD, Dept. of Physics
BNMIT, Bengaluru

Dr. Krishnamurthy G. N.
Principal
BNMIT, Bengaluru

Prof. T. J. Rama Murthy
Director
BNMIT, Bengaluru

Mr. Sunil Kumar N

SIGNATURE OF HOD
Head of the Department
Dept. of Science and Humanities
K.S. Institute of Technology
Bengaluru - 560 109

SIGNATURE OF PRINCIPAL
PRINCIPAL
K.S. INSTITUTE OF TECHNOLOGY
BENGALURU - 560 109.

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109

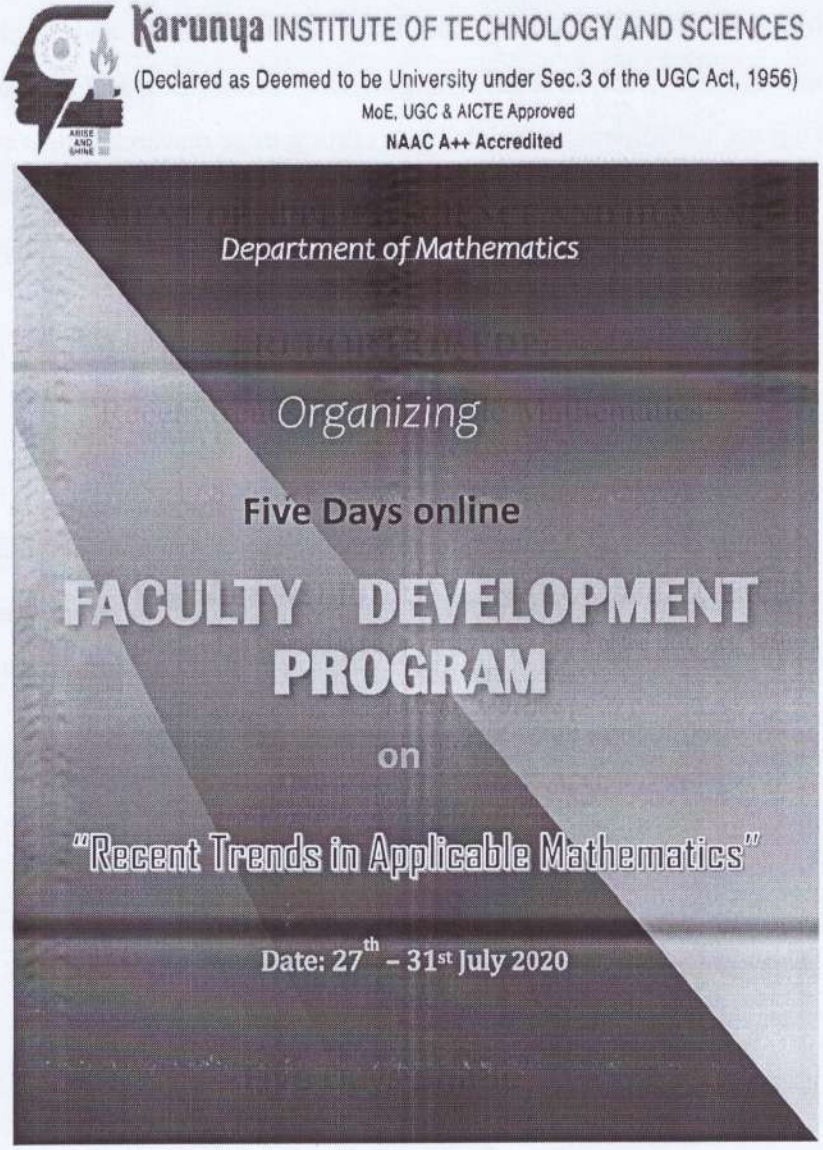
#14, Raghuvanahalli, Kanakapura Main Road, Bengaluru-5600109

DEPARTMENT OF APPLIED SCIENCE AND HUMANITIES

REPORT OF FDP:

"Recent trends in Applicable Mathematics"

Brochure:



Report

Faculty Development Program (FDP) Report

Title: Recent trends in Applicable Mathematics

Date: 27th July 2020 to 31st July '2020, Karunya Institute of Technology & Sciences, Coimbatore.

Participants: 1) Mr. Chowdappa M. R

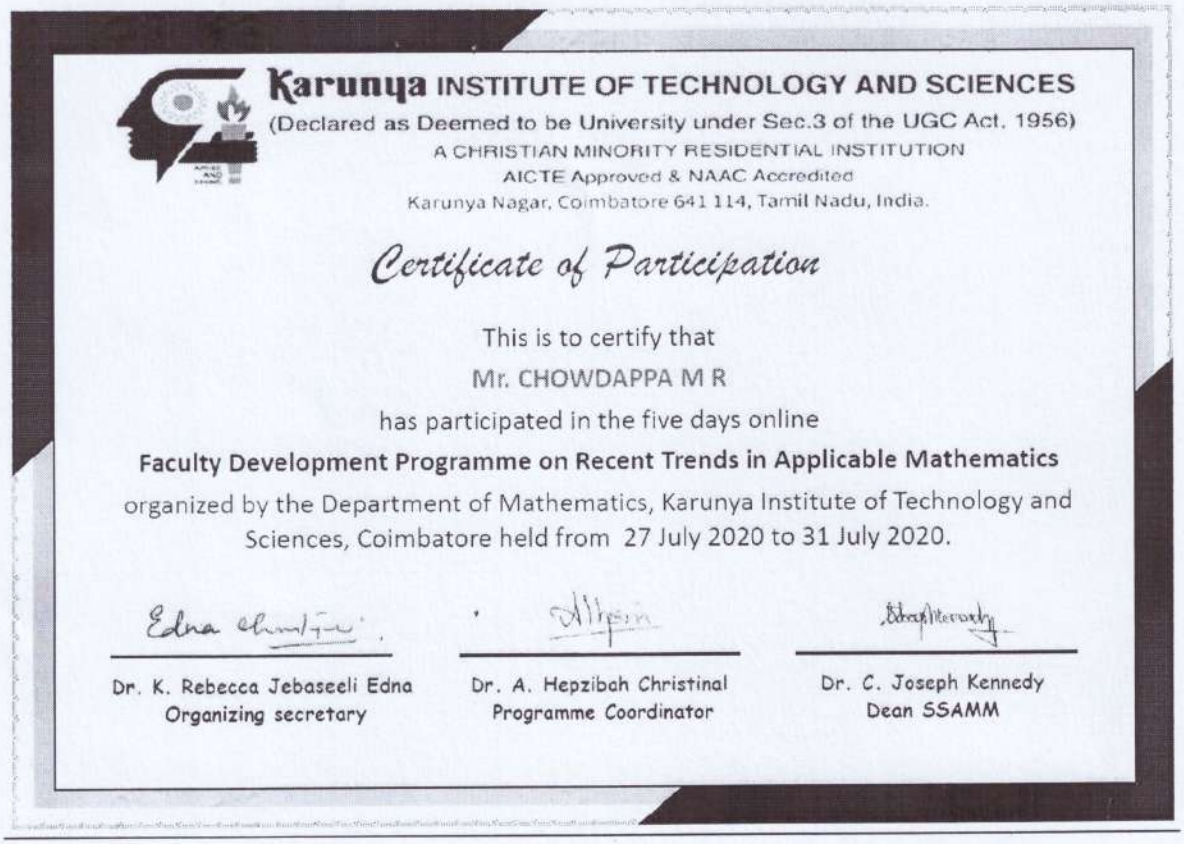
Summary:

The Faculty Development Program (FDP) on "Recent Trends in Applicable Mathematics", focuses on exploring and understanding the latest advancements and applications of mathematics in various fields, such as science, engineering, economics, and data analysis. Throughout the program, participants will delve into cutting-edge research topics and practical applications where mathematics plays a crucial role. This may include areas such as mathematical modeling, optimization techniques, machine learning, cryptography, and computational methods.

Objectives of the FDP

The objective of the Faculty Development Program (FDP) on "Recent Trends in Applicable Mathematics" is to provide participants with a comprehensive understanding of the latest advancements and applications of mathematics in diverse fields, and to equip them with the knowledge and skills necessary to leverage these trends in their research, teaching, and professional practice.

Submitted by



Karunya INSTITUTE OF TECHNOLOGY AND SCIENCES
(Declared as Deemed to be University under Sec.3 of the UGC Act, 1956)
A CHRISTIAN MINORITY RESIDENTIAL INSTITUTION
AICTE Approved & NAAC Accredited
Karunya Nagar, Coimbatore 641 114, Tamil Nadu, India.

Certificate of Participation

This is to certify that
Mr. CHOWDAPPA M R
has participated in the five days online
Faculty Development Programme on Recent Trends in Applicable Mathematics
organized by the Department of Mathematics, Karunya Institute of Technology and Sciences, Coimbatore held from 27 July 2020 to 31 July 2020.

Dr. K. Rebecca Jebaseeli Edna
Organizing secretary

Dr. A. Hepzibah Christinal
Programme Coordinator

Dr. C. Joseph Kennedy
Dean SSAMM

Mr. Chowdappa M. R

SIGNATURE OF HOD
Head of the Department
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#14, Raghuvanahalli, Kanakapura Main Road, Bengaluru-5600109

DEPARTMENT OF APPLIED SCIENCE AND HUMANITIES

REPORT OF FDP:

"Being a Super Teacher"

Brochure:

BANNARI AMMAN
INSTITUTE OF TECHNOLOGY
Stay Ahead

Department of Management Studies

Organizes

One Week Online FDP

on

Being a Super Teacher

Date

6th – 12th July 2020

Report

Faculty Development Program (FDP) Report

Title: Being a Super Teacher

Date: 6th July 2020 to 12th July 2020,

Participants: 1) Mrs. Lakshmi C

Summary:

The Faculty Development Program (FDP) on "Being a Super Teacher" is designed to empower educators with the knowledge, skills, and mindset to excel in their teaching roles and positively impact student learning outcomes.

Throughout the program, participants will explore various aspects of effective teaching and pedagogy, focusing on strategies and techniques that elevate their teaching practices to the level of a "super teacher."

Objectives of the FDP

The objective of the Faculty Development Program (FDP) on "Being a Super Teacher" is to empower educators with the knowledge, skills, and mindset necessary to excel in their teaching roles and positively impact student learning outcomes.

Submitted by

BANNARI AMMAN INSTITUTE OF TECHNOLOGY

SCHOOL OF MANAGEMENT STUDIES

C E R T I F I C A T E

OF PARTICIPATION

This certificate is awarded to Mr./Ms./Dr. LAKSHMI C, Assistant professor, K.S.Institute of technology, Bengaluru for participating in the one week online FDP on "Being a Super Teacher" from July 6 to July 12, 2020

DIRECTOR (SMS), BIT

PRINCIPAL, BIT

. Mrs. Laksmi C

SIGNATURE OF HOD

Head of the Department
Dept. of Science and Humanities
K.S. Institute of Technology
Bengaluru - 560 109

SIGNATURE OF PRINCIPAL

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K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109

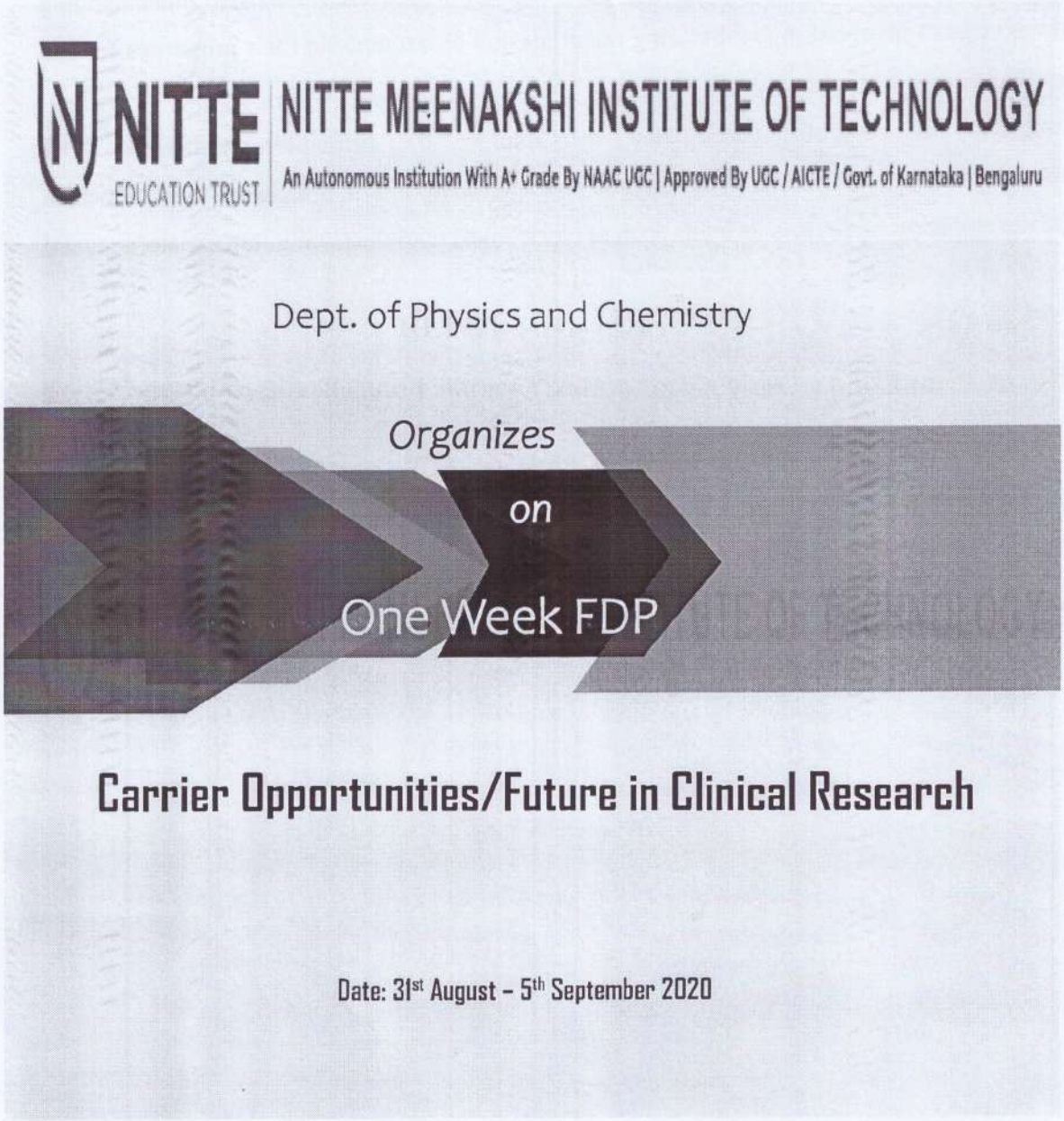
#14, Raghuvanahalli, Kanakapura Main Road, Bengaluru-5600109

DEPARTMENT OF APPLIED SCIENCE AND HUMANITIES

REPORT OF FDP:

"Material Synthesis and Characterization for Device Applications"

Brochure:



Report

Faculty Development Program (FDP) Report

Title: Material Synthesis and Characterization for Device Applications

Date: 31st August 2020 to 5th September 2020, NMIT, Bangalore.

Participants: 1) Mrs. Shylaja K.R

Summary:

The Faculty Development Program (FDP) on "Material Synthesis and Characterization for Device Applications" is designed to provide participants with a comprehensive understanding of the processes involved in synthesizing materials and characterizing their properties for use in various device applications.

Throughout the program, participants will explore the principles, techniques, and methodologies used in material synthesis and characterization, with a focus on their relevance to the development of devices in fields such as electronics, optoelectronics, energy storage, and biomedical engineering.

Objectives of the FDP

The objective of the Faculty Development Program (FDP) on "Material Synthesis and Characterization for Device Applications" is to equip participants with the knowledge, skills, and practical expertise required to effectively synthesize materials and characterize their properties for use in various device applications.

Submitted by

NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY
(An Autonomous Institution Under Visvesvaraya Technological University, Belgaum)
YELAHANKA, BANGALORE-64

CERTIFICATE OF PARTICIPATION

This is certify that Dr./Prof./Mr./Ms. SHYLAJA K R , K S I T, Bengaluru, Participated in One-week Faculty Development Programme "Material Synthesis and Characterization for Device Applications" held from 31st August to 5th September 2020 organized by Department of Physics & Chemistry, NMIT, Bangalore.

Dr. S Abdul Sattar
Co ordinator

Dr. Habibuddin Shaik
Convener

Mrs. Shylaja K. R

SIGNATURE OF HOD

Head of the Department
Dept. of Science and Humanities
K.S. Institute of Technology
Bengaluru - 560 109

SIGNATURE OF PRINCIPAL

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BENGALURU - 560 109.

K. S. INSTITUTE OF TECHNOLOGY

DEPARTMENT OF BASIC SCIENCE AND HUMANITIES

5 Day FDP on the theme "Inculcating Universal Human Values in Technical Education"

Date and Time of FDP: 18th October to22nd October 2020.

Organized by: All India Council for Technical Education (AICTE)

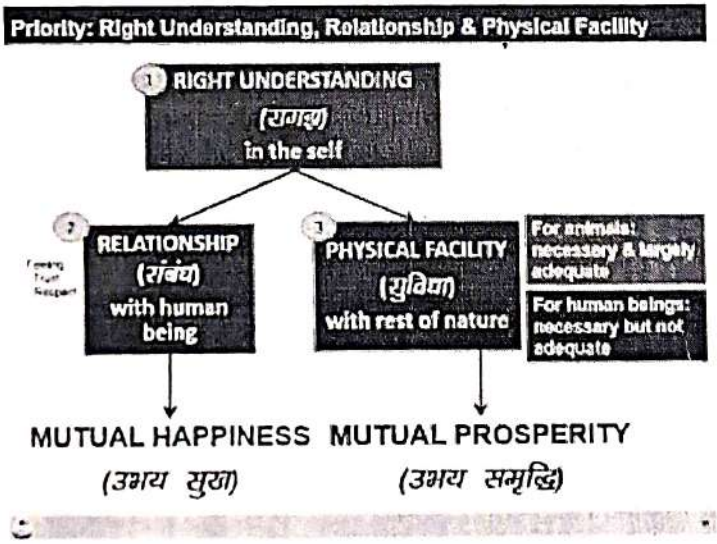
Through: Online .

Scope and Objectives: This workshop is about living with fulfillment in our practical day-to-day life. Education is expected to facilitate this aspiration by helping the student to develop a holistic world view as well as the practical skills for living with fulfilment, i.e., living in harmony as an individual as well as with family, society and the natural environment.

Day 1: Introduction for value education

Need for Value Education

Content of Value Education: The value of an entity is its participation in the larger order of which it is a part. The context is always the larger order. Value has to do with the participation of a unit in the larger order. E.g. a piece of chalk is a unit. The classroom is the larger order for this unit. The value of chalk is that it can be used to write on the blackboard for the desired functioning of the classroom.



Understanding Natural Acceptance – the basis for Right Understanding

Right understanding obtained through self-exploration can be recognised as follows:
a. It is assuring
b. It is satisfying
c. It is universal
Self-exploration is a process of seeing the reality on our own right, by our own investigation, observation and analysis. It is a process of dialogue between "what I am" and "what is naturally acceptable to me". It includes verifying the proposals on the basis of natural acceptance (which is not

the same as acceptance) and validating experientially in living.

Exploring the Meaning of Happiness and Prosperity

Happiness is to be in a state of harmony. The expanse of our living is at four levels (individual human being, family, society and nature/existence), and thus the program for continuity of happiness is to be in harmony at all these levels. Prosperity is the feeling of having more than required physical facility.

Day 2 : Understanding the Human Being (As Co-existence of Self and Body)

The Needs of the Self and the Body

The need of the Self is happiness (e.g. feeling of respect leading to happiness) while the need of the Body is physical facility (e.g. food). All the needs related to the Self are continuous in time while all the needs related to the Body are required for a limited time. This is one way we can differentiate between the need of the Self and the need of the Body.

The Activities of the Self and the Body
The Self has the activity of desire, thought and expectation which are continuous. On the other hand, any activity of the Body, like eating, walking, etc. is temporary in time.

The Response of the Self and the Body
The response of the Body is based on recognizing and fulfilling whereas the response of the Self is based on knowing, assuming, recognizing and fulfilling. The recognition and fulfilment of the Body is definite, while that of Self is determined by the activity of assuming. As assumption changes, the recognition and fulfilment by the Self also changes. The conduct of the human being basically depends upon the response of the Self, as all decisions are made by the Self. Only with the assumptions set right, i.e. assuming based on knowing (which is definite), can recognising and fulfilling be set right; and only then, the conduct can become definite.

Day 3: Understanding Harmony in the Family

Feeling of Relationship as the Basis for Harmony in the Family
The harmony in the family has primarily to do with the fulfilment of relationship between one human being and the other human being. In order to fulfil relationship, it is necessary to understand relationship.

Feelings (values) in relationship:
1. Trust (foundation value)
2. Respect
3. Affection
4. Care
5. Guidance
6. Reverence
7. Glory
8. Gratitude
9. Love (complete value)

Relationship already exists – we don't have to create it; rather we only have to recognise and fulfil it. The family is the basic unit of human-human interaction. The basic issue in family is that of relationship. In relationship, there are nine feelings (values) that can be clearly understood and lived with. There is harmony in the family, mutual happiness in the family, when we understand the feelings and ensure in our living.

Respect is right evaluation at the level of the Self. The complete content of respect is to see that the other is similar to me in terms of purpose, programme and potential; and we are complementary to each

other in terms of competence. Over evaluation, under/otherwise evaluation and discrimination are disrespect.

The other feelings in relationship include affection, care, guidance, reverence, glory, gratitude and love. Love is the feeling of acceptance of all; it is the complete value. Justice is ensuring these feelings in oneself and expressing them to the other, leading to mutual happiness. Justice begins from family and extends to the world family, leading to undivided society.

Day 4: Understanding Harmony in the Society

Education is to develop right understanding of the harmony at all levels of being – from self to the entire existence (individual, family, society, and nature/existence). And Sanskar is to develop the basic acceptances of the harmony at various levels.
At the level of society, the human goal is right understanding and right feeling (happiness) in every individual, prosperity in every family, fearlessness (trust) in society and co-existence (mutual fulfilment) in nature/existence. This goal is fulfilled by human order, i.e. systems for education-sanskar, health-self regulation, production-work, justice-preservation and exchange-storage. These systems start with the family order, and are interconnected right up to world family order, leading to universal human order. The natural process of development of a child in an environment of relationship needs to be understood and fulfilled so that the child grows into a human being who can have the competence to participate in the universal human order.

Day 5 :Understanding Harmony in the Nature and Existence

Existence is co-existence, which is in the form of units submerged in space. Units are energised, they are self-organised and they recognise their relationship with other units and participate with them in a mutually fulfilling manner (except for human beings without right understanding).

Existence is co-existence, and the role of human being is to realise co-existence in the Self and live in co-existence in nature/existence, extending up to universal human order. In this way, the unfolding of the co-existence will be completed through human being – resulting into universal order.

Report Submitted By

Anuradha MV
Assistant Professor
Department of BSH , KSIT

Prof Jalaja P
Professor & Head
Department of BSH, KSIT
Head of the Department
Dept. of Science and Humanities
K.S. Institute of Technology
Bengaluru - 560 109

F.No AICTE/FDP-SI/OnlineWorkshop/201/45881

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

NELSON MANDELA MARG, VASANT KUNJ, NEW DELHI

Certificate of Participation

This is to certify that Mrs. Anuradha Mv from KSIT, Bangalore has participated and successfully completed the online workshop on Universal Human Value on the theme "Inculcating Universal Human Values in Technical Education" during 19-23 October, 2020 as organized by All India Council for Technical Education(AICTE).

Dr. Rajneesh Arora
Chairman
National Coordination Committee for Induction Program

Prof. Rajive Kumar
Member Secretary, AICTE

Kammavari Sangham(R)-1952

K.S.INSTITUTE OF TECHNOLOGY

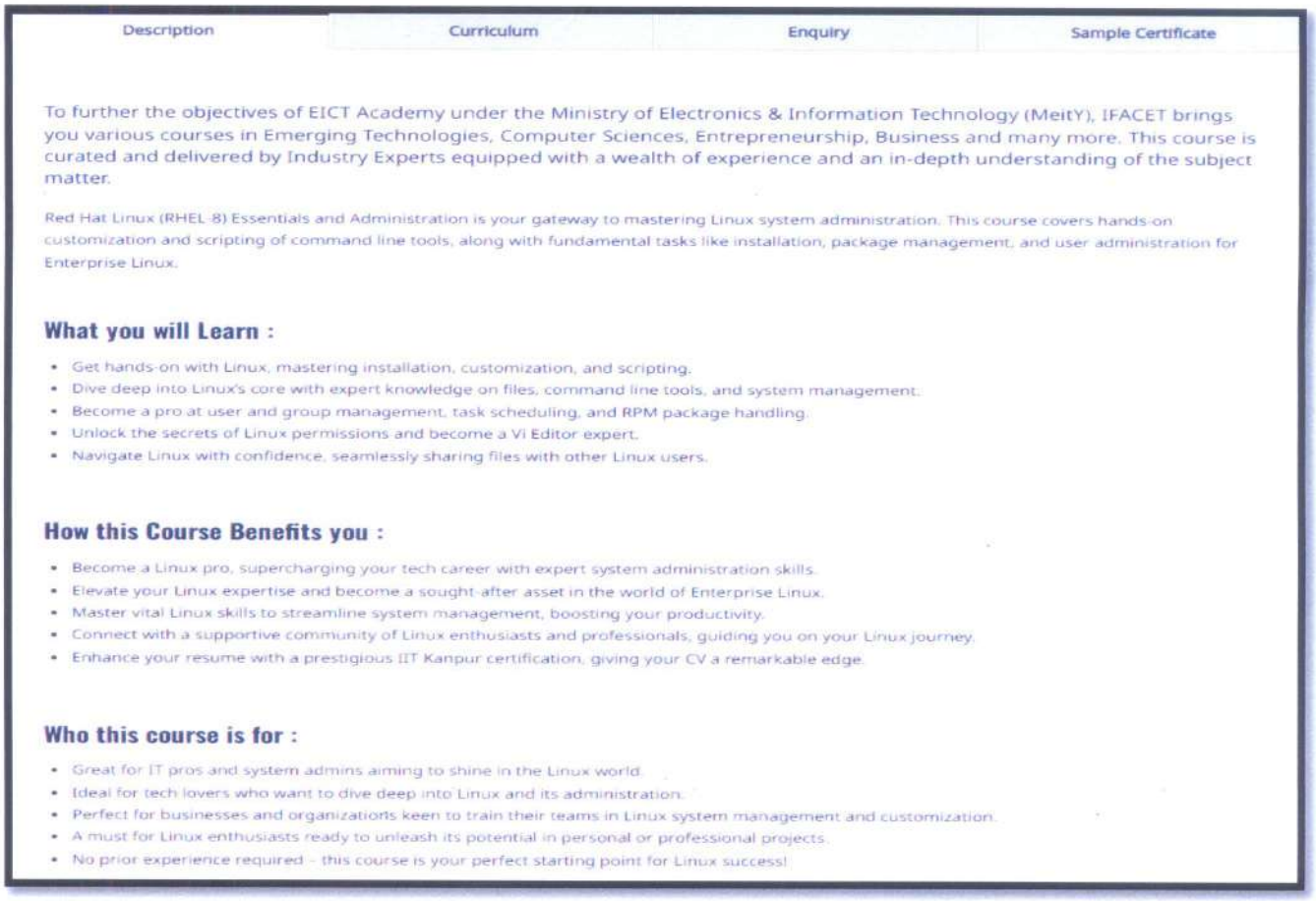
Department of Computer Science& Engineering

FDP REPORT
ON
ADVANCE CONCEPTS ON NETWORKING AND LINUX

Venue: IIT Kanpur **Date: 31-05-2021 to 05-06-2021**

I, Mrs. Soughandika Narayan Assistant Professor, Department of CSE, KSIT, attended a Five Days Faculty Development Programme on "Advance Concepts on Networking and Linux" in Online Mode.

Brochure:



Description | Curriculum | Enquiry | Sample Certificate

To further the objectives of EICT Academy under the Ministry of Electronics & Information Technology (MeitY), IFACET brings you various courses in Emerging Technologies, Computer Sciences, Entrepreneurship, Business and many more. This course is curated and delivered by Industry Experts equipped with a wealth of experience and an in-depth understanding of the subject matter.

Red Hat Linux (RHEL-8) Essentials and Administration is your gateway to mastering Linux system administration. This course covers hands-on customization and scripting of command line tools, along with fundamental tasks like installation, package management, and user administration for Enterprise Linux.

What you will Learn :

- Get hands-on with Linux, mastering installation, customization, and scripting.
- Dive deep into Linux's core with expert knowledge on files, command line tools, and system management.
- Become a pro at user and group management, task scheduling, and RPM package handling.
- Unlock the secrets of Linux permissions and become a Vi Editor expert.
- Navigate Linux with confidence, seamlessly sharing files with other Linux users.

How this Course Benefits you :

- Become a Linux pro, supercharging your tech career with expert system administration skills.
- Elevate your Linux expertise and become a sought-after asset in the world of Enterprise Linux.
- Master vital Linux skills to streamline system management, boosting your productivity.
- Connect with a supportive community of Linux enthusiasts and professionals, guiding you on your Linux journey.
- Enhance your resume with a prestigious IIT Kanpur certification, giving your CV a remarkable edge.

Who this course is for :

- Great for IT pros and system admins aiming to shine in the Linux world.
- Ideal for tech lovers who want to dive deep into Linux and its administration.
- Perfect for businesses and organizations keen to train their teams in Linux system management and customization.
- A must for Linux enthusiasts ready to unleash its potential in personal or professional projects.
- No prior experience required - this course is your perfect starting point for Linux success!

About FDP

The Five-Day Online Faculty Development Programme on "Advanced Concepts in Networking and Linux" provided an intensive and comprehensive exploration of key principles and technologies in the fields of networking and Linux operating systems. Through a series of structured sessions, participants

delved into advanced topics such as network security, virtualization, cloud computing, and advanced Linux administration techniques.

The programme fostered a dynamic learning environment, blending theoretical discussions with hands-on practical exercises and demonstrations. Expert instructors shared their insights and experiences, equipping participants with valuable knowledge and skills to navigate complex networking environments and harness the power of Linux-based systems effectively. Overall, the programme served as a platform for professional development, empowering faculty members to stay abreast of the latest advancements in networking and Linux technology, ultimately enhancing their teaching capabilities and contributing to the academic excellence of their institutions.

Certificate:

E & ICT Academy, IIT Kanpur

(A Joint Initiative of MeitY & IIT Kanpur)

Certificate

This is to certify that

DR. / MR. / MS. **SOUGANDHIKA NARAYAN**

of

K.S. INSTITUE OF TECHNOLOGY

has completed the **Faculty Development Program** on

Advance Concepts on Networking and Linux

from 31st May 2021 to 5th June 2021 (1 week)

Prof. B. V. Phani — Prof. Amey Karkare

Date of Issue: 08-06-2021

System Identification No.: 44169-455221-475c7a7d65579487

Chief Investigators, E & ICT Academy, IIT Kanpur

FDP's by E&ICT Academy, IIT Kanpur are recognised as per CAS Guidelines in this regard. For more details visit ict.iitk.ac.in/fdp

SUBMITTED BY: MRS. SOUGHANDIKA NARAYAN

SIGNATURE OF THE FACULTY

HOD

Head of the Department
Dept. of Computer Science
K.S. Institute of Technology
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Kammavari Sangham(R)-1952

K.S.INSTITUTE OF TECHNOLOGY

Department of Computer Science& Engineering

FDP REPORT

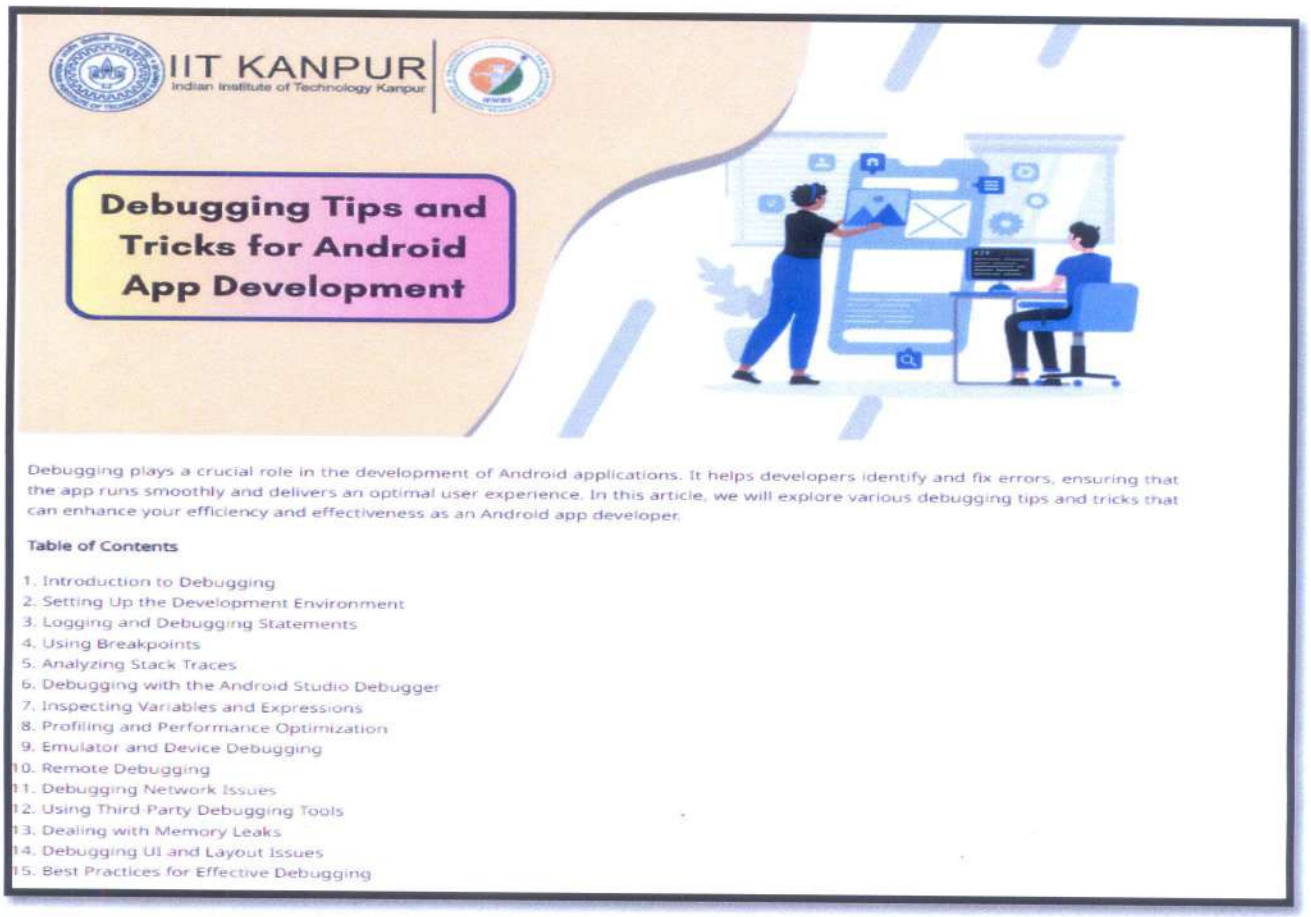
ON

Android Development

Venue: IIT Kanpur **Date: 26-04-2021 to 01-05-2021**

I, Mr. Harshavardhan J R Associate Professor, Department of CSE, KSIT, attended a Five Days Faculty Development Programme on "Android Development" in Online Mode.

Brochure



About FDP

The Five-Day Faculty Development Programme on "Android Development" in an online mode was an enriching and immersive experience. Throughout the duration of the program, participants were introduced to the fundamental concepts and advanced techniques in Android app development. The curriculum covered various aspects such as user interface design, data storage, networking, and

security, providing a comprehensive understanding of the Android platform. Through interactive lectures, practical demonstrations, and hands-on coding sessions, participants gained practical experience in building and deploying Android applications.

Expert instructors shared valuable insights, best practices, and real-world examples, equipping participants with the knowledge and skills needed to develop high-quality Android apps. The online mode of delivery facilitated flexible learning, allowing participants to engage with the material at their own pace and from any location. Overall, the Faculty Development Programme served as a valuable platform for professional growth, enabling faculty members to enhance their expertise in Android development and better prepare students for the rapidly evolving field of mobile app development.

Certificate:

E & ICT Academy, IIT Kanpur

(A Joint Initiative of MeitY & IIT Kanpur)

Certificate

This is to certify that

DR. / MR. / MS. **HARSHAVARDHAN J.R**

of

K.S. INSTITUTE OF TECHNOLOGY

has completed the **Faculty Development Program** on

Android Development

from 26th April 2021 to 1st May 2021 (1 week)

Prof. B. V. Phani — Prof. Amey Karkare

Chief Investigators, E & ICT Academy, IIT Kanpur

Date of Issue: 11-05-2021

System Identification No.: 42597-450130-be8d3ebe7a209391

FDP's by E&ICT Academy, IIT Kanpur are recognised as per CAS Guidelines in this regard. For more details visit ict.iitk.ac.in/fdp

SUBMITTED BY: MR. HARSHAVARDHAN J R

SIGNATURE OF THE FACULTY

HOD

Head of the Department
Dept. of Computer Science & Engg
K.S. Institute of Technology
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BENGALURU - 560 109.

Kammavari Sangham(R)-1952

K.S.INSTITUTE OF TECHNOLOGY

Department of Computer Science& Engineering

FDP REPORT

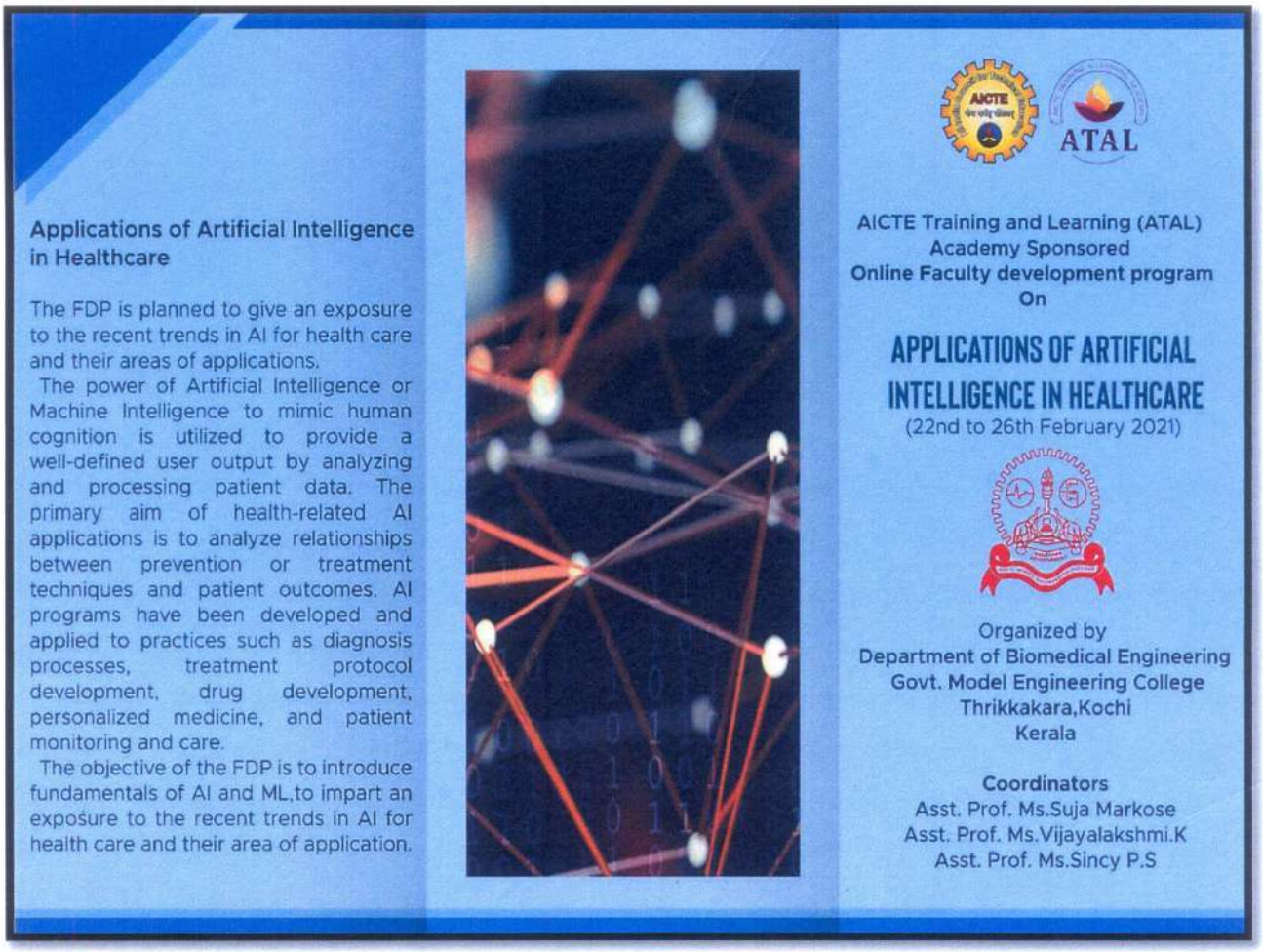
ON

Artificial Intelligence

Venue: Model Engineering College. **Date: 22-02-2021 to 26-02-2021**

I, Dr. Deepa S R Associate Professor, Department of CSE, KSIT, attended a Five Days Faculty Development Programme on "successfully AICTE Training and Learning (ATAL) Academy Online FDP on "Artificial Intelligence" at Model Engineering College.

Brochure:



Kammavari Sangham(R)-1952

K.S.INSTITUTE OF TECHNOLOGY

Department of Computer Science& Engineering

AICTE TRAINING AND LEARNING (ATAL) Academy

AICTE is committed for the development of quality technical education in the country by initiating various schemes launched by Govt. of India, Ministry of Human Resource Development.

Council understands that there is a need of the day to train the young generation in skill sector and having faculty technicians to be trained in their respective disciplines.

It was felt that Training with latest tools and technologies is vital to keeping an institute competitive and more productive. Training is required for increasing the knowledge and skills of students to make them more employable to acquire global competencies.

It also transforms them to harmonize with society and most importantly to make them a good citizen of the country. Accordingly, it was decided to the opening of AICTE Training and learning, [ATAL] Academies. As a part of its activities, AICTE Training and learning [ATAL] Academy will conduct a Faculty development programme on Applications of Artificial Intelligence in Health care at Govt. Model Engineering College, Thrikkakara from 22nd to 26th February 2021.

Govt. Model Engineering College

For the past 28 years Govt. Model Engineering College has empowered its students to pave the way for excellence and innovation in the field of Engineering &Technology. The Institute is affiliated to APJ Abdul Kalam Technological University (KTU), and was the first Engineeringcollege to be established by the Govt of Kerala under the aegis of the Institute of Human Resource Development (IHRD). The college was previously affiliated to Cochin University of Science & Technology (CUSAT) and has witnessed record breaking placements year after year.

Department of Biomedical Engineering

The Department of Biomedical Engineering is one of the pioneer departments started when Govt. Model Engineering College was established in the year 1989 and the first in Kerala to offer an engineering course in Electronics and Biomedical Engineering.The department offers undergraduate programme in Electronics and Biomedical Engineering with an intake of 60 students.The Department was accredited thrice by NBA in the years 2003 ,2008 and 2019.

Course Content

- NN and its applications in Bio signal analysis
- AI for Biomedical Image Analysis
- AI for Treatment planning&diagnosis
- Healthcare without borders through AI
- Real world AI implementation in healthcare
- Clinical data inference using machine learning algorithm
- Neural Networks for diagnostic ultrasonic imaging
- Confluence of deep learning in histopathology images

Resource Persons

The sessions will be handled by the experts on the subject from industry and other Institutions of repute.

Who can Apply

Registration is open to Faculty from all disciplines /Research scholars/PG students from AICTE approved Institutions

Guidelines

- Course registration is free for all participants.
- Eligible participants will be selected based on first come first serve basis and will be intimated by mail.
- An assessment test will be conducted on the last day of the program for all the participants
- A digital certificate by the ATAL academy will be issued to the participants who have an attendance of minimum 80% and score more than 60% in the test.

Registration details

- All the participants are requested to register using the following link

https://atalacademy.aicte-india.org/login

For further information if any required, please contact

Ms.Suja Markose:	9447293687
Ms.Vijayalakshmi K:	9847093300
Ms.Sincy P S:	9809234464

About FDP

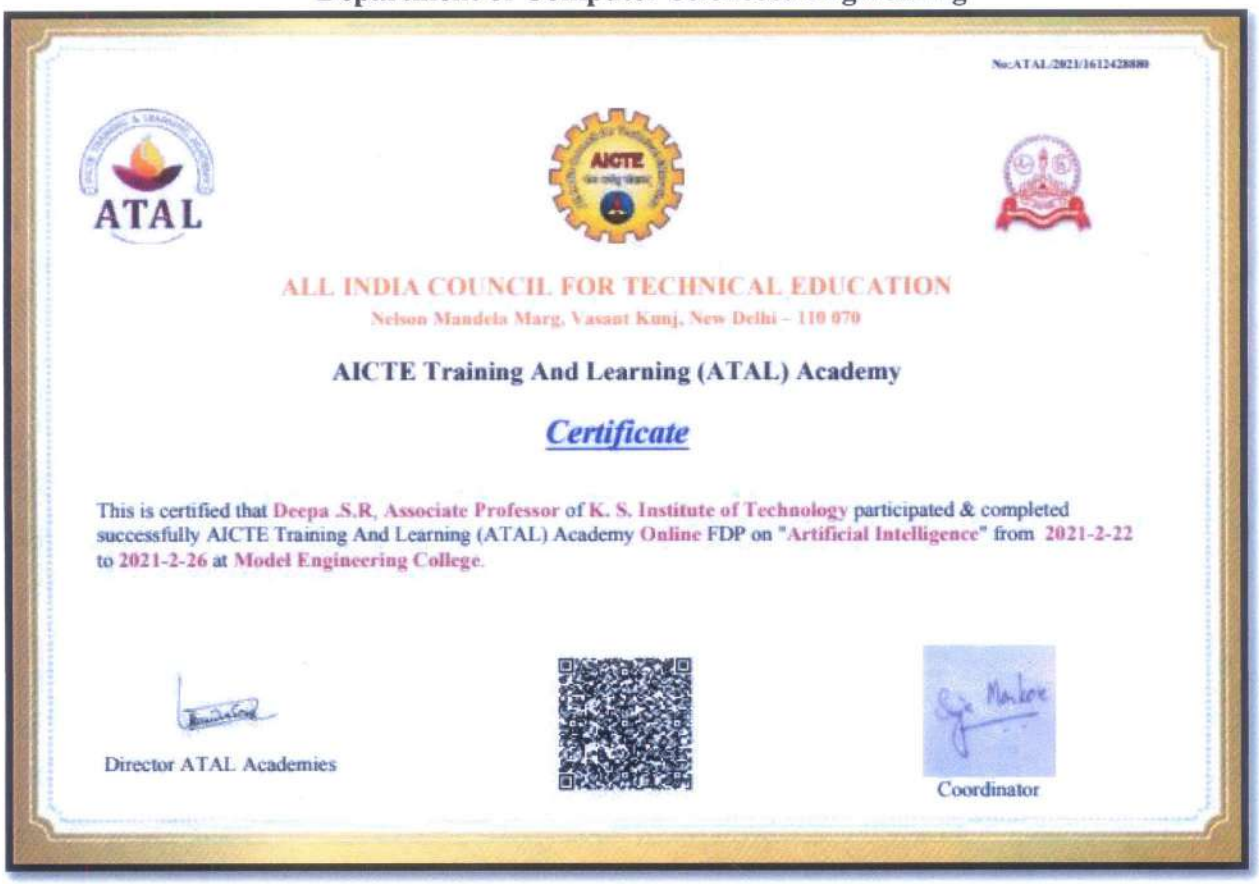
The five-day online Faculty Development Programme (FDP) on Artificial Intelligence provided a comprehensive overview of AI concepts, methodologies, and applications. Through a series of interactive sessions, workshops, and lectures, participants gained insights into various aspects of AI, including machine learning, deep learning, natural language processing, computer vision, and robotics. The programme facilitated discussions on emerging trends, best practices, and ethical considerations in AI research and implementation. Participants had the opportunity to collaborate with peers and experts, exchanging ideas and experiences, thereby enhancing their understanding and proficiency in AI. By the end of the FDP, attendees were equipped with the knowledge and skills to leverage AI technologies effectively in their academic pursuits, research endeavors, and professional practices, contributing to advancements in the field and addressing real-world challenges across diverse domains.

Certificate:

Kammavari Sangham(R)-1952

K.S.INSTITUTE OF TECHNOLOGY

Department of Computer Science& Engineering



No:ATAL/2021/1612428880

ATAL

AICTE

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070

AICTE Training And Learning (ATAL) Academy

Certificate

This is certified that Deepa .S.R, Associate Professor of K. S. Institute of Technology participated & completed successfully AICTE Training And Learning (ATAL) Academy Online FDP on "Artificial Intelligence" from 2021-2-22 to 2021-2-26 at Model Engineering College.

Director ATAL Academies

Coordinator

SUBMITTED BY: Dr. DEEPA S R

Deepa

SIGNATURE OF THE FACULTY

HOD

Head of the Department
Dept. of Computer Science & Engg.
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K.S.INSTITUTE OF TECHNOLOGY

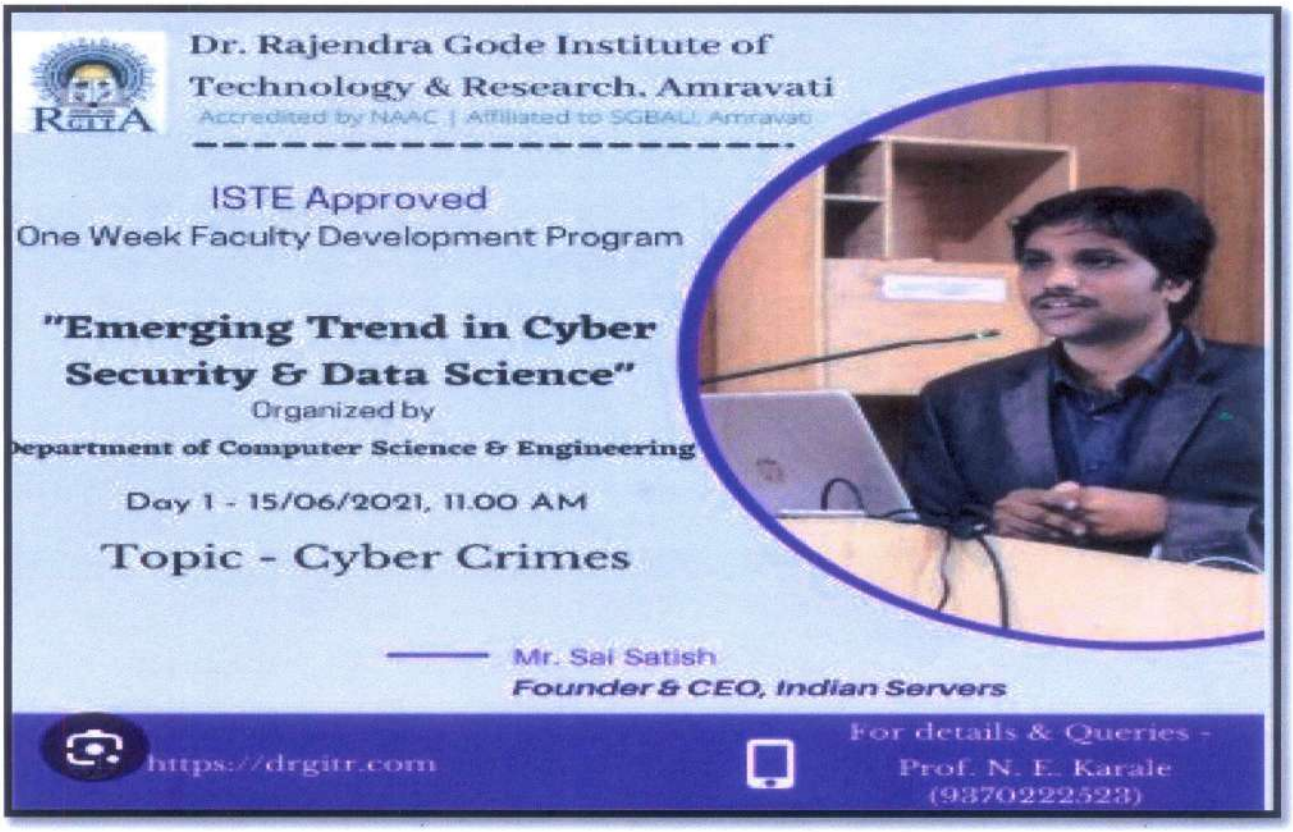
Department of Computer Science& Engineering

FDP REPORT
ON
Emerging Trend in Cyber Security & Data Science

Venue: Online Training Program **Date:** 15/06/2021 to 19/06/2021

I, Mr. Kumar K Assistant Professor, Department of CSE, KSIT, attended a one week Online Short Term Training Program on "Emerging Trend in Cyber Security & Data Science".

Brochure:



About FDP: The one-week online faculty development program (FDP) on Emerging Trends in Cyber Security & Data Science provided a comprehensive overview of the evolving landscape in these crucial domains. Participants delved into cutting-edge advancements, including but not limited to, machine learning for threat detection, blockchain for secure transactions, and privacy-preserving techniques in data analytics. Through interactive sessions, workshops, and case studies, attendees gained insights into the latest methodologies and tools essential for addressing contemporary

challenges in cyber security and data science. The program fostered a collaborative environment for knowledge exchange and skill enhancement, empowering educators to effectively prepare the next generation of professionals in these rapidly evolving fields.

Certificate:

Dr. Rajendra Gode Institute of Technology & Research, Amravati

Accredited by NAAC | Affiliated to SGBAU, Amravati

Dr. Rajendra Gode Educational Campus, University Road, Amravati - 444602 www.drgitr.com

B+ NAAC

CERTIFICATE OF ATTENDANCE

This certificate Is presented to

KUMAR K

has attended One week Online Short Term Training Program on **"Emerging Trend in Cyber Security & Data Science"** approved by ISTE, New Delhi during 15/06/2021 to 19/06/2021 organized by Department of Computer Science & Engineering.

Prof. Nikhil Karale	Dr. Sudhir W. Mohod	Dr. Pramod B. Patil
Co-Coordinator	Coordinator, HoD, CSE	Principal

SUBMITTED BY: MR. KUMAR K

SIGNATURE OF THE FACULTY

HOD

Head of the Department
Dept. of Computer Science & Engg
K.S. Institute of Technology
Bengaluru -560 109

PRINCIPAL

PRINCIPAL
K.S. INSTITUTE OF TECHNOLOGY
BENGALURU - 560 109.

Kammavari Sangham(R)-1952

K.S.INSTITUTE OF TECHNOLOGY

Department of Computer Science& Engineering

FDP REPORT

ON

Feature Engineering in Data Science & Deep Learning Models

Venue: Online Training Program **Date:** 25-08-2021 to 29-08-2021

I, Mrs. Beena K Assistant Professor, Department of CSE, KSIT, attended a Faculty Development Program on "Feature Engineering in Data Science & Deep Learning Models".

Brochure:

Faculty Development Program
on
"Feature Engineering in Data Science and Deep Learning Models"

Global Academy of Technology
Rajarajeshwari Nagar, (off Mysore Road), Ideal Homes Township, Bengaluru - 560098, Karnataka, India.

25th – 29th August, 2021

Chief Patron
Sri. D K Shivakumar, Chairman, NEF

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Prof. Veena V P, CSE, G.A.T
Prof. Sushmitha S, CSE, G.A.T

Organized by
Department of Computer Science & Engineering
Department of Artificial Intelligence & Data Science

About Global Academy of Technology

Global Academy of Technology (G.A.T), established in the year 2001 under the patronage of National Education Foundation (NEF) has been in the forefront imparting quality technical and management education in the city of Bengaluru. The state-of-the-art infrastructure in all branches of engineering, dedicated and qualified teaching fraternity, highly conducive environment for teaching-learning process, research and a lush green campus are the hallmarks of this professionally managed institute.

Some of the key highlights of G.A.T include Permanent affiliation of all branches of Engineering; All departments are recognized as research centers by the affiliating University-VTU; Accorded A grade by NAAC in 2017; Accredited by NBA for UG Programs in 2019; Autonomous status in 2020 and Accorded 2(f) and 12(B) status from the UGC.

Department of CSE

The Department of Computer Science and Engineering at Global Academy of Technology is focused on disseminating the most updated and sophisticated technical knowledge to the students who enroll in the course. The department has well experienced and quality faculty to guide the students through their academic endeavors.

The department also has excellent classrooms and well-equipped laboratories along with a rich collection of books in the department library.

Department of AI & Data Science

The Department of AI & Data Science @ G.A.T's mission is to produce students by strengthening the theoretical and practical aspects of the learning process by strong research culture in collaboration with communities to build healthy and sustainable world and to establish entrepreneurship among young minds. The mission is also to enable students to become leaders in industry and academia by developing technology to enhance social service and health care interventions by focusing on AI with strong bases in ethical principles.

The Department has excellent collaborations with the industry and with Research Institutions to guide faculty and students and give periodic training to the faculty members.

About the Program

World is undergoing a proliferative technological advancement in all disciplines of higher education. The areas such as Engineering, Medicine, Management etc. are considerably developing with the quantitative data analysis obtained by various measurements. The data to be analyzed has to be reliable and adequate enough to process, interpret and infer. This involves challenges such as efficient pre-processing, possibility of having missing and incomplete data, presence of noise, data being skewed and imbalanced etc. which have to be accurately addressed before fitting a model. The performance of the model depends on a larger extent on the efficacy of the features which have to be logically extracted for a good overall performance. From this a subset of carefully selected features with an objective criterion can provide improved performance. With the advent of high-speed computational hardware and the state-of-the-art models such as deep learning algorithms being applied in all the aspects and strata of human life, it has become imperative to deep dive into nuances of data science and its diversified application spectrum.

The main objective of this program is to enhance the importance of pre-processing and feature engineering in real world scenario where data is raw, imbalanced, skewed yet possess relevant information. Also, it is mandated in the national higher education policy to introduce the undergraduate programs in Data Science, Machine Learning, Artificial Intelligence etc. There is dire need to introduce, promote and provide basic conceptual framework from scratch to the stakeholders of these programs. In light of the technological advancements and reforms in the academic curriculum this programme can augment and supplement in order to enrich the skills of the participants.

Objectives and Scope

- To provide an in-depth knowledge with hands-on experience in all pre-processing techniques.
- To explore feature engineering concepts such as feature extraction, selection, reduction etc., through practical approach.
- To enhance participants with the state-of-the-art deep learning models with real world case studies through hands-on.
- To provide additional information to the participants on recent developments in deep learning and possible research areas for young researchers.

Kammavari Sangham(R)-1952

K.S.INSTITUTE OF TECHNOLOGY

Department of Computer Science& Engineering

Course Contents

Day – 1: Dealing with Data in Machine Learning
- *Handling missing data*
- *Handling noisy data*
- *Normalization techniques*
- *Structured and Unstructured data*
- *Data Annotation*

Day – 2: Feature Engineering
- *Feature Extraction techniques*
- *Feature Ranking*
- *Feature Selection techniques*
- *Feature Reduction techniques*

Day – 3: Dimensionality Reduction
- *PCA*
- *MDS*
- *ISOMAP*

Day – 4: Deep Learning
- *Artificial Neural Networks (ANN)*
- *Convolutional Neural Networks (CNN)*

Day – 5: Deep Learning
- *Recurrent Neural Networks (RNN)*
- *Long Short Term Memory (LSTM)*

Outcomes

By end of the program the participants should learn concepts through hands-on:

- Understand the concepts and importance of features in computational Data Science.
- Appreciate the need of structured data and pre-processing steps in feature engineering.
- Impact a profound understanding of feature transformation and challenges in feature extraction and reduction.
- Analyze the relative importance among the features towards efficient performance in Data Science.
- Interpret and apply dimensionality reduction techniques on large dataset and select appropriate feature.
- Evaluate the state-of-the-art deep learning models through hands-on.
- Apply the pre-processing techniques and deep learning models on real world data.
- Develop the motivation for further studies and research in these domains.

One-week FDP includes

- 40 hours Instructor-led Hands-on based Learning & Interactive Query Session.
- Soft copy of study material, Training PPT's, etc.
- Participation and Attendance Certificate.

Who Can Participate

Faculty members of UGC/AICTE recognized Universities and Engineering colleges all over India. Research scholars (Ph.D only) and students.

Resource Persons

Experts from **Indian Institute of Information Technology, Allahabad** and from **Industry** will deliver contents through hands-on to make participants aware of various topics related to Pre-processing, Feature Engineering and state-of-the-art Deep Learning Models and the corresponding research challenges.

Registration Fee

- Faculty/ Research Scholar (Ph.D.): **Rs.1500/-**
- Students: **Rs. 1000/-**
- Accommodation will be provided in the G.A.T hostel with nominal price.

Registration Process

1. Registration fee can be paid by the online mode, the account details for this purpose is:
   Account Name: FOR GAT DEPARTMENT OF CSE
   Bank Name: UNION BANK OF INDIA
   Branch: RAJARAJESHWARI NAGAR
   A/C No: 143510100044418
   IFSC: UBIN0814351
2. The brochure of the program may be downloaded from the Institute website: **www.gat.ac.in**
   Last date of registration: 20.08.2021.
3. **Total - 50 seats and the selection will be done on first-come-first-serve basis.** PDF file of online filled registration form with proof of registration fee paid will be sent through email to **fdp@gat.ac.in**

Faculty Development Program on Feature Engineering in Data Science and Deep Learning Models

25th - 29th August, 2021

REGISTRATION FORM

Name of Participant: ----------
Dept: ----------
Designation: ----------
Qualification: ----------
Organization: ----------
Mobile No. ----------
Email: ----------
Payment Reference No. ----------

I agree to abide by the rules and the regulations governing the FDP.

Place:
Date: *Signature of the Participant*

Mr./Ms. /Dr./_____is a student/employee of our Institution and is permitted to attend the 5-Day FDP at G.A.T, Bengaluru.

Signature of the Head of (applicant's) Institution and Seal

Place:

Date:

About FDP:

The Faculty Development Program (FDP) on "Feature Engineering in Data Science & Deep Learning Models" provided a comprehensive exploration of the pivotal role feature engineering plays in enhancing the performance of data science and deep learning models. Over the course of the program, participants were immersed in a rich array of topics, spanning from fundamental principles to advanced techniques.

The FDP commenced with an in-depth overview of feature engineering concepts, elucidating its significance in extracting meaningful insights from raw data. Through interactive lectures and hands-on workshops, attendees gained practical knowledge on techniques such as feature scaling, dimensionality reduction, and categorical encoding. Real-world case studies and industry examples offered valuable insights into best practices and common pitfalls in feature engineering workflows.

The program further delved into the integration of feature engineering with deep learning models, exploring strategies to effectively preprocess input data for neural networks. Participants learned how to design and implement feature extraction layers within deep learning architectures, optimizing model performance and interpretability.

Additionally, the FDP provided a platform for collaboration and knowledge exchange among participants and expert instructors. Interactive discussions and collaborative projects facilitated the sharing of insights, challenges, and innovative solutions in feature engineering across diverse domains.

By the conclusion of the FDP, participants had acquired a comprehensive understanding of feature engineering techniques and their application in data science and deep learning. Armed with practical skills and theoretical knowledge, educators were empowered to enrich their teaching methodologies and equip students with the expertise needed to excel in this rapidly evolving field.

Certificate:

GLOBAL ACADEMY OF TECHNOLOGY

"A" Grade accredited by NAAC

An Autonomous Institution, Affiliated to Visvesvaraya Technological University, Belagavi, Recognized by Govt. of Karnataka & Approved by AICTE, New Delhi

Ideal Homes Township, Rajarajeshwari Nagar, Bengaluru- 560098.

www.gat.ac.in info@gat.ac.in

Certificate of Participation

This certificate is presented to Dr./Ms./Mr. Beena Assistant Professor,

of K.S.Institute of Technology for learning and actively participating in the Faculty Development Programme on "Feature Engineering in Data Science and Deep Learning Models" conducted during August 25 - 29, 2021 at Global Academy of Technology, Bengaluru in association with Indian Institute of Information Technology, Allahabad.

Dr. Bhaggyashri R Hanji

Dr. Ashwini K.

Dr. N. Ranaparatap Reddy

SUBMITTED BY: MRS. BEENA K

SIGNATURE OF THE FACULTY

HOD

Head of the Department
Dept. of Computer Science & Engg
K.S. Institute of Technology
Bengaluru -560 109

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K.S.INSTITUTE OF TECHNOLOGY

Department of Computer Science& Engineering

FDP REPORT

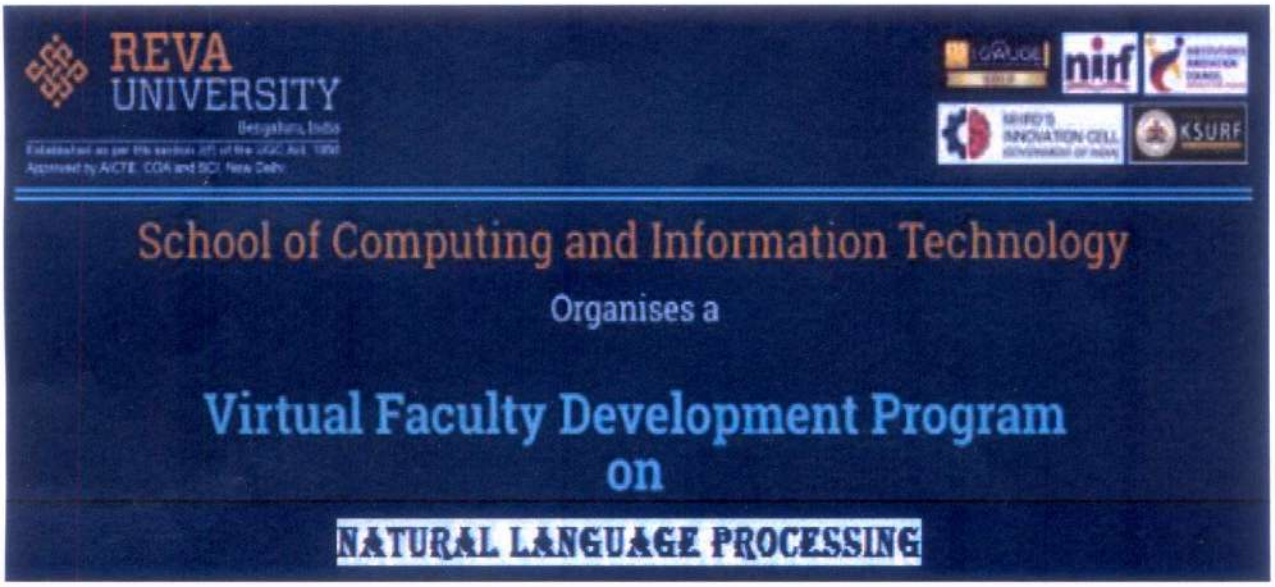
ON

Natural Language Processing

Venue: Virtual **Date: 30-06-2020 to 04-07-2020**

I, Mrs. Ranjitha K N Assistant Professor, Department of CSE, KSIT, attended a Faculty Development Program on "**Natural Language Processing**".

Brochure:



About FDP:

The Faculty Development Program on "Natural Language Processing" offered an immersive exploration into the intricate world of computational linguistics. Participants delved into fundamental concepts like syntax, semantics, and pragmatics, gaining a holistic understanding of language comprehension by machines. Through hands-on workshops and lectures by experts, attendees honed their skills in utilizing cutting-edge tools and techniques for text analysis, sentiment analysis, and language generation. Moreover, the program emphasized the practical applications of NLP across various domains, from chatbots and virtual assistants to automated translation and sentiment analysis in social media monitoring. By the end of the program, participants were equipped with not only theoretical knowledge but also practical insights to integrate NLP into their

teaching methodologies and research endeavors, fostering innovation and advancement in the field of computational linguistics.

Furthermore, the program fostered a collaborative environment where faculty members could exchange ideas, share best practices, and forge partnerships for future research projects and academic initiatives. Through interactive sessions and group discussions, participants explored emerging trends and challenges in NLP, such as bias detection and mitigation, multilingual processing, and the ethical considerations surrounding language generation models. The program also provided a platform for networking with industry professionals and researchers, facilitating interdisciplinary collaborations that have the potential to drive innovation and address real-world problems through NLP solutions. Overall, the Faculty Development Program on NLP served as a catalyst for advancing both individual expertise and collective knowledge in harnessing the power of natural language processing for academic and societal impact.

Certificate:

REVA UNIVERSITY
Bengaluru, India
Established as per the section 2(f) of the UGC Act, 1956
Approved by AICTE, COA and BCI, New Delhi

Certificate of Participation

School of Computing and Information Technology

Thank you

Ranjitha K N

for participating in the Five-Days Virtual Faculty Development Program on Natural Language Processing (NLP), held between the 30th of June and 4th of July, 2020.

Organizing Chair & Professor
School of C&IT

Director
School of C&IT

In-charge Vice-Chancellor
REVA University

SUBMITTED BY: MRS. RANJITHA K N

SIGNATURE OF THE FACULTY

HOD

Head of the Department
Dept. of Computer Science & Engg
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K.S.INSTITUTE OF TECHNOLOGY

Department of Computer Science& Engineering

FDP REPORT

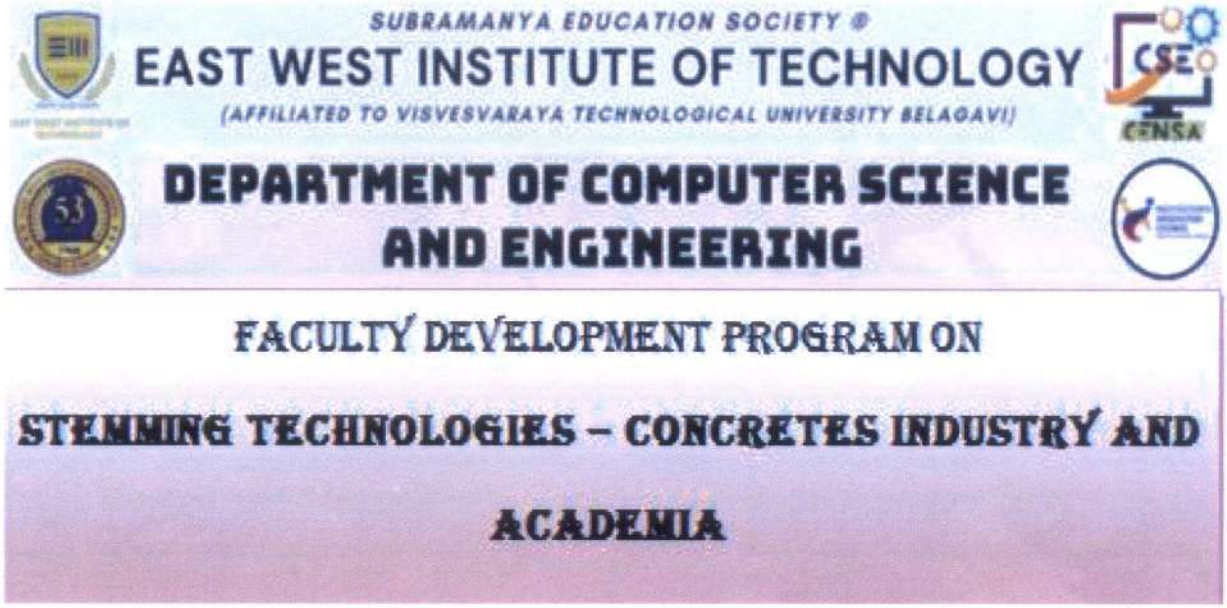
ON

Stemming Technologies – Concretes Industry and Academia

Venue: Virtual **Date: 10-08-2020 to 14-08-2020**

I, Mrs. Swathi K Assistant Professor, Department of CSE, KSIT, attended a Faculty Development Program on "**Stemming Technologies – Concretes Industry and Academia**".

Brochure:



About FDP:

The Faculty Development Program (FDP) focused on Stemming Technologies in the concretes industry and academia provided a comprehensive overview of the intersection between concrete technology and innovative stem-based approaches. Participants explored how advancements in materials science, including nanotechnology and bio-concrete, are reshaping the landscape of construction materials. Through lectures, demonstrations, and practical sessions, attendees gained insights into the latest techniques for enhancing the strength, durability, and sustainability of concrete structures. Moreover, the FDP facilitated discussions on the integration of STEM (Science, Technology, Engineering, and Mathematics) principles into concrete research and education,

emphasizing the importance of interdisciplinary collaboration in addressing contemporary challenges in the construction sector.

Furthermore, the program fostered collaboration between academia and industry, fostering partnerships that bridge the gap between theoretical research and practical application. Participants had the opportunity to engage with industry experts, exchange ideas, and identify opportunities for collaborative projects and technology transfer. By leveraging cutting-edge stem-based technologies, such as 3D printing and self-healing concrete, participants explored innovative solutions for improving construction processes and infrastructure resilience. Overall, the FDP on Stemming Technologies in the concretes industry and academia served as a catalyst for fostering innovation, driving collaboration, and advancing knowledge in the field of concrete technology.

Certificate:

EAST WEST INSTITUTE OF TECHNOLOGY

COMPUTER SCIENCE & ENGINEERING

Participation Certificate

This is to certify that ____Prof. Swathi K_____ has participated in One Week Faculty Development Program on "Stemming Technologies-concretes Industry & Academia", organized by Department of Computer Science & Engineering from 10th to 14th August 2020, at EWIT, Bengaluru.

Dr. Narasimha Murthy M S
HoD-CSE, Webinar Chair, EWIT

Dr. Channakeshavalu K
PRINCIPAL EWIT

SUBMITTED BY: MRS. Swathi K

SIGNATURE OF THE FACULTY

HOD

Head of the Department
Dept. of Computer Science & Engg
K.S. Institute of Technology
Bengaluru - 560 109

PRINCIPAL

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K.S. INSTITUTE OF TECHNOLOGY
BENGALURU - 560 109.

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109

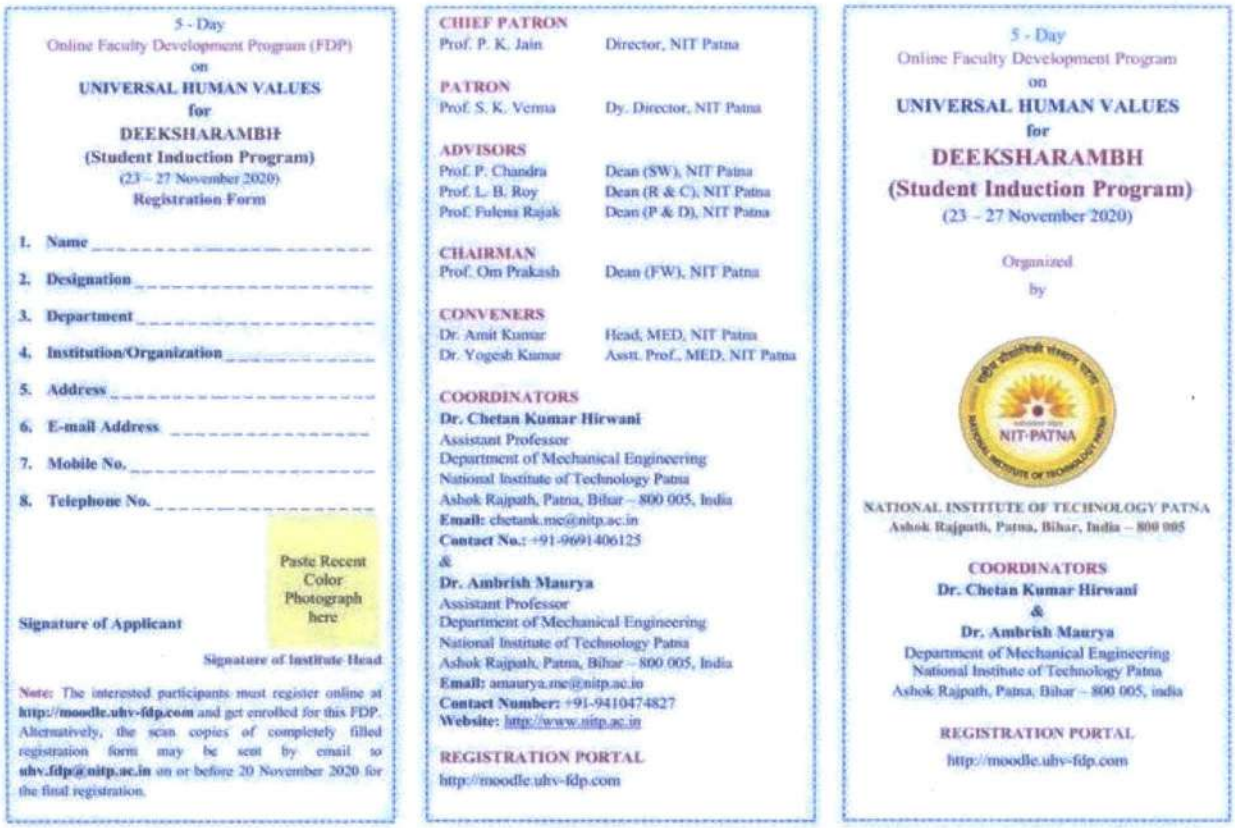
#14, Raghuvanahalli, Kanakapura Main Road,Bengaluru-5600109

Department Of Computer Science & Engineering

REPORT OF FDP:

UNIVERSAL HUMAN VALUES for DEEKSHARAMBH

Brochure:



5 - Day
Online Faculty Development Program (FDP)
on
UNIVERSAL HUMAN VALUES
for
DEEKSHARAMBH
(Student Induction Program)
(23 – 27 November 2020)
Registration Form

1. **Name** _____
2. **Designation** _____
3. **Department** _____
4. **Institution/Organization** _____
5. **Address** _____
6. **E-mail Address** _____
7. **Mobile No.** _____
8. **Telephone No.** _____

Paste Recent Color Photograph here

Signature of Applicant

Signature of Institute Head

Note: The interested participants must register online at **http://moodle.uhv-fdp.com** and get enrolled for this FDP. Alternatively, the scan copies of completely filled registration form may be sent by email to **uhv.fdp@nitp.ac.in** on or before 20 November 2020 for the final registration.

CHIEF PATRON
Prof. P. K. Jain — Director, NIT Patna

PATRON
Prof. S. K. Verma — Dy. Director, NIT Patna

ADVISORS
Prof. P. Chandra — Dean (SW), NIT Patna
Prof. L. B. Roy — Dean (R & C), NIT Patna
Prof. Fulena Rajak — Dean (P & D), NIT Patna

CHAIRMAN
Prof. Om Prakash — Dean (FW), NIT Patna

CONVENERS
Dr. Amit Kumar — Head, MED, NIT Patna
Dr. Yogesh Kumar — Asstt. Prof., MED, NIT Patna

COORDINATORS
Dr. Chetan Kumar Hirwani
Assistant Professor
Department of Mechanical Engineering
National Institute of Technology Patna
Ashok Rajpath, Patna, Bihar – 800 005, India
Email: chetank.me@nitp.ac.in
Contact No.: +91-9691406125
&
Dr. Ambrish Maurya
Assistant Professor
Department of Mechanical Engineering
National Institute of Technology Patna
Ashok Rajpath, Patna, Bihar – 800 005, India
Email: amaurya.me@nitp.ac.in
Contact Number: +91-9410474827
Website: http://www.nitp.ac.in

REGISTRATION PORTAL
http://moodle.uhv-fdp.com

5 - Day
Online Faculty Development Program
on
UNIVERSAL HUMAN VALUES
for
DEEKSHARAMBH
(Student Induction Program)
(23 – 27 November 2020)

Organized
by

NIT-PATNA

NATIONAL INSTITUTE OF TECHNOLOGY PATNA
Ashok Rajpath, Patna, Bihar, India – 800 005

COORDINATORS
Dr. Chetan Kumar Hirwani
&
Dr. Ambrish Maurya
Department of Mechanical Engineering
National Institute of Technology Patna
Ashok Rajpath, Patna, Bihar – 800 005, India

REGISTRATION PORTAL
http://moodle.uhv-fdp.com

Report

Online Faculty Development Program (FDP) Report

Title: Universal Human Values for DEEKSHARAMBH(Student Induction Program)

Date: 21st – 27thNov 2020, NIT, Patna.

Program Coordinator: Dr. Chetan Kumar Hirwani, Assistant Professor, Department of Mechanical Engineering.

Participants: Mr. Krishna Gudi of KSIT, Mr. Satish Kumar B of KSIT.

Summary:

The universal human values for a DEEKSHARAMBH ceremony, it's essential to focus on principles that are universally recognized and respected across cultures and societies. In this they

covered what is DEEKSHARAMBH(SIP)?Current education-Student motivations, achievements, about Holistic education, and Introduction to Universal Human Values & Process of education , assumptions and conditioning ,current state of Nature etc.

It covers Need for definite human conduct, Role of Self, Role of Money or physical facilities Role of Relationships, Role of Understanding Human desires, Topics student Mentoring, values (mulya) in Relationship respect and Trust and Gratitude.

This FDP focuses on understanding the concept of Human values and Current Education system.

Objectives of the FDP

To Provide awareness of Human Values and Current education System.

To Provide knowledge about the Holistic education.

5-day
Online Faculty Development Program
on
UNIVERSAL HUMAN VALUES
for
DEEKSHARAMBH
(Student Induction Program)
23 - 27 NOVEMBER 2020

Organised
by
Department of Mechanical Engineering
NATIONAL INSTITUTE OF TECHNOLOGY PATNA

CERTIFICATE OF PARTICIPATION

This is to certify that **Mr. Krishna Gudi** from K S Institute of Technology, Bengaluru, Karnataka, has participated in "5-day online FDP on Universal Human Values for DEEKSHARAMBH (Student Induction Program)" organized by NIT Patna during 23-27 November 2020.

Place: Patna
Date: 27.11.2020

Certificate No. P3.440

Dr. Chetan Kumar Hirwani (Coordinator)
Dr. Ambrish Maurya (Coordinator)
Dr. Yogesh Kumar (Convener)
Dr. Amit Kumar (Convener)

SUBMITTED BY: Mr. Krishna Gudi

SIGNATURE OF FACULTY

HOD

Head of the Department
Dept. of Computer Science & Engg
K.S. Institute of Technology
Bengaluru -560 109

PRINCIPAL

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K.S. INSTITUTE OF TECHNOLOGY
BENGALURU - 560 109.

Kammavari Sangham(R)-1952

K.S.INSTITUTE OF TECHNOLOGY

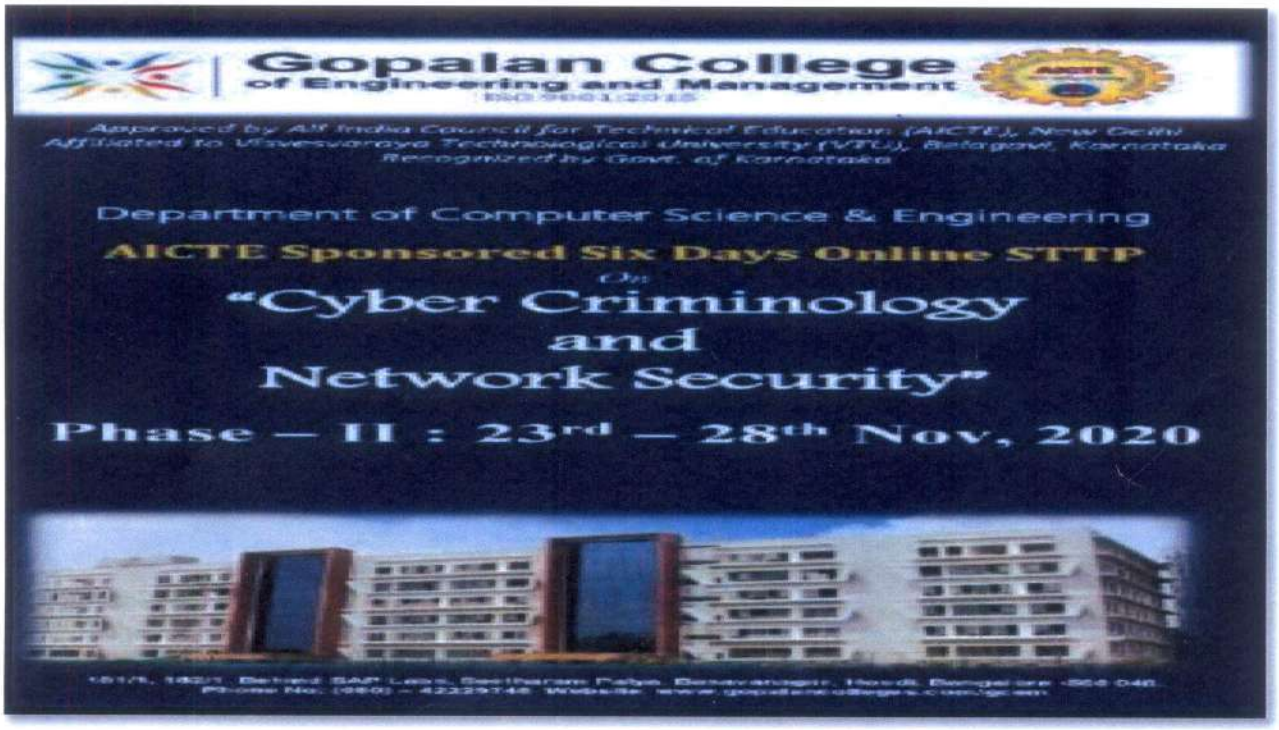
Department of Computer Science& Engineering

FDP REPORT
ON
Cyber Criminology and Network Security

Venue: Gopalan College of Engineering and Management **Date:** 23-11-2020 to 28-11-2020

I, Mrs. Vaneeta M Associate Professor, Department of CSE, KSIT, attended a Six Day Faculty Development Programme on "Cyber Criminology and Network Security at Gopalan College of Engineering and Management.

Brochure:



About FDP:

The Six-day Faculty Development Programme (FDP) on Cyber Criminology and Network Security provided an insightful exploration into the multifaceted realm of cybercrime and cyber security. Hosted online, this intensive programme brought together experts and participants from various academic and professional backgrounds to delve into the intricacies of cyber threats, digital forensics, and protective measures. Throughout the FDP, attendees, including academics, researchers, and industry professionals, engaged in interactive sessions, workshops, and case studies,

gaining a comprehensive understanding of cybercrime trends, attack vectors, and mitigation strategies.

The programme emphasized the importance of proactive approaches to network security, ethical hacking, and incident response, while also highlighting the legal and ethical considerations surrounding cyber investigations and law enforcement. By the conclusion of the FDP, participants were equipped with the knowledge, skills, and tools necessary to analyze, prevent, and respond to cyber threats effectively, poised to contribute to the safeguarding of digital assets and the protection of online communities.

Certificate:

Certificate of Participation

This is to certify that

MS.VANEETA M

of K.S Institute of Technology

has successfully completed

the 6 days AICTE sponsored STTP Phase-II

organised by

Department of CSE,

Gopalan College of Engineering and Management,

Bangalore- 560048.

On the title

"Cyber Criminology and Network Security"

from 23/11/ 2020 to 28/11/2020

Dr M Pauline
Coordinator

Dr. J Somasekar
HoD

Dr. N. Sengottaiyan
Principal

GCEM/STTP-2/045

SUBMITTED BY: MRS. VANEETA M

Vaneeta m

SIGNATURE OF THE FACULTY

HOD

Head of the Department
Dept. of Computer Science & Engg
K.S. Institute of Technology
Bengaluru -560 109

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K.S. INSTITUTE OF TECHNOLOGY
BENGALURU - 560 109.

K.S.INSTITUTE OF TECHNOLOGY

Department of Electronics & Communication Engineering

Report

on

6 Days Faculty Development Program
on

Advances In Signal Processing and Wireless Communication
From
24th to 29th August 2020

held at

Rajeev Institute of Technology Hassan.

Submitted by:

Dr P N Sudha

1/10/2020

31/1/21

The FDP on Advances in Signal Processing was conducted by the Dept of Electronics & Communication Engg. On 24th Aug in the first session brief introduction to various generations was explained by the experts from the industry.In the afternoon session introduction Signal Processing was done.

On 25th explained about 3G Radio Interfaces. The UMTS 3G architecture is required to provide a greater level of performance to that of the original GSM network. However as many networks had migrated through the use of GPRS and EDGE, they already had the ability to carry data. Accordingly many of the elements required for the WCDMA / UMTS network architecture were seen as a migration. This considerably reduced the cost of implementing the UMTS network as many elements were in place or needed upgrading.

On 26th He explained about basics of WSN and where all we are using and presented one demo of their own developed sensor .He also gave an introduction to iSense and its architecture was explained.

On 26th He explained about basics of WSN and where all we are using and presented one demo of their own developed sensor .He also gave an introduction to iSense and its architecture was explained

On 27thWireless Protocols for IoT: Zigbee, Zwave, 6LowPAN, WiFi, THREAD, Cellular 4G/5G .In the second session, resource person discussed very basics and advanced writing ways of research proposal writing. He highlighted the importance of project funding and gave information about different funding agencies. He shared his knowledge with participants by power point presentation and by giving various examples.

On 28th & 29th Aug various application and advances were discussed. The subject experts also indicated various research areas for pursuing research.

Rajeev Institute of Technology, Hassan

Department of Electronics & Communication Engineering

Certificate

This is to certify that **Dr P N Sudha** of **KSIT** participated in the online Faculty Development Program on **"Advances in Signal Processing and Wireless Communication"** organized by the Department of Electronics and Communication Engineering, Rajeev Institute of Technology, Hassan from 24 – 29 August 2020.

Dr. Aravind B N
Convener (HOD, ECE)

Dr. A N Ramakrishna
Principal

(3)

K S GROUP OF INSTITUTIONS

K. S. INSTITUTE OF TECHNOLOGY

PHASE -3

A REPORT ON

6 DAYS AICTE – ISTE INDUCTION / REFRESHER PROGRAM

ON

FUTURE WIRELESS COMMUNICATION: STANDARDS & TECHNOLOGIES

ORGANIZED BY

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

K.S.INSTITUTE OF TECHNOLOGY, BENGALURU

A 6 Days AICTE-ISTE Induction / Refresher Program on **FUTURE WIRELESS COMMUNICATION: STANDARDS & TECHNOLOGIES** inaugural function was held on 24th May 2021 in Zoom online platform.

The Induction program was inaugurated by Chief Guest Dr. Rangaswamy .B.E, Registrar (Evaluation), Visvesvaraya Technological University, Belgavi, graced by **Sri.R.Rajagopal Naidu**, President, Kammavari Sangham, **Sri. R. Leela Shankar Rao**, Hon.Secretary, Kammavari Sangham, **Sri.T. Neerajakshulu Naidu**, Treasurer, Kammavari Sangham .The function was presided by **Dr. KVA Balaji** CEO, KSGI, **Dr. Dilip Kumar K**, Principal / Director ,KSIT, **Dr. P. N. Sudha**, Prof & HOD-ECE, Program chair, **Dr.Sangappa S. B.** Director (Adm & PR),KSGI, National Executive Council Member, ISTE, New Delhi, Chief coordinator of induction program,. The function was coordinated by Prof. Santhosh Kumar B R, Prof. Jayasudha S. B. and Prof. Sangeetha V. The 3rd phase Inaugural event and six days induction program was conducted through zoom online platform.

K. S. INSTITUTE OF TECHNOLOGY

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Web: www.ksit.ac.in

6 Days AICTE-ISTE FUNDED INDUCTION / REFRESHER PROGRAM

(3rd Phase)

On

FUTURE WIRELESS COMMUNICATION: STANDARDS & TECHNOLOGIES

Organized by

Department of Electronics & Communication Engineering

24th - 29th May 2021

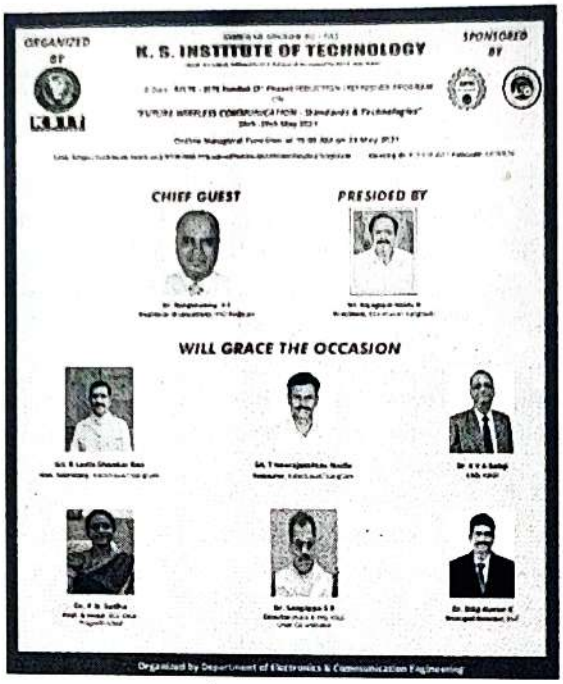


Fig: Chief Guest and Dignitaries of Inaugural Function

The welcome speech was given by Dr .Sangappa S. B. Director (Adm. & PR),KSGI, National Executive Council Member, ISTE, New Delhi, Chief coordinator, and he briefed about KSGI achievement from beginning to till date , highlighted KSIT is one among five colleges to conduct this AICTE-ISTE sponsored induction programme and around 320 participants registered from all over India.

Fig: Welcome Speech by Dr.Sangappa S.B, Director (Adm & PR),KSGI

Dr. P. N. Sudha, Prof & HOD-ECE, Program chair briefed about 6 days each session Resource person and title of the talk of the third phase of Induction/ Refresher program.

Fig: Dr.P.N.Sudha , Program Chair speech

The event was anchored by Mrs.Sangeetha.V ,Asst.Prof., dept., of ECE ,Invocation song was rendered by Sahana V,VII Sem student of ECE Dept., followed by the introduction of chief guest by Mr. Santhosh Kumar B.R, Associate Professor, Dept. of ECE,KSIT.

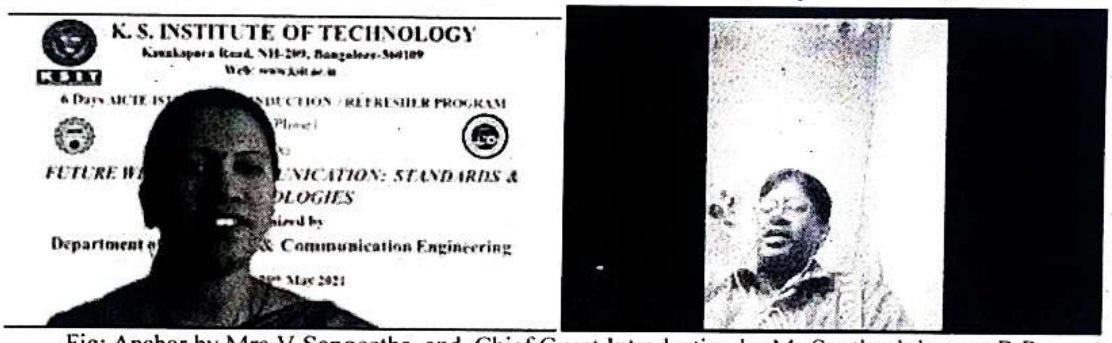


Fig: Anchor by Mrs.V.Sangeetha and Chief Guest Introduction by Mr.Santhosh kumar .B.R

The Chief Guest Dr. Rangaswamy .B.E, Registrar (Evaluation), Visvesvaraya Technological University, Belgavi, how new technologies like Machine Learning, IoT have overpowered the numerous other outdated technologies. He spoke about one of the largest digital career all over world is wireless technologies and every entrepreneur highly depends on it. He highlighted GDP is measure on how much spectrum are there and currently everyone are relying upon it and about edge artificial technologies. By the end of year 2021 expected to show us major technological advancement & innovation.

Fig: Chief Guest Speech

Sri.R.Rajagopal Naidu, President, Kammavari Sangham spoke about how technology has progressed and how it has impacted all of us in our daily lives. He appreciated the entire team work and congratulated the participants from various places from India. He highlighted the quote "Coming together is a beginning; keeping together is a progress; working together is a success".

Fig: **Sri.R.Rajagopal Naidu**, President, Kammavari Sangham speech

Sri.T. Neerajakshulu Naidu, Treasurer, Kammavari Sangham, spoke about KSGI follows four important mantras as Discipline, Dedication, Hardwork and Commitment .He also told that the endeavors will be successful only when all the stake holders: students, parents, faculty and Institution are aligned and moving in the same direction.

Fig: **Sri.T. Neerajakshulu Naidu**, Treasurer, Kammavari Sangham ,Treasurer Speech

Sri.D.Rukmangada, Ex-Treasurer, Kammavari Sangham spoke about the successful completion of two phases and third phase which brought many more participants from various places from India. He also mentioned this Induction program will give wide depth knowledge on 5G and 6G standards and technologies.

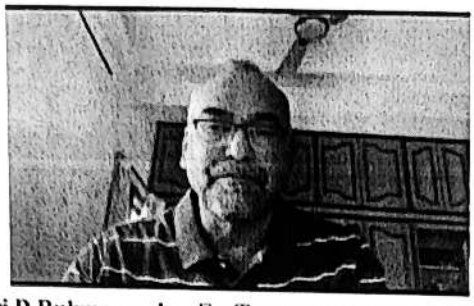


Fig: **Sri.D.Rukmangada**, Ex-Treasurer, Kammavari Sangham Speech

Dr. KVA Balaji CEO,KSGI addressed the gathering and wished all the participants happy learning for all the six days.He spoke about if the world was not slow down by the current pandemic, the implementation and adoption of this technology would be for ahead of where it is now in our country.

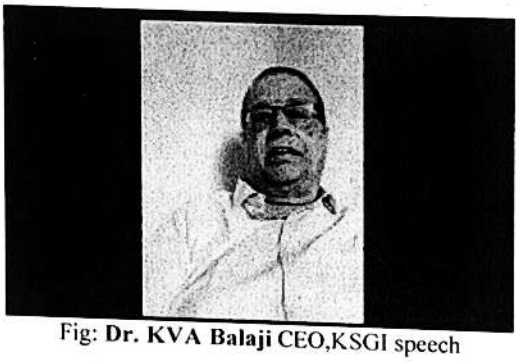


Fig: **Dr. KVA Balaji** CEO,KSGI speech

Dr. Dilip Kumar K, Principal / Director ,KSIT, spoke about Teaching is called Nobel Profession and Teacher willingness shows then everything will be converted. The best of country is young generation ,hence need to train student in a better way with discipline. He also appreciated the vey well planned organization of this event.

Fig: Dr. Dilip Kumar K, Principal / Director ,KSIT speech

The program was concluded by expressing gratitude to all those people who were part of this inaugural function of AICTE-ISTE sponsored program by Mr. Sunil Kumar G R. Asst. Professor Dept. of ECE,KSIT.

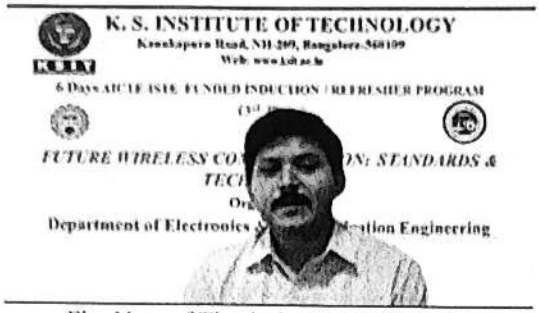


Fig: Vote of Thanks by Mr.Sunil Kumar

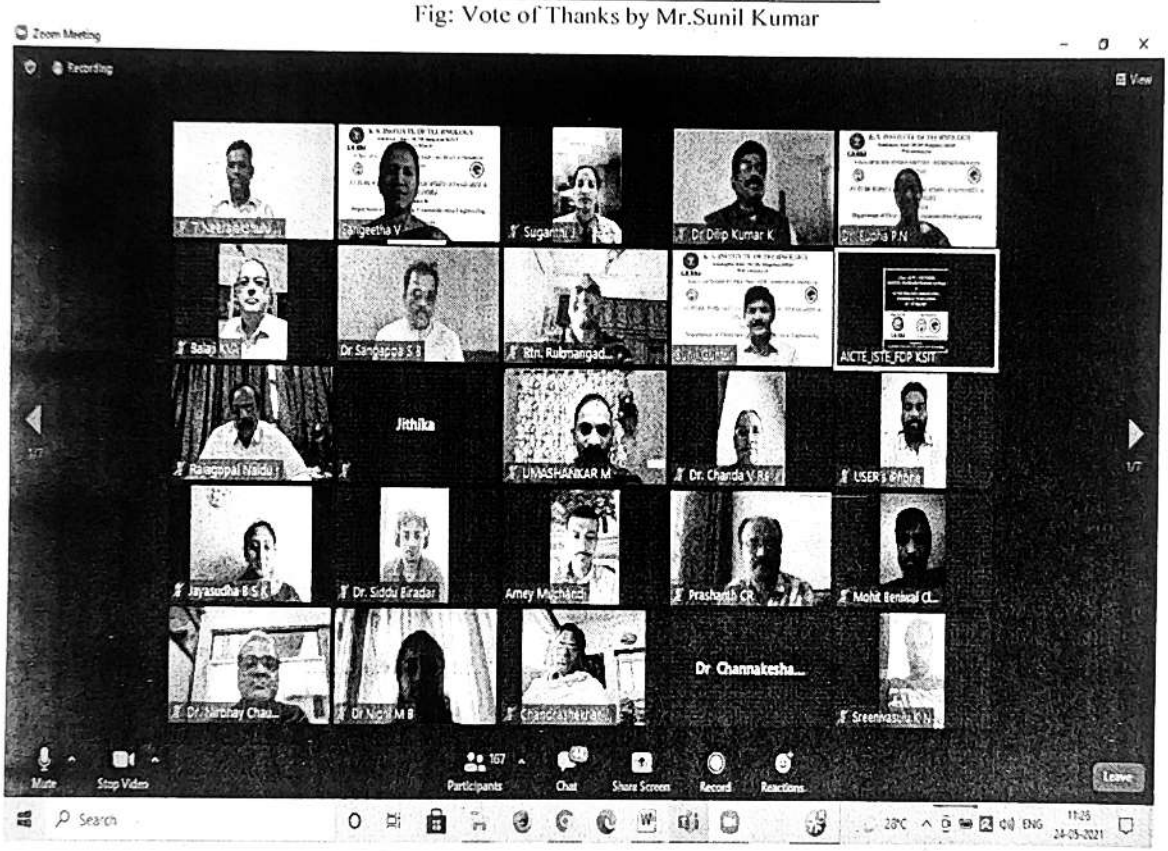
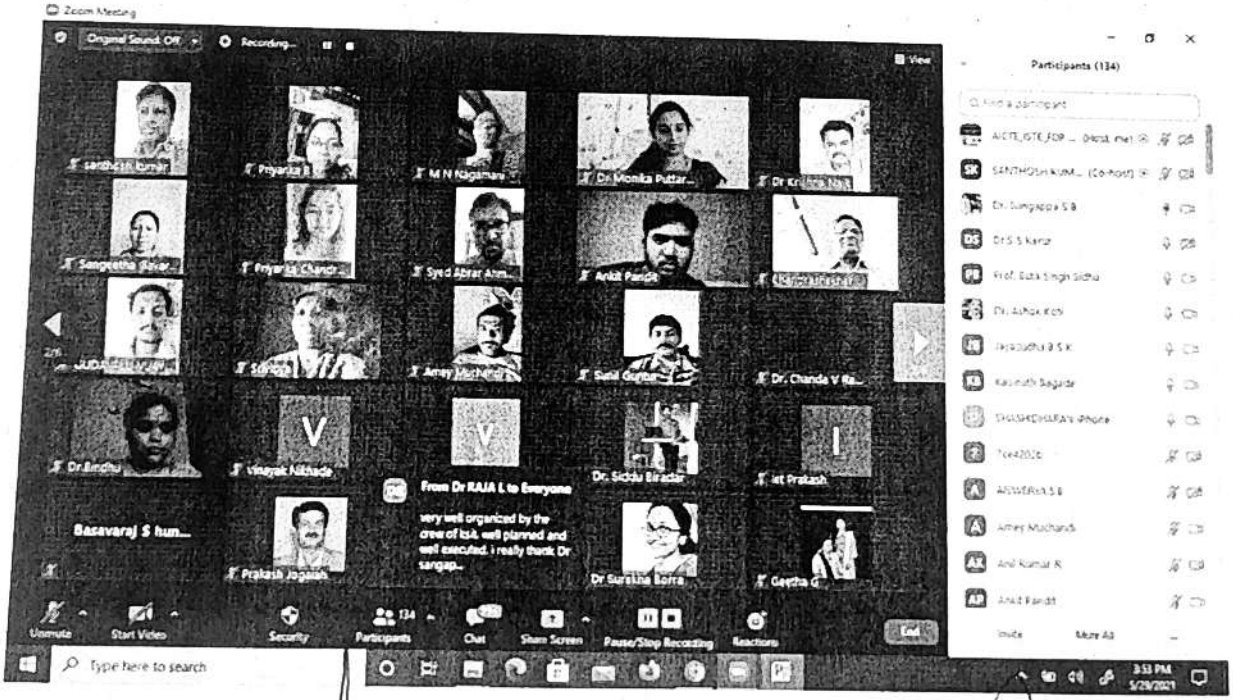


Fig: Management, Chief Guest, Participants in 3rd Phase online Inaugural Function



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This is to Certify that **Dr.Chanda V Reddy** from **KSIT** has participated in 6-days AICTE-ISTE funded Induction / Refresher program (3rd - Phase) on **"Future Wireless Communication: Standards & Technologies"** organized by the Department of Electronics & Communication Engineering between 24th - 29th May 2021.

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Program Chair

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This is to certify that **Sanjoy Das** from **KSIT** has participated in 6-days **AICTE-ISTE** funded Induction / Refresher program (3rd - Phase) on **"Future Wireless Communication: Standards & Technologies"** organized by the Department of Electronics & Communication Engineering between 24th - 29th May 2021.

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This is to certify that **Roopesh Kumar B. N** from **KSIT** has participated in 6-days **AICTE-ISTE** funded Induction / Refresher program (3rd - Phase) on **"Future Wireless Communication: Standards & Technologies"** organized by the Department of Electronics & Communication Engineering between 24th - 29th May 2021.

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This is to certify that **Dr.P Joy Prabhakaran** from **KSIT** has participated in 6-days **AICTE-ISTE** funded Induction / Refresher program (3rd - Phase) on **"Future Wireless Communication: Standards & Technologies"** organized by the Department of Electronics & Communication Engineering between 24th - 29th May 2021.

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This is to certify that **Dr.B Sudharshan** from **KSIT** has participated in 6-days **AICTE-ISTE** funded Induction / Refresher program (3rd - Phase) on **"Future Wireless Communication: Standards & Technologies"** organized by the Department of Electronics & Communication Engineering between 24th - 29th May 2021.

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This is to certify that **Mr.Sampath Kumar S** from **KSIT** has participated in 6-days **AICTE-ISTE** funded Induction / Refresher program (3rd - Phase) on **"Future Wireless Communication: Standards & Technologies"** organized by the Department of Electronics & Communication Engineering between 24th - 29th May 2021.

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This is to certify that **Ms. Bhargavi Ananth** from **KSIT** has participated in 6-days **AICTE-ISTE** funded Induction / Refresher program (3rd - Phase) on **"Future Wireless Communication: Standards & Technologies"** organized by the Department of Electronics & Communication Engineering between 24th - 29th May 2021.

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This is to certify that **Ms.Yeshwini V** from **KSIT** has participated in 6-days **AICTE-ISTE** funded Induction / Refresher program (3rd - Phase) on **"Future Wireless Communication: Standards & Technologies"** organized by the Department of Electronics & Communication Engineering between 24th - 29th May 2021.

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Department of Telecommunication Engineering

Report on

One-week webinar on "Advanced Antenna Design and Development for RF Communication Systems" scheduled during 20th to 25th July 2020

The Institution of Electronics and Telecommunication Engineers (IETE), Bangalore Centre & ATMS (Antenna Test and Measurement Society) ORGANISED one-week webinar on "Advanced Antenna Design and Development for RF Communication Systems"

DURATION: 06 Days (20th to 25th July 2020)

OBJECTIVE OF PROGRAM:

During this program, the participants were able to acquire the knowledge about various concepts like

- Uncommon uses of Microwave
- Aspects of Antenna wrt Polarization and Noise
- Microwave Antenna Measurement Technology
- Space Technologies which changed our lives
- Spacecraft Antenna
- Antennas for wireless / mobile communications - with emphasis on 5
- Compact Multiband antennas and Numerical Modeling
- Metamaterial based antenna designs and applications: Prospects and Challenge
- 5G and Beyond
- Different types of antenna such as Microstrip Antenna, Wearable Antenna and Liquid Antenna

The details of sessions in 6 days Webinar is as follows:

Day-01

Morning Session

Welcome Address: Dr. S G Shivaprasad Yadav & Dr. Swetha Amit

Address by : Sri C Satyanandan, Chairman, IETE Bangalore

Guest of Honor: Shri. Raj Kumar Malaviya, Secretary, ATMS

Chief Guest: Dr. Surendra Pal, Former Vice Chancellor, DIAT, Pune, Senior Adviser- ISRO

Keynote address: Prof. OPN Calla, Director, ICRS

Day-01

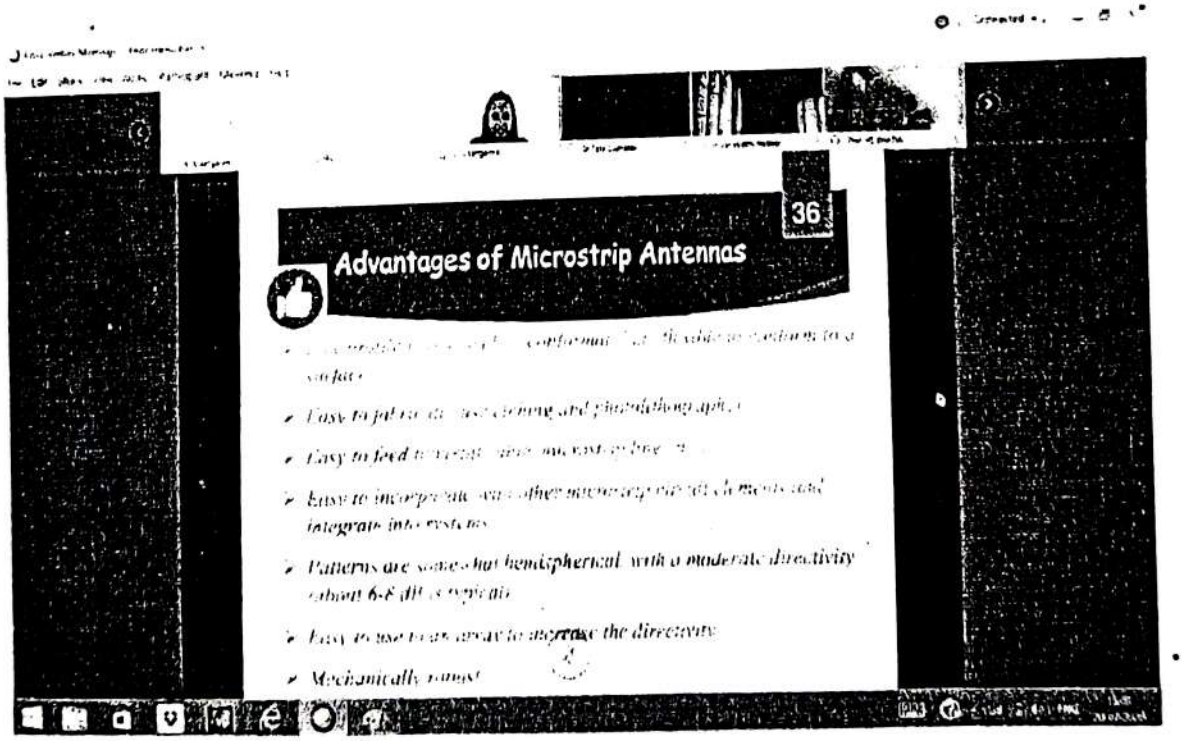
Afternoon Session

Topic : Antenna fundamentals, Design and analysis of Microstrip Antennas

Resource Person : Dr. Swetha Amit, Assistant Professor, Ramaiah Institute of Tech, Bangalore

The speaker discussed about :

- Polarization of electromagnetic wave and a receiving antenna
- Power transfer problem between two antennas
- Antenna noise temperature
- Antennas for aerospace applications



Day-02

Morning Session

Topic : Microwave Antenna Measurement Technology

Resource Person : Shri. Raj Kumar Malaviya, Secretary, ATMS

The speaker discussed about:

- Compact range principles
- Technical data of CCR 75/60
- Planar near field range
- Multi probe near field range

Day-02

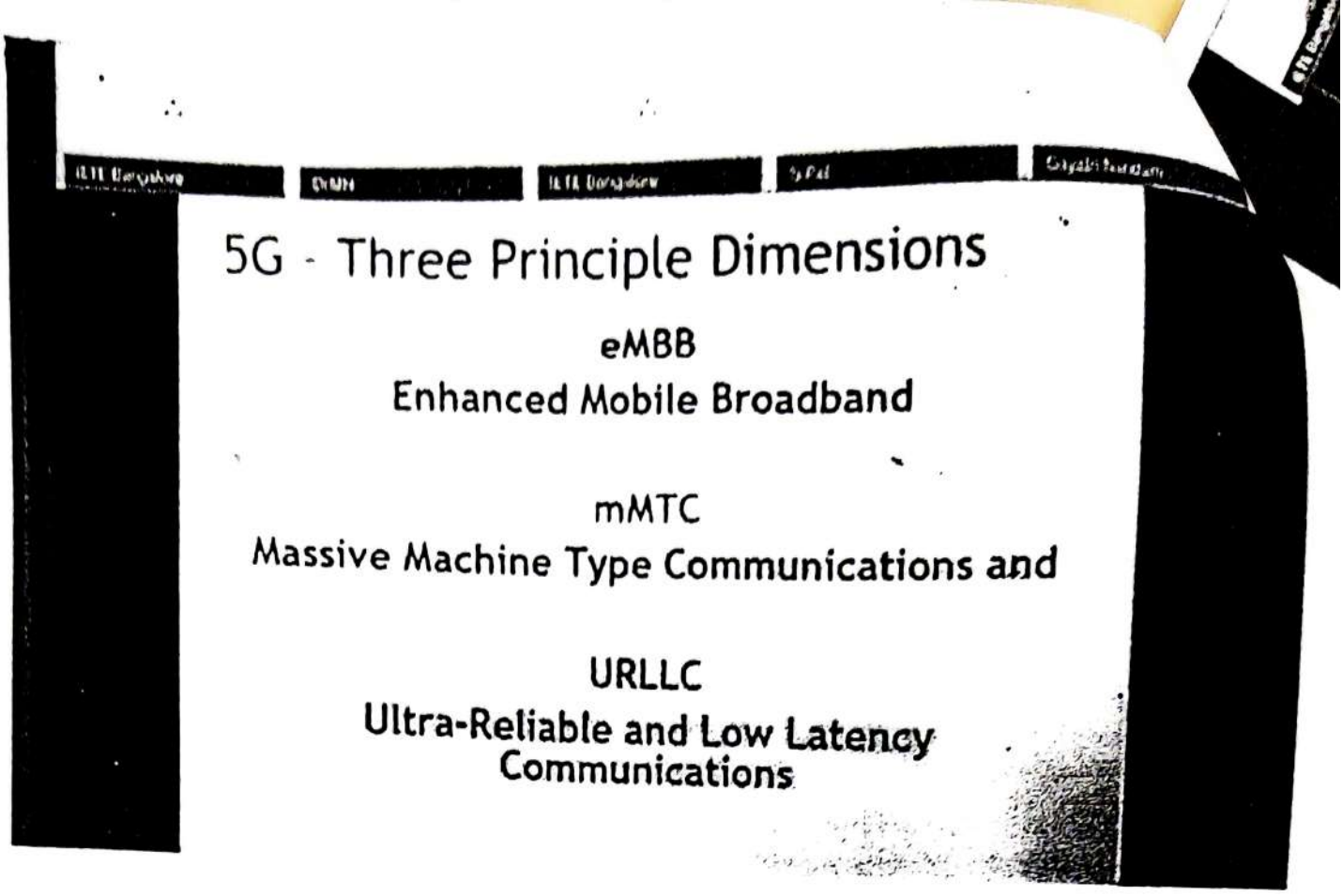
Afternoon Session

Topic : Antennas for Wireless/ Mobile Communications – with Emphasis on 5G

Resource Person : Dr. M. H. Kori, Distinguished Fellow IETE, Technical Director (Retd.), Alcatel-Lucent Technologies

The speaker discussed about:

- Adaptive antenna technologies
- Evolution of LTE- Advanced
- 5G-Three principle Dimensions
- Reconfigurable Antenna



Day-03

Morning Session

Topic : Spacecraft Antennas

Resource Person : Prof Mahadevan, Scientist ISRO(R)/ Professor PESUniv, Bangalore

The speaker discussed about :

- Space craft subsystems overview
- Altitude and Orbit control systems(AOCS)
- Fine Positioning
- Orbit insertion & maintenance

Day-03

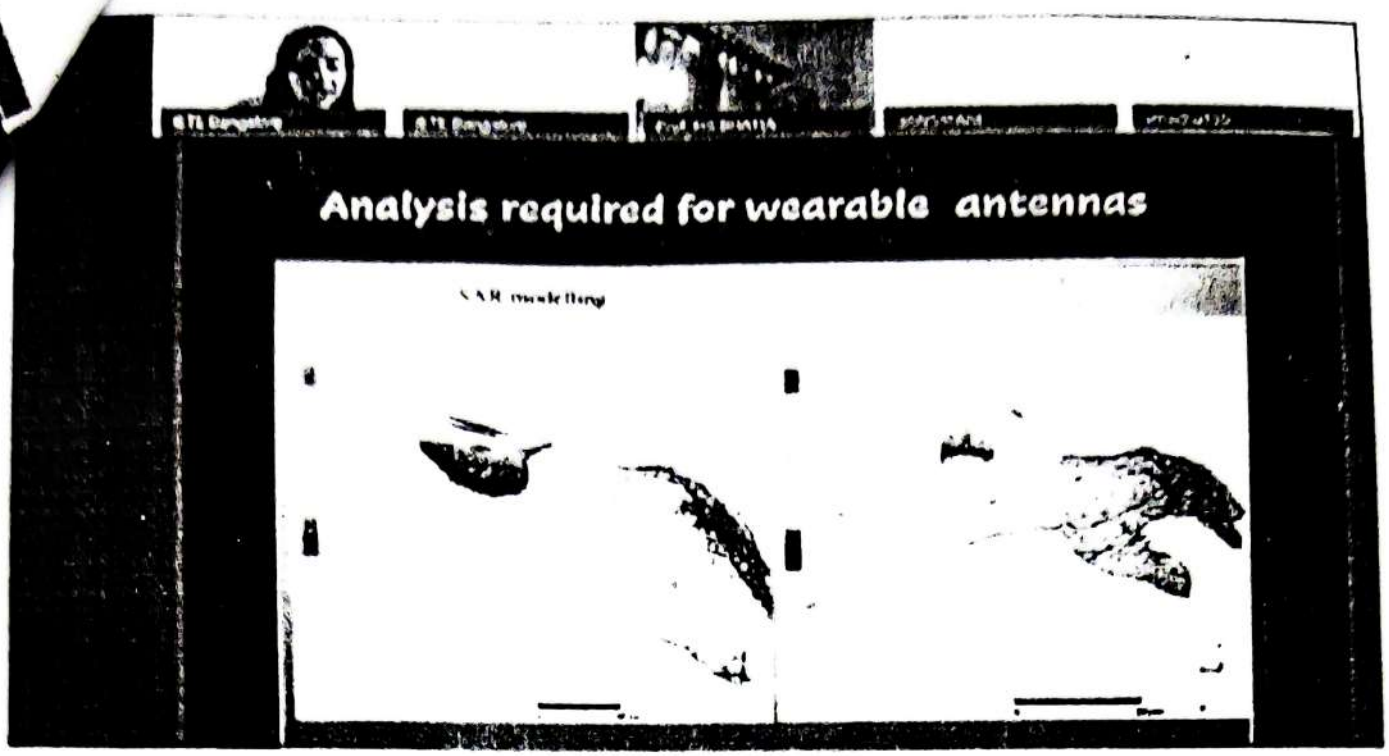
Afternoon Session

Topic : Challenges in design and analysis of Active and Passive Wearable Antennas

Resource Person : Dr. Swetha Amit, Assistant Professor, Ramaiah Institute of Tech, Bangalore

The speaker discussed about :

- Challenges f wearable antenna
- Antenna detuning & impedance matching
- Analysis required for wearable antenna
- Factors influencing the performance of Textile antenna



Day-04

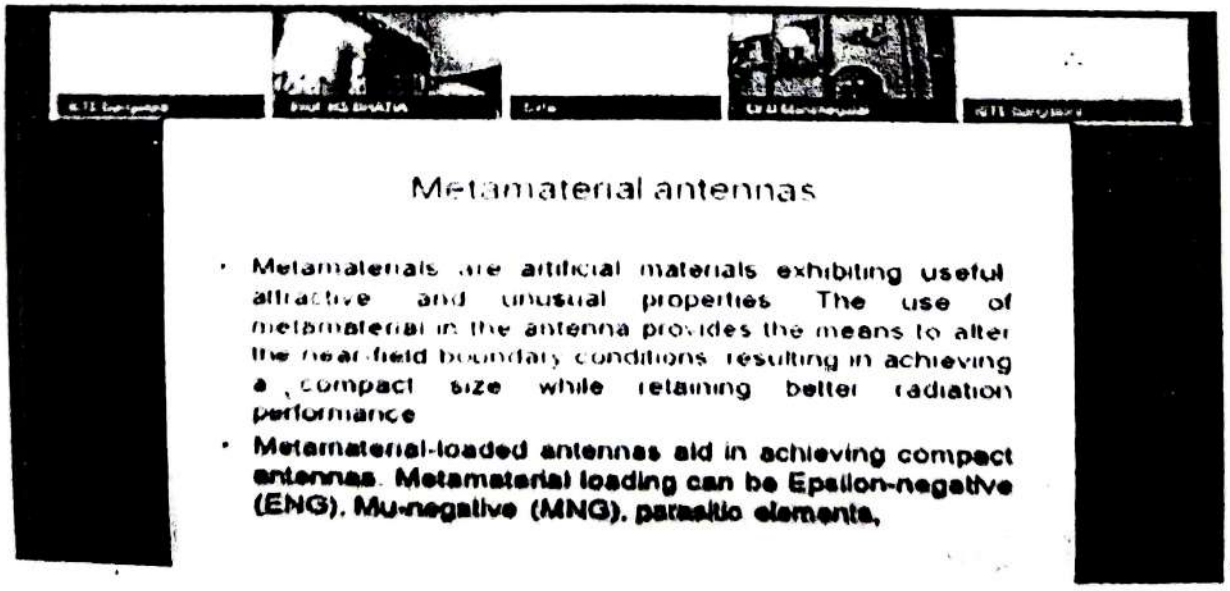
Morning Session

Topic . : Compact Multiband antennas and Numerical Modelling

Resource Person : Dr. B. Manimegalai, Professor, Thiagarajar College of Engineering, Madhurai

The speaker discussed about :

- Wireless connectivity technologies
- Challenges in wireless RF frontend
- FRACTALS as antenna
- New trend in antenna design techniques



Day-04

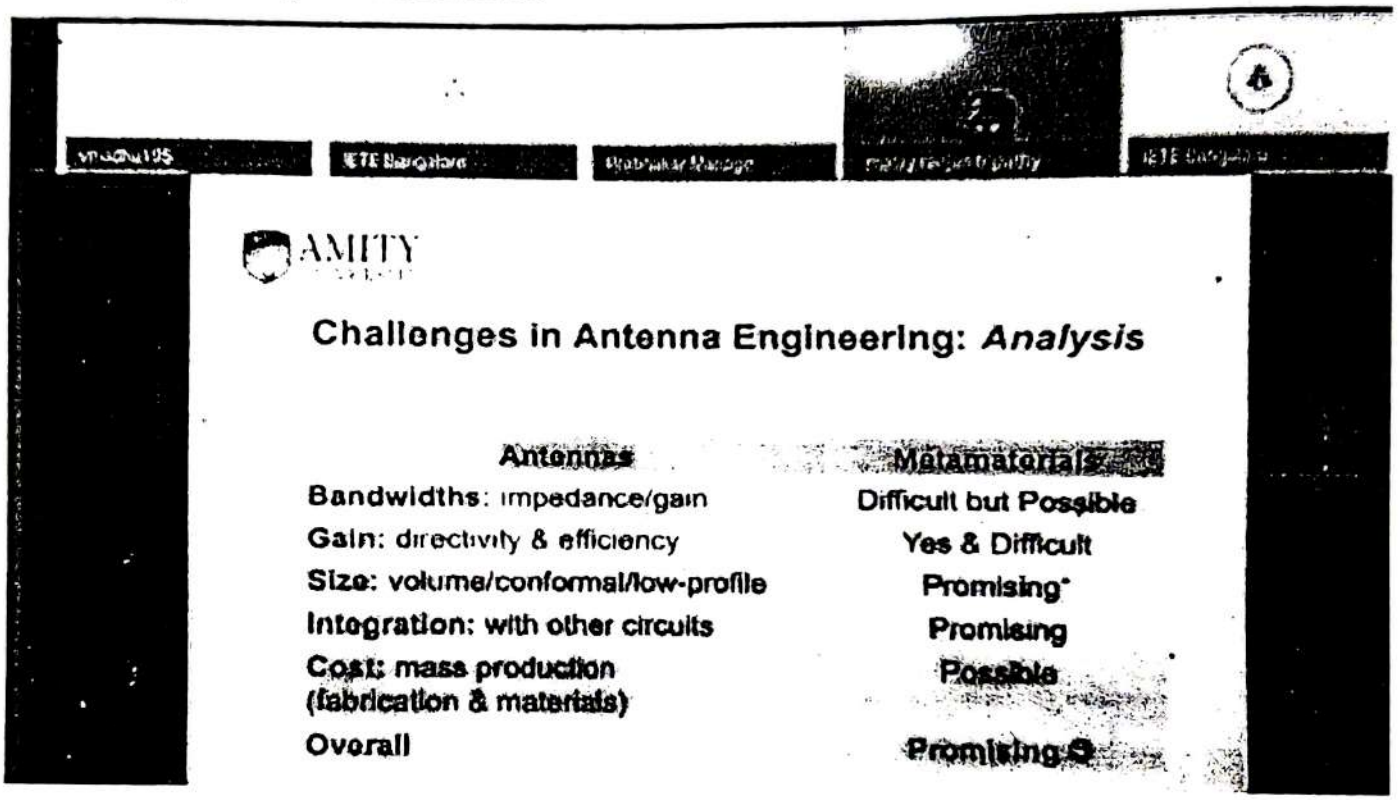
Afternoon Session

Topic : Metamaterial based antenna designs and applications: Prospects and Challenges

Resource Person : Dr. Malay Ranjan Tripathy, Professor, Amity University Uttar Pradesh, Noida, U.P., India

The speaker discussed about :

- Potentials in Antenna Engineering
- Challenges in Antenna Engineering
- Metamaterial devices
- Antipodal tapered slot antenna



Day-05

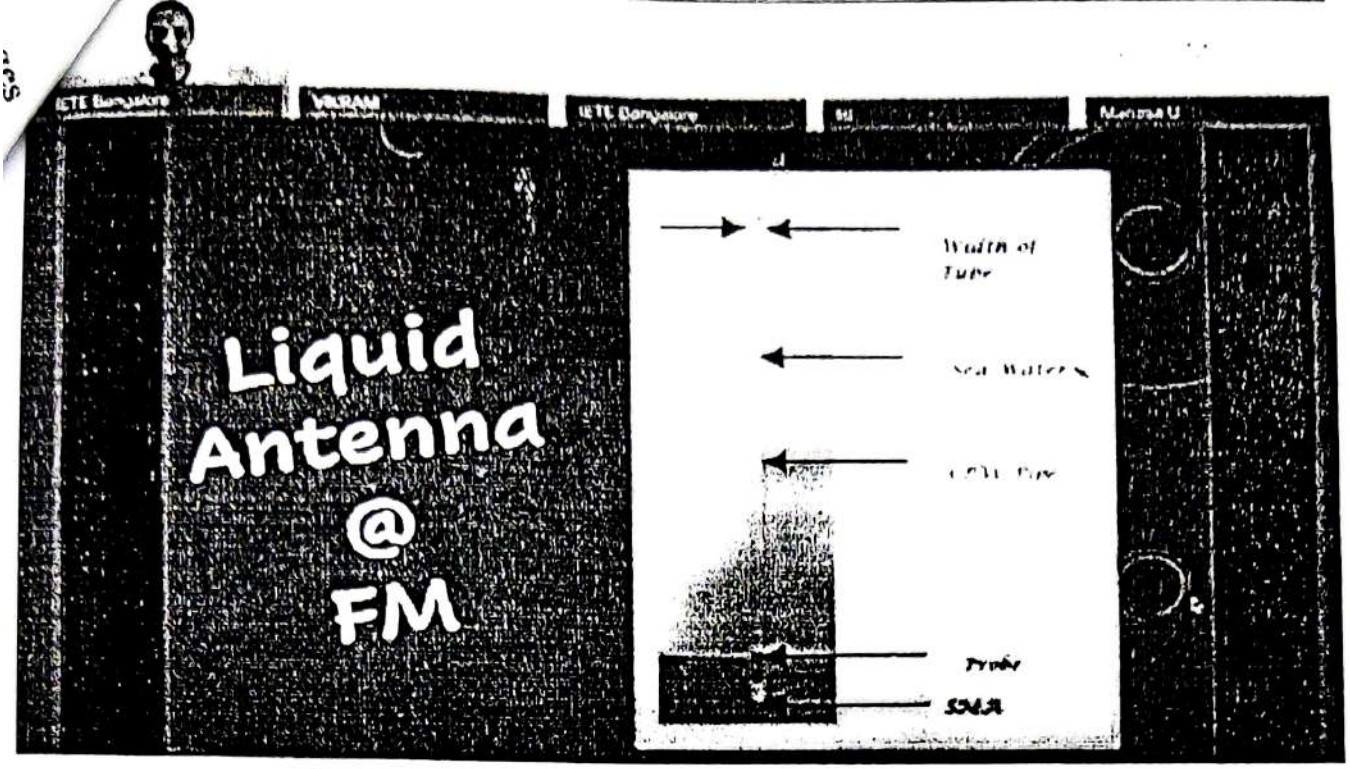
Morning Session

Topic : Research ideas on Liquid Antennas

Resource Person : Dr. Swetha Amit, Assistant Professor, Ramaiah Institute of Tech, Bangalore

The speaker discussed about :

- Sea water antenna
- Sea water conductivity
- Salt water antenna as a fountain
- Salt water concentration to distance covered



)ay-05

ıfternoon Session

'opic · : Space Technologies which changed our lives

:esource Person : Shri. Kali Shankar Shukla, Retd. Senior Scientist ISRO

'he speaker discussed about :

- Medical applications of Space technology
- Examples of space technology in day today life
- Applications of space technology in fitness & gym clubs
- Search & rescue service

Day-06

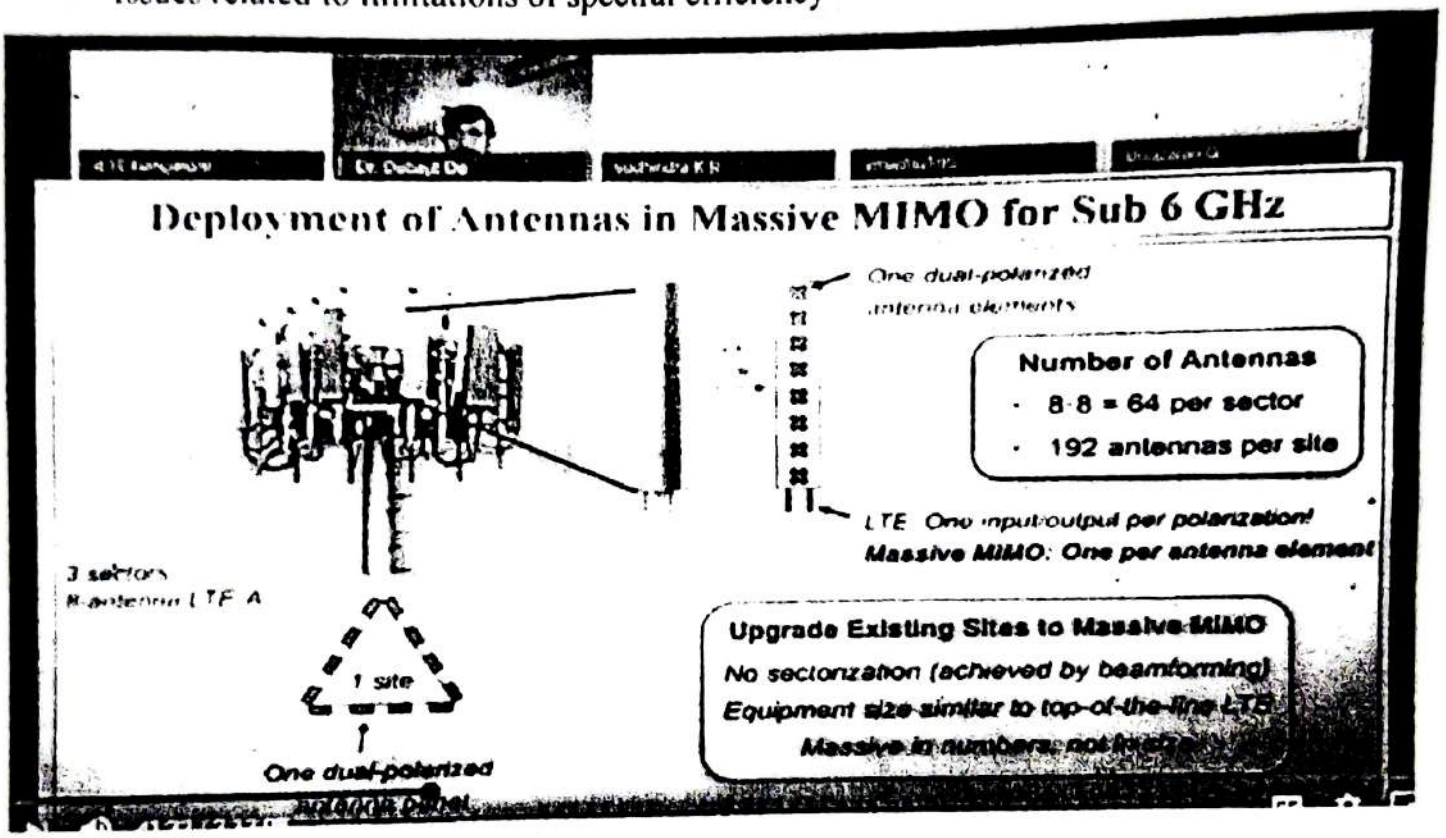
Morning Session

Topic : 5G and Beyond

Resource Person : Dr. Debajit De, Senior RF Engineer, VVDN Technologies Private Limited, Odisha

The speaker discussed about :

- How to improve cellular networks
- Massive MIMO & beam forming
- Challenges of manufacturer for small cell radio
- Issues related to limitations of spectral efficiency



Program	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2
Webinar on "Advanced Antenna Design and Development for RF Communication Systems"	3	3	2	2	2	2	1	-	1	1	1	1	3	1

- PO1:Staff gained the knowledge of mathematics, science and engineering fundamentals
- PO2:Staff can able to analyze complex engineering problems
- PO3:Staff can able to design and develop model
- PO4:Staff can identify complex problems for research work
- PO5:Staff can utilize modern tools for research work
- PO6: Staff can understand the consequent responsibilities relevant to the professic engineering practice.
- PO7: Staff can demonstrate the knowledge of, and need for sustainable development.
- PO9: Staff can function effectively as an individual, and as a member or-leader in diverse teams, and in multidisciplinary settings
- PO10:Staff can communicate effectively by gaining knowledge
- PO11: Staff can apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments
- PO12: Staff can engage in independent and life-long learning in the broadest context technological change.
- PSO1: It provided an ability to understand and analze basic concepts & systems relating o the field of communication
- PSO2: It provided an ability to apply the understandings & publish literature .

Participants:

Dr. Chanda V Reddy
Ms. Rekha N
Ms. Devika B
Ms. Srividya R

6/8/2020
Dr. Chanda. V. Reddy
HOD,TCE

HEAD OF THE DEPARTMENT
Dept. of Telecommunication Engg
K. S. Institute of Technology
Bengaluru - 560 109

7/8/2020
Principal

PRINCIPAL
K.S. INSTITUTE OF TECHNOLO
BENGALURU - 560 109.

CERTIFICATE OF PARTICIPATION

DEVIKA B

Assistant Professor of K. S. Institute of Technology

For participating in the One Week Webinar on ***"Advanced Antenna Design and Development for RF Communication Systems"*** held during 20th to 25th July 2020, Jointly Organized by The Institution of Electronics and Telecommunication Engineers (IETE) Bangalore and Antenna Test & Measurement Society of India (ATMS)

Dr. Swetha Amit	Dr. S G Shivaprasad Yadav	Shri C Satyanandan	Shri R K Malaviya
Coordinator &	Coordinator &	Chairman	Secretary
Member, ATMS	Hon. Secretary, IETE Bangalore	IETE Bangalore	ATMS, India

K S Institute of Technology, Bengaluru– 109

Department of Telecommunication Engineering

Report on FDPtitled "Image and Signal Processing"

Date and Time of webinar: 04/01/2021to 08/01/2021from 10.30AM to 12.30PM

Through : Google Meet online Appliation.

Organized by: Department of Electronics & Communication Engineering and Civil Engineering, JSSATE, Bengaluru in Association with Indian Society for Technical Education & Association of Consulting Civil Engineers

Scope and Objectives:

This FDP focused on importance of Image and Signal Processing in the current scenario.This FDPon Image and Signal Processingwas organized for Research scholars, Faculties and working professionals. Research scholars, working professionalsand faculties were benefited learning about different types of image and signal processing systems available in the market.

Schedule:

DATE AND TIME	SPEAKER	TOPIC
04-01-2021 10:30 AM – 12:30PM(IST)	Dr. P.M. Shivakumaraswamy	Image Processing in Remote Sensing
05-01-2021 10:30 AM – 12:30PM(IST)	Dr. SudarshanPatilkulkarni	Image Processing using Wavelets
06-01-2021 10:30 AM – 12:30PM(IST)	Dr. KarthikUpadhya	Signal Processing for Wireless Communications : Challenges and Opportunities
07-01-2021 10:30 AM – 12:30PM(IST)	Dr. Raju AEDLA	UAV- Based Smart Agricultural Management system using Image Processing
08-01-2021 10:30 AM – 12:30PM(IST)	Dr. Ganasri B P	Digital Image Processing and image classification

Day-1:

Resource Person: Dr. P M ShivakumaraSwamy, Professor, Department of Electronics & Communication Engineering, JSSATE, Bengaluru.

Speaker discussed about the topic titled "Remote Sensing and Image Processing". Speaker informed about Characteristics of satellite communication, Data processing and preprocessing steps of GIS workflow, spectral image processing types, image processing softwares used in current scenario. He discussed about active and passive components in remote sensing.

Speaker informed that, RADAR is the best example of active remote sensing. Speaker also discussed about Electromagnetic radiation spectrum andDifference between general images and satellite images. Speaker also discussed about importance of Color composites and hyperspectral image. Speaker also illustrated about Multispectral imaging and its frequency ranges. Speaker also discussed about multispectral and hyper spectral image sensing. Speaker also illustrated about applications of hyper spectral image sensing.

Day-2:

Resource Person: Dr.SudarshanPatilKulkarni, Professor, Department of Electronics & Communication Engineering, JSSSTU, Mysuru.

Orthoganality

Inner vector

Orthonormal basis sets

Introduction to wavelet transforms

Applications of wavelet transforms

Level of decomposition affecting compression ratio

How to apply wavelets to images and audio signals

Day-3:

Resource Person: Dr.KarthikUpadhya, Espoo, Finland.

Day-4:

Resource Person: Dr.Raju AEDLA, Research Scientist, Kumamoto University, JAPAN.

Day-5:

Resource Person: Dr.Ganasri B. P, GIS Analyst, DALLAS, TEXAS, USA

Mapping of webinar with PO'S and PSO'S

Program	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1
FDP	2	2	2	1	1	-	-	-	-	1	-	2	2

- PO1: Participants gained the knowledge of engineering fundamentals on Image processing and sensors.
- PO2: Participants can be able to analyze complex engineering problems.
- PO3: Participants can be able to apply the knowledge in using various programming tools like Keras and Tensorflow.
- PO4: Participants can identify complex problems for research work.
- PO5: Participants can utilize modern tools for research work (Keras and Tensorflow).
- PO10: Participants can communicate effectively by gaining knowledge.
- PO12: Participants can apply the basic knowledge in lifelong learning of new programming languages.
- PSO1: Participants are able to understand and apply programming tools to various fields of signal processing problems.

Report Submitted By

Dinesh Kumar DS

Mr.Dileep J

HOD

HEAD OF THE DEPARTMENT
Dept of Telecommunication
K.S Institute of Te...
BANGA...

JSS MAHAVIDYAPEETHA

JSS ACADEMY OF TECHNICAL EDUCATION

Dr.Vishnuvardhana Road,Bengaluru-560060

Affiliated to VTU, Belagavi, Karnataka, INDIA, Approved by AICTE, New Delhi, Accredited by NBA

Department of Electronics and Communication Engineering

&

Department of Civil Engineering

CERTIFICATE OF PARTICIPATION

This Certificate is Awarded to

Mr.Dileep J

K S INSTITUTE OF TECHNOLOGY

for successfully completing the one week online FDP on **"Image and Signal Processing"** from 4th - 8th January 2021, jointly organized by the Department of Electronics & Communication Enginnering and Department of Civil Engineering, JSS Academy of Technical Education, Bengaluru - 60.

Mr. Manohar B.S Coordinator	**Dr. Santhosh Kumar** HOD, Civil Engg.	**Dr. Siddesh G.K** HOD, ECE	**Dr.Mrityunjaya V Latte** **Principal** **JSSATE,Bengaluru.**

JSS MAHAVIDYAPEETHA

JSS ACADEMY OF TECHNICAL EDUCATION

Dr.Vishnuvardhana Road,Bengaluru-560060

Affiliated to VTU, Belagavi, Karnataka, INDIA, Approved by AICTE, New Delhi, Accredited by NBA

Department of Electronics and Communication Engineering

&

Department of Civil Engineering

CERTIFICATE OF PARTICIPATION

This Certificate is Awarded to

Mr.Dinesh Kumar D S

KS Institute of Technology

for successfully completing the one week online FDP on **"Image and Signal Processing"** from 4th - 8th January 2021, jointly organized by the Department of Electronics & Communication Enginnering and Department of Civil Engineering, JSS Academy of Technical Education, Bengaluru - 60.

Mr. Manohar B.S Coordinator	**Dr. Santhosh Kumar** HOD, Civil Engg.	**Dr. Siddesh G.K** HOD, ECE	**Dr.Mrityunjaya V Latte** **Principal** **JSSATE,Bengaluru.**

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Faculty Name: Dr. Surekha Borra

FDP Title: Machine Learning with Python

Organized by: Department of Computer Science& Engineering, KKR&KSRIT

Duration: 13th Jul to 18th Jul 2020

About FDP:

FDP on Machine Learning with Python provided educators with a comprehensive understanding of machine learning concepts, techniques, and applications using the Python programming language. Through a series of lectures, hands-on workshops, and collaborative discussions, participants gained insights into fundamental machine learning algorithms, practical implementations, and real-world applications. The FDP aimed to equip educators with the knowledge, skills, and resources necessary to integrate machine learning with Python into academic curricula, foster research collaborations, and prepare students for careers in this rapidly growing field. Participants gained a solid understanding of Python programming fundamentals, including data types, control flow, functions, and object-oriented programming. They learned how to write clean, efficient, and modular Python code for machine learning applications. The FDP covered fundamental machine learning concepts, including supervised learning, unsupervised learning, and reinforcement learning. Participants learned about algorithms such as linear regression, logistic regression, decision trees, k-nearest neighbors, support vector machines, clustering algorithms, and neural networks

The FDP on Machine Learning with Python provided a valuable platform for educators to deepen their understanding of machine learning concepts and develop practical skills in Python programming. By incorporating insights gained from the FDP into their teaching and research activities, participants are well-equipped to prepare students for careers in machine learning and data science. The program emphasized the importance of hands-on learning, continuous practice, and lifelong learning in mastering machine learning with Python and driving innovation in this rapidly evolving field.

HOD ECE

Signature of faculty

KITS/CSE/FDP/ 299

KITS

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Vinjanampadu, Vatticherukuru Mandal, Guntur, Andhra Pradesh-522017

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

www.kitsguntur.ac.in

Certificate of Participation

This is to certify that **Surekha Borra** from **K.S.Institute of Technology** participated & completed the one week online Faculty Development Program on **Machine Learning With Python** from **13-07-2020** to **18-07-2020** organized by Department of Computer Science & Engineering, **KKR&KSR Institute of Technology & Sciences, Vinjanampadu, Guntur, Andhra Pradesh, India.**

Coordinator	Coordinator	HOD	Director	Principal
Dr. G. Murali	Dr. S.V. Appaji	Prof. R. Ramesh	Dr. K. Hari Babu	Dr. P. Babu

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Faculty Name: Mr. Santhosh Kumar

FDP Title: Machine Learning Using Python Programming

Organized by: Department of ISE,CSE & ECE,AJIT

Duration: 01st Jun to 05th Jun 2021

About FDP:

FDP on machine learning with Python are instrumental in equipping educators with the knowledge and skills necessary to integrate this powerful combination into academic curricula effectively. These programs offer a comprehensive exploration of machine learning concepts, techniques, and algorithms using the Python programming language, which has become a leading choice for data analysis and machine learning applications due to its simplicity, versatility, and rich ecosystem of libraries. Participants in FDPs on machine learning with Python delve into a wide range of topics, including but not limited to supervised learning, unsupervised learning, reinforcement learning, deep learning, natural language processing, and computer vision. Through lectures, hands-on workshops, coding exercises, and real-world projects, educators gain practical experience in applying machine learning algorithms to solve diverse problems across various domain

By engaging in FDPs on machine learning with Python, educators enhance their expertise, expand their professional network, and stay updated with the latest developments in machine learning technology and research. These programs empower faculty members to inspire and educate the next generation of data scientists and machine learning practitioners, driving innovation, and societal impact through their teaching, research, and outreach efforts.

Signature of faculty

HOD ECE

A. J. Institute of Engineering & Technology

(A Unit of Laxmi Memorial Trust)
Kottara Chowki, Mangaluru-575006

AJIET

Certificate of Participation

This is to certify that

Mr SANTHOSH KUMAR. B. R

of

KSIT

Bangalore

has participated in 5 days Faculty Development Programme on "Machine Learning Using Python Programming" organised by Department of Information Science and Engineering in association with Department of CSE and Department of ECE from 01-06-2021 to 05-06-2021

Dr Nagesh H R
Convenor, HOD & Vice Principal

Dr Shantharama Rai
Principal

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K. S. INSTITUTE OF TECHNOLOGY

PHASE - 1

A REPORT ON

6 DAYS AICTE – ISTE INDUCTION / REFRESHER PROGRAM

ON

NEXT GENERATION WIRELESS COMMUNICATION: 5G & IT'S IMPLEMENTATION

ORGANIZED BY

THE DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

K.S.INSTITUTE OF TECHNOLOGY, BENGALURU

Sponsored By

AICTE ISTE

Inaugural Function

Date:21-12-2020

Time: 9.30am – 11.00am

The Inaugural Function of 6 Days AICTE-ISTE Induction / Refresher Program on **Next Generation Wireless Communication: 5G and its Implementation** was held on 21st December 2020 in Mechanical seminar hall, KSIT, Bangalore at 9.30 am

The Induction program was Inaugurated by Chief Guest Dr. Pratapsinh Kakasaheb Desai, President, ISTE New Delhi, graced by Sri. **Y. Ramachandra Naidu**, Hon. President- Kammavari Sangham, **Sri. K. Venkatesh Naidu**, Hon. secretary- Kammavari Sangham, and **Sri. D. Rukmangada** Hon. Treasurer-Kammavari Sangham. The function was presided by **Dr. KVA Balaji Principal** /CEO- KSIT, **Dr .Sangappa S. B.** Prof & Dean, KSIT, National Executive Council Member, ISTE, Chief coordinator of induction program, Dr. P. N. Sudha, Prof & HOD-ECE, Program chair. The function was coordinated by Prof. Santhosh Kumar B R, Prof. Jayasudha S. B. and Prof. Sangeetha V. The Inaugural event was conducted offline where as participants joined through both offline and online mode.

Fig: Dignitaries of the Induction program after Lighting the Lamp

Fig: Dignitaries Management , Principal, Chief Coordinator, Program chair

The welcome speech was given by **Dr .Sangappa S. B.** Prof & Dean, KSIT; invocation song was rendered by Prof. Vishalini Divakar, then lighting the lamp by the dignitaries followed by the introduction of chief guest by prof. Saleem S. Tevarmani.

Fig: Invocation Song

Fig: Welcome Speech by Dr.Sangappa S.B

The Chief Guest Dr. Pratapsinh Kakasaheb Desai, spoke about the challenges faced by Technical Institutes. He gave inputs to upcoming engineers about the advantages of being inter-disciplinary. Mere knowledge of a particular discipline is not sufficient in today's competitive world, one should develop attitude of being inter-disciplinary to succeed in his career.

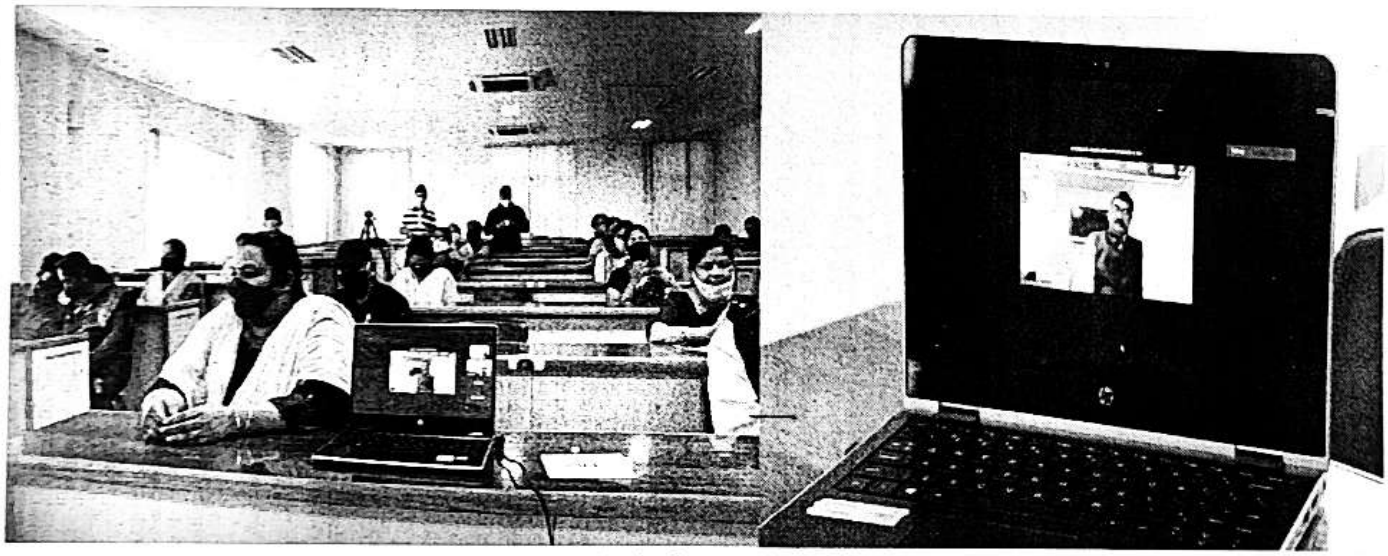

Fig: Chief Guest Speech

Sri. K. Venkatesh Naidu, Hon. secretary- Kammavari Sangham spoke about the endeavors will be successful only when all the stake holders: students, parents, faculty and Institution are aligned and moving in the same direction. **Sri. D. Rukmangada** Hon. Treasurer- Kammavari Sangham spoke about how technology has progressed and how it has impacted all of us in our daily lives.

Fig: Secretary Speech

Fig: Treasurer Speech

Dr. KVA Balaji Principal /CEO- KSIT addressed the gathering and wished all the participants happy learning for all the six days. Dr. P. N. Sudha, Prof & HOD-ECE, Program chair briefed about schedule of the Induction/ Refresher program of six days. The program was concluded by expressing gratitude to all those people who were part of this inaugural function of AICTE-ISTE sponsored program by Prof. Sunil Kumar G R.

Fig: Inaugural Function Coordinators and all the staff of ECE department

HEAD OF THE DEPARTMENT
Dept. of Electronics & Communication Engg.
K.S. Institute of Technology
Bengaluru - 560 109

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#14, Raghuvanahalli, Kanakapura Main Road, Bengaluru - 560109
Ph.28435722 / 24, | Fax: 080 - 28435723 | Email: principal@ksit.ac.in | Web:www.ksit.ac.in
KSIT
Sponsored by
AICTE & ISTE New Delhi

CERTIFICATE OF PARTICIPATION

This is to Certify that

Ms.Vishalinidivakar

from

KSIT,BANGALORE

has participated in 6-days AICTE-ISTE Induction/Refresher program on **'Next Generation Wireless Communications 5G and it's implementation'** organized by the Department of Electronics & Communication Engineering from 21st to 26th December 2020.

Dr. Sangappa S. B
NATIONAL EXECUTIVE COUNCIL MEMBER
ISTE, NEW DELHI
CHIEF COORDINATOR

Dr. P N Sudha
PROF.& HEAD DEPARTMENT OF ECE
PROGRAM CHAIR

Dr. K V A Balaji
PRINCIPAL/CEO
K S INSTITUTE OF TECHNOLOGY
CONVENER

KAMMAVARI SANGHAM (R) - 1952
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#14, Raghuvanahalli, Kanakapura Main Road, Bengaluru - 560109
Ph.28435722 / 24, | Fax: 080 - 28435723 | Email: principal@ksit.ac.in | Web:www.ksit.ac.in

Sponsored by
AICTE & ISTE New Delhi

CERTIFICATE OF PARTICIPATION

This is to Certify that

Mr.Praveen.A

from

KSIT,BANGALORE

has participated in 6-days AICTE-ISTE Induction/Refresher program on **'Next Generation Wireless Communication: 5G and it's implementation'** organized by the Department of Electronics & Communication Engineering from 21st to 26th December 2020.

Dr. Sangappa S. B
NATIONAL EXECUTIVE COUNCIL MEMBER
ISTE, NEW DELHI
CHIEF COORDINATOR

Dr. P N Sudha
PROF.& HEAD DEPARTMENT OF ECE
PROGRAM CHAIR

Dr. K V A Balaji
PRINCIPAL/CEO
K S INSTITUTE OF TECHNOLOGY
CONVENER

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Faculty Name: Mrs. Jayasudha BSK

FDP Title: Advance topics & applications of Machine Learning

Organized by: Department of ECE, NMAMIT

Duration: 31st Aug to 05th Sep 2020

About FDP:

The Faculty Development Program (FDP) on Advanced Topics & Applications of Machine Learning provided educators with an in-depth exploration of advanced machine learning concepts, techniques, and applications. Through a series of lectures, hands-on workshops, and collaborative discussions, participants gained insights into cutting-edge methodologies, recent research advancements, and practical implementations across diverse domains. The FDP aimed to equip educators with the knowledge, skills, and resources necessary to integrate advanced machine learning topics into academic curricula, foster research collaborations, and prepare students for careers in this rapidly evolving field. The FDP addressed the growing importance of machine learning in various sectors, including healthcare, finance, marketing, and cybersecurity. Participants, comprising faculty members, researchers, and industry professionals, engaged in discussions on recent advancements in machine learning, emerging trends, and the role of educators in preparing students for the AI-driven future.

The FDP on Advanced Topics & Applications of Machine Learning provided a valuable platform for educators to deepen their understanding of advanced machine learning concepts, methodologies, and applications. By incorporating insights gained from the FDP into their teaching and research activities, participants are well-equipped to prepare students for careers in this dynamic and rapidly evolving field. The program emphasized the importance of collaboration, interdisciplinary research, and lifelong learning in harnessing the potential of machine learning to address societal challenges and drive positive impact.

Signature of faculty

HOD ECE

NITTE EDUCATION TRUST | NMAM INSTITUTE OF TECHNOLOGY

(An Autonomous Institution affiliated to VTU, Belagavi)
NITTE – 574110, Karkala Taluk, Udupi District, Karnataka, India
ISO 9001:2015 Certified, Accredited by NAAC with 'A' Grade

Department of Electronics & Communication Engineering

AICTE Sponsored Short Term Training Program on

Advanced Topics in Machine Learning and Applications in Engineering and Technology

Certificate

is presented to

Mrs. JAYASUDHA B S K

(Assistant Professor, Dept. of ECE, K.S.Institute of Technology, Bengaluru-560109)

for attending and successfully completing the **AICTE Sponsored Online Short Term Training Program on "Mathematical Foundations of Machine Learning (Statistics and Neural Basis)"** organized by the Department of Electronics & Communication Engineering, NMAM Institute of Technology, Nitte-574110, Karnataka, India during **14th to 21st August 2020.**

Sbhat		
Dr. Subramanya Bhat	**Dr. Rekha Bhandarkar**	**Dr. Niranjan N Chiplunkar**
Coordinator STTP	**Convener & HoD**	**Principal**

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60 Years 1952-2012

A REPORT ON

6 DAYS AICTE – ISTE INDUCTION REFRESHER PROGRAM

ON

NEXT GENERATION WIRELESS COMMUNICATION: 5G & BEYOND

ORGANIZED BY

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

K.S.INSTITUTE OF TECHNOLOGY, BENGALURU

A 6 Days AICTE-ISTE Induction / Refresher Program on **Next Generation Wireless Communication: 5G and its Beyond** was held on 3rd May 2021 in Zoom online platform.

The Induction program was inaugurated by Chief Guest **Dr.Mahesh Anant Kakade** Director, Board of Examinations, Pune University, Pune, Maharashtra, graced by **Sri.R.Rajagopal Naidu**, President, Kammavari Sangham, **Sri. R. Leela Shankar Rao**, Hon.Secretary, Kammavari Sangham, **Sri.T. Neerajakshulu Naidu**, Treasurer, Kammavari Sangham .The function was presided by **Dr. KVA Balaji** CEO, KSGI, **Dr. Dilip Kumar K**, Principal / Director ,KSIT, **Dr. P. N. Sudha**, Prof & HOD-ECE, Program chair **, Dr.Sangappa S. B.** Director (Adm & PR),KSGI, National Executive Council Member, ISTE, New Delhi, Chief coordinator of induction program,. The function was coordinated by Prof. Santhosh Kumar B R, Prof. Jayasudha S. B. and Prof. Sangeetha V. The Inaugural event and six days induction program was conducted through online mode.

Fig: Chief Guest and Dignitaries of Inaugural Function

The welcome speech was given by Dr .Sangappa S. B. Director (Adm & PR),KSGI, National Executive Council Member, ISTE, New Delhi, Chief coordinator, and he briefed about KSGI achievement from beginning to till date and highlighted KSIT is one among five colleges to conduct this AICTE-ISTE sponsored induction programme.

Fig: Welcome Speech by Dr.Sangappa S.B, Director (Adm & PR),KSGI

Dr. P. N. Sudha, Prof & HOD-ECE, Program chair briefed about schedule of the second phase of Induction/ Refresher program of six days. She added quote as "Beautiful thing about Learning is nobody can take it away from us".

Fig: Dr.P.N.Sudha ,Programme Chair speech

Invocation song was rendered by Prof. Vishalini Divakar, Asst.Prof.Dept.of ECE, KSIT ,followed by the introduction of chief guest by Dr.B.Sudharsan, Professor, Dept. of ECE,KSIT.

Fig: Invocation Song and Chief Guest Introduction

The Chief Guest Dr.Mahesh Anant Kakade Director, Board of Examinations, Pune University, Pune, Maharashtra, spoke about education ecology .He enlighten the necessary tools and weapon of power of knowledge are skills and competencies. Execution of performance can be achieved by making excellence as a habit. This better performance comes from best practice benchmark. Best practice comes from novelty of thoughts and DNA committed for innovation.

He also added set a Himalayan Goal to become a Global academic leader and that can be achieved with constant interaction with Stake holders. Each teacher identity is because of identity of organization. He spoke about students centered education, women centered family, Human Centric development, knowledge centered Society and finally Research centered India. The definition of superpower is only certain words which are buzz words or passwords are Research and Innovation. He encouraged for the new startup of innovation hub in future. He concluded that one should have 360 degree positive approach in each and every activities.

Fig: Chief Guest Speech

Sri.R.Rajagopal Naidu, President, Kammavari Sangham spoke about how technology has progressed and how it has impacted all of us in our daily lives. He told about to achieve anything we all need to look for strong leadership. Teamwork is more important aspect and set clear objectives, create a culture and move forward.

Fig: **Sri.R.Rajagopal Naidu**, President, Kammavari Sangham speech

Sri. R. Leela Shankar Rao, Hon.Secretary, Kammavari Sangham, spoke about KSGI follows four important mantras as Discipline, Dedication, Hardwork and Commitment .He also told that the endeavors will be successful only when all the stake holders: students, parents, faculty and Institution are aligned and moving in the same direction.

Fig: Sri. R. Leela Shankar Rao, Hon.Secretary, Kammavari Sangham Secretary Speech

Dr. KVA Balaji CEO,KSGI addressed the gathering and wished all the participants happy learning for all the six days.He spoke about if the world was not slow down by the current pandemic, the implementation and adoption of this technology would be for ahead of where it is now in our country.

Fig: **Dr. KVA Balaji** CEO,KSGI speech

Dr. Dilip Kumar K, Principal / Director ,KSIT, spoke about Teaching is called Nobel Profession and Teacher willingness shows then everything will be converted. The best of country is young generation ,hence need to train student in a betterway with discipline. He also appreciated the vey well planned organization of this event

Fig: Dr. Dilip Kumar K, Principal / Director ,KSIT speech

The program was concluded by expressing gratitude to all those people who were part of this inaugural function of AICTE-ISTE sponsored program by Prof. Sunil Kumar G R. Asst. Professor Dept. of ECE,KSIT.

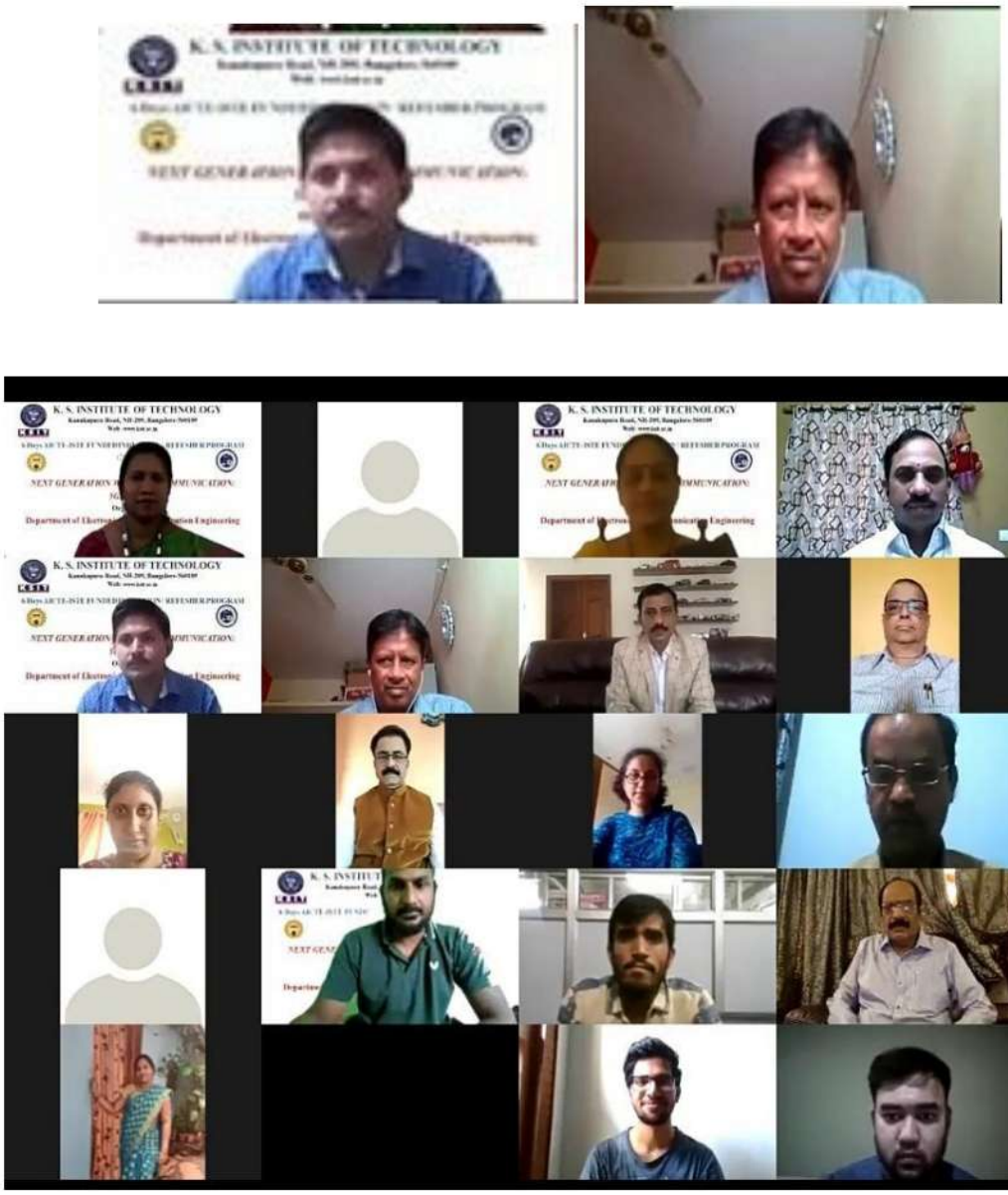


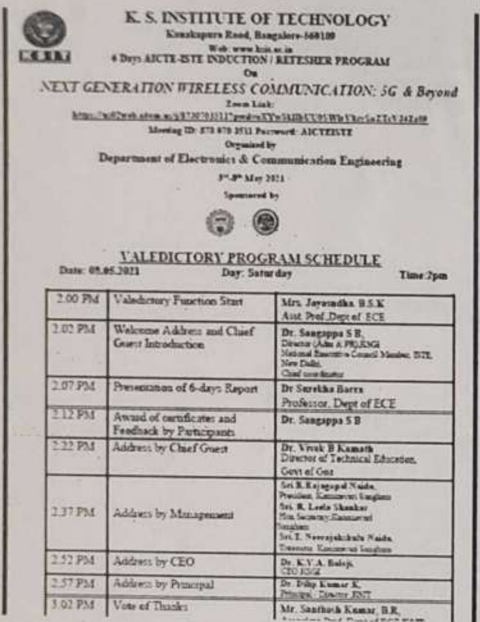
Fig: Management, Chief Guest, Participants in online Inaugural Function

Valedictory session

Time 2PM-3.15 PM

The Valedictory started with the welcome address by Dr Sangappa, following Presentation of 6-days Report by Dr Surekha Borra. The participation certificates were distributed online to few participants. The Participants appreciated the the complete organization of the Induction program by fibbing their feedback. It was told that the sessions were technically rich and there were many take aways. Th Chief guest for the day **Dr. Vivek B Kamath** Director of Technical Education,

Govt of Goa, addressed the gathering and highlighted the importance of such programs conducted for the benefit of teaching fraternity. Then the Management , CEO and Principal addressed the audience with their encouraging words. The program ended with vote of Thanks by Prof. Santhosh Kumar.



K. S. INSTITUTE OF TECHNOLOGY

Kanakapura Road, Bangalore-560109

Web: www.ksit.ac.in

6 Days AICTE-ISTE INDUCTION / REFESHER PROGRAM

On

NEXT GENERATION WIRELESS COMMUNICATION: 5G & Beyond

Zoom Link:

[illegible]

Meeting ID: [illegible] Password: AICTEISTE

Organized by

Department of Electronics & Communication Engineering

3rd-8th May 2021

Sponsored by

VALEDICTORY PROGRAM SCHEDULE

Date: 08.05.2021 Day: Saturday Time:2pm

2.00 PM	Valedictory Function Start	Mrs. Jayasudha. B.S.K Asst. Prof. Dept of ECE
2.02 PM	Welcome Address and Chief Guest Introduction	Dr. Sangappa S B, Director (Adm & PR), KSGI National Executive Council Member, ISTE, New Delhi, Chief coordinator
2.07 PM	Presentation of 6-days Report	Dr Surekha Borra Professor, Dept of ECE
2.12 PM	Award of certificates and Feedback by Participants	Dr. Sangappa S B
2.22 PM	Address by Chief Guest	Dr. Vivek B Kamath Director of Technical Education, Govt of Goa
2.37 PM	Address by Management	Sri R. Rajagopal Naidu, President, Kammavari Sangham Sri. R. Leela Shankar Hon Secretary, Kammavari Sangham Sri. T. Neerajakshulu Naidu, Treasurer, Kammavari Sangham
2.52 PM	Address by CEO	Dr. K.V.A. Balaji, CEO KSGI
2.57 PM	Address by Principal	Dr. Dilip Kumar K, Principal / Director, KSIT
3.02 PM	Vote of Thanks	Mr. Santhosh Kumar, B.R. [illegible]

HEAD OF THE ...

Dept. of Electronics & Communication Engg

K.S. Institute of Technology

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#14, Raghuvanahalli, Kanakapura Main Road, Bengaluru - 560109
Ph. 28435722/24, | Fax : 080 - 28435723 | Email : principal@ksit.ac.in | Web: www.ksit.ac.in

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AICTE & ISTE New Delhi

CERTIFICATE OF PARTICIPATION

This is to Certify that **Mr.Sunil Kumar.G.R** from **KSIT,Bangalore** has participated in 6-days AICTE-ISTE funded Induction / Refresher program (Second Phase) on **'Next Generation Wireless Communication: 5G & Beyond'** organized by the Department of Electronics & Communication Engineering between **03rd- 8th May 2021**.

Dr P N Sudha
Prof.& Head ECE Dept
Program Chair

Dr.Sangappa.S.B
Director (Adm & PR), KSGI
Chief Coordinator

Dr.Dilip Kumar.K
Principal/ Director
KSIT

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This is to Certify that **S.CHRISTO JAIN** from **KSIT, Bangalore** has participated in 6-days AICTE-ISTE funded Induction / Refresher program (Second Phase) on **'Next Generation Wireless Communication: 5G & Beyond'** organized by the Department of Electronics & Communication Engineering between **03rd- 8th May 2021**.

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This is to Certify that **Ms.Aruna Rao.B.P** from **KSIT,Bangalore** has participated in 6-days AICTE-ISTE funded Induction / Refresher program (Second Phase) on **'Next Generation Wireless Communication: 5G & Beyond'** organized by the Department of Electronics & Communication Engineering between **03rd- 8th May 2021.**

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Principal/ Director
KSIT

K. S. INSTITUTE OF TECHNOLOGY

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Faculty Name: Mr. Saleem S Tevaramani

FDP on NAAC Accreditation Process

Organized by B.M.S. College for Women, Basavanagudi, Bangalore

Duration: 23-11-2020 to 30-11-2020

About FDP:

The NAAC (National Assessment and Accreditation Council) accreditation process is a rigorous evaluation aimed at assessing the quality and performance of higher education institutions in India. It involves several sequential steps. Initially, institutions prepare a detailed Self-Study Report (SSR), documenting various aspects such as their mission, infrastructure, academic programs, faculty, and achievements. This SSR is then submitted to NAAC, which assigns a peer team for evaluation. This team conducts an on-site assessment, interacting with stakeholders like faculty, students, and management. The evaluation is based on multiple criteria covering curriculum, teaching methods, research, infrastructure, governance, and innovation. Following the visit, the peer team prepares an assessment report outlining strengths, weaknesses, and recommendations. The institution can respond to this report, addressing any concerns. NAAC's Committee then evaluates the report and response to finalize the institution's accreditation status, assigning a grade ranging from A++ to D. Accreditation is valid for a set period, typically five years, after which reaccreditation is necessary. The process aims to foster a culture of continuous improvement and ensure accountability, ultimately enhancing the quality of higher education institutions.

SIGNATURE OF THE STAFF

HOD - ECE

B.M.S COLLEGE FOR WOMEN

NAAC accredited 'A' – Grade
Basavanagudi, Bengaluru-560 004

ज्ञान-विज्ञान विमुक्तये

Internal Quality Assurance Cell
UGC-Scheme PARAMARSH

Certificate of Participation

This is to certify that Saleem S Tevaramani, Assistant Professor, KSIT has participated in the **National Level Seven Day Online Symposium on NAAC Accreditation Process** organised by ***Internal Quality Assurance Cell,*** B.M.S College for Women, Bengaluru-04, under the aegis of ***UGC Scheme-PARAMARSH*** from 23 to 30 November 2020.

Accreditation Ambassador,
PARAMARSH,BMSCW

Director, IQAC
BMSCW

Principal,
BMSCW

K S Institute of Technology Bangalore – 109
Department of Electronics and communication Engineering

Report on five day online workshop On "IOT and wireless sensor networks" Organized by Bridavan College of Engineering, Yelhanka, Bangalore

Date: 27th July -31st July 2020

Scope and Objectives:

The main objective of the programme is to expose PG students and research scholars to discuss the scope and fundamentals of IOT and wireless sensor networks, focusing on various aspects related to defining research problems, designing of research method etc.

Topic coverage:

On 27/7/2020

Workshop was inaugurated by Dr. H. Honegowda, Technical Director,KSTA and guest of honor was Dr. Ashok D. Hanjagi, Senior Professor & chairman, Dept of Geography and Geoinformatics, Bangalore university, Bengaluru. Session I started at 10:30-12:30 and Session II started at 2:00-3:30.

Session I: Dr. Anant kamath , Professor, Azim Premji University gave a talk on Meaning of Research, Research Objectives and Characteristics of IOTs from 10:30-12:30.

Session II: Dr. K N Krishnamurthy, professor, UAS, GKVK gave a introduction to literature of sensors and its applications 2:00-3:30.

On 28/7/2020

Session I: Dr. Jai Asundi, Research Director, CSTEP explained:

- Introduction to mathematical & physical modelling
- Overview of Simulink block library.
- Introduction to solvers
- Introduction to Physical components library
- Hands on: Design of model to generate the waveforms, implementing the mathematical equations in Simulink

Session II: Dr. Yogesh Simmhan, Assistant Professor, Dept of computational and Data Science, IISC discussed:

- To analyze various device parameters necessary for building a image processing system
- To recommend various image enhancement techniques according to the applications

On 29/7/2020

Session I: Dr. U H Acharya, Professor, SQC & OR Unit. Indian Statistical Institute, explained about testing of hypothesis and sample Design, and the idea about choosing the valid data and explained about data analysis.

- To understand the fundamentals of image and video processing and apply the same to security applications.
- To demonstrate the ability to design, develop solutions for Problems in Electronics & Communication Engineering using hardware and software tools with social concerns

On 30/7/2020

Session I: Dr. Yogesh Simmhan, Assistant Professor, Dept of computational and Data Science, IISC discussed about Reading/Writing an image file, Video processing (edge detection and filtering),Face detection in image and Face recognition in image

Session II: Dr. M H Balasubramanya, professor, Dept of Management Studies, IISC gave a talk on Implementation of smart security application, Web interface video streaming using flask, Introduction to AWS (cloud storage).

On 30/7/2020

Session I: Dr. Parameshwar P Iyer, Former Chief Research Scientist, IISC explained about the importance and protection of 5G networks.

Session II: Mrs. Apoorva H R , Consultant gave us the hands on experience about the usage of the software with more examples and taught management Tools.

Enclosure: Certificate Copy of Workshop

Report Submitted By:

Mrs. P Pragati

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

Centre for PG Studies and Regional Office
Kusnoor Road, Kalaburagi 585105

Certificate

This is to certify that Prof. *Pragati*
has participated in Five Days Online FDP on "Contemporary Research Trends in Electronics & Communications, and Computer Science" organised by Department of Electronics & Communications, Visvesvaraya Technological University, Centre for Postgraduate Studies, Kalaburagi in association with IETE from 06 to 10 July 2020.

Dr. Shubhangi D.C
Programme Coordinator

Dr. T.C Thanuja
Chairperson

Dr. Basawaraj Gadgay
Regional Director(I/c)

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Faculty Name: Mrs. Priyadarshini J Patil

FDP Title: Recent Trends in Electrical Engineering

Organized by: Department of ECE, ASE

Duration: 20th Jul to 26th Jul 2020

About FDP:

The FDP addressed the rapidly evolving landscape of electrical engineering, driven by technological advancements, societal demands, and sustainability concerns. Participants, comprising faculty members, researchers, and industry professionals, engaged in discussions on the importance of staying updated with recent trends and leveraging them to drive innovation and academic excellence. Participants gained insights into the design, analysis, and optimization of renewable energy systems, including solar photovoltaics, wind turbines, hydroelectric power, and energy storage technologies. They explored emerging trends in grid integration, microgrids, smart grids, and distributed energy resources. The FDP covered recent developments in power systems engineering, including power generation, transmission, distribution, and control. Participants learned about advanced techniques for grid stability analysis, fault detection, voltage regulation, and demand-side management. The FDP highlighted interdisciplinary applications of electrical engineering in areas such as biomedical engineering, robotics, autonomous vehicles, smart cities, and sustainable infrastructure. Participants explored case studies and real-world examples illustrating the potential impact of electrical engineering on society.

Signature of staff

HOD ECE

AMRITA VISHWA VIDYAPEETHAM

AMRITA School Engine Bangalo IEEE Student Bra

Certificate Of Participatior

This is presented to

Priyadarshini J Patil

for attending an FDP on "Recent Trends in Electrical Engineering : A Research Perspective 2020" ,from 20.07.20 to 26.07.20, organised by Department of Electr and Electronics Engineering and IEEE PES & IAS Jt Student Branc Chapter of Amrita School of Engineering -Bangalore.

IEEE PES Power & Energy Society®

IAS IEEE INDUSTRY APPLICATIONS SOCIETY Linking Research to Practice

Dr. P. Surekha,
Coordinator,
RTEEaRP - 2020
ASE, Bangalore.

Dr.Deepa. K
Coordinator,
RTEEaRT - 2020,
ASE, Bangalore

Dr.Navin Kuma
Branch Counsellor,IE
Student Branch, ASI
Bangalore

K.S.INSITITUTE OF TECHNOLOGY

Department of Telecommunication Engineering

Report on

One-week webinar on "Advanced Antenna Design and Development for RF Communication Systems" scheduled during 20th to 25th July 2020

The Institution of Electronics and Telecommunication Engineers (IETE), Bangalore Centre & ATMS (Antenna Test and Measurement Society) ORGANISED one-week webinar on "Advanced Antenna Design and Development for RF Communication Systems"

DURATION: 06 Days (20th to 25th July 2020)

OBJECTIVE OF PROGRAM:

During this program, the participants were able to acquire the knowledge about various concepts like

- Uncommon uses of Microwave
- Aspects of Antenna wrt Polarization and Noise
- Microwave Antenna Measurement Technology
- Space Technologies which changed our lives
- Spacecraft Antenna
- Antennas for wireless / mobile communications - with emphasis on 5
- Compact Multiband antennas and Numerical Modeling
- Metamaterial based antenna designs and applications: Prospects and Challenge
- 5G and Beyond
- Different types of antenna such as Microstrip Antenna, Wearable Antenna and Liquid Antenna

The details of sessions in 6 days Webinar is as follows:

Day-01

Morning Session

Welcome Address: Dr. S G Shivaprasad Yadav & Dr. Swetha Amit

Address by : Sri C Satyanandan, Chairman, IETE Bangalore

Guest of Honor: Shri. Raj Kumar Malaviya, Secretary, ATMS

Chief Guest: Dr. Surendra Pal, Former Vice Chancellor, DIAT, Pune, Senior Adviser- ISRO

Keynote address: Prof. OPN Calla, Director, ICRS

Day-01

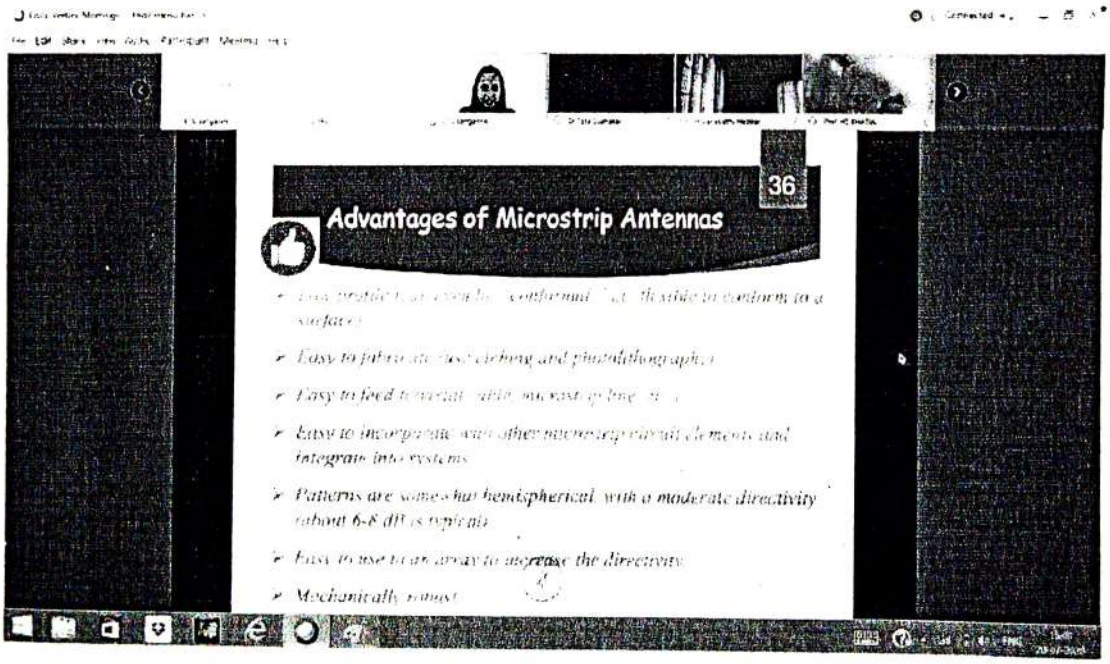
Afternoon Session

Topic : Antenna fundamentals, Design and analysis of Microstrip Antennas

Resource Person : Dr. Swetha Amit, Assistant Professor, Ramaiah Institute of Tech, Bangalore

The speaker discussed about :

- Polarization of electromagnetic wave and a receiving antenna
- Power transfer problem between two antennas
- Antenna noise temperature
- Antennas for aerospace applications



Day-02

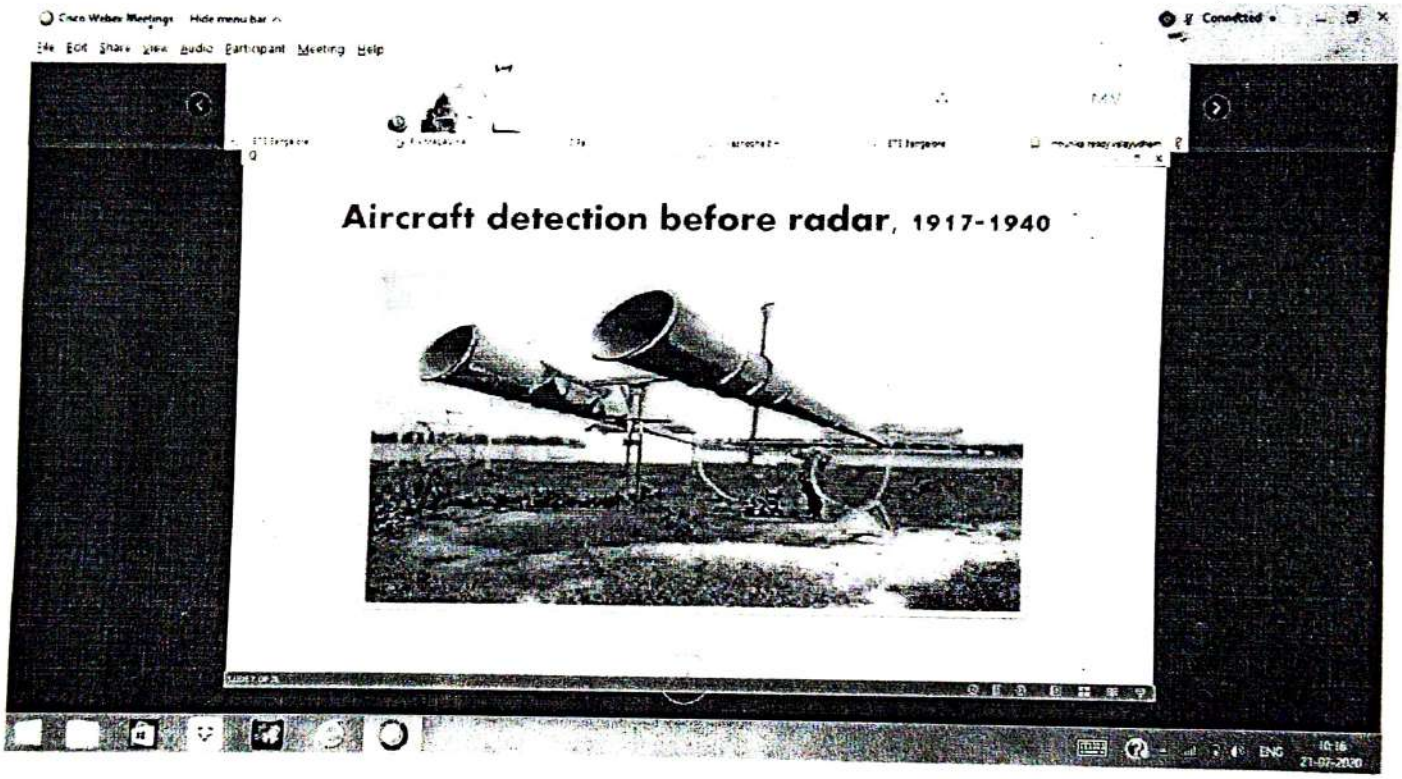
Morning Session

Topic : Microwave Antenna Measurement Technology

Resource Person : Shri. Raj Kumar Malaviya, Secretary, ATMS

The speaker discussed about:

- Compact range principles
- Technical data of CCR 75/60
- Planar near field range
- Multi probe near field range



Day-02

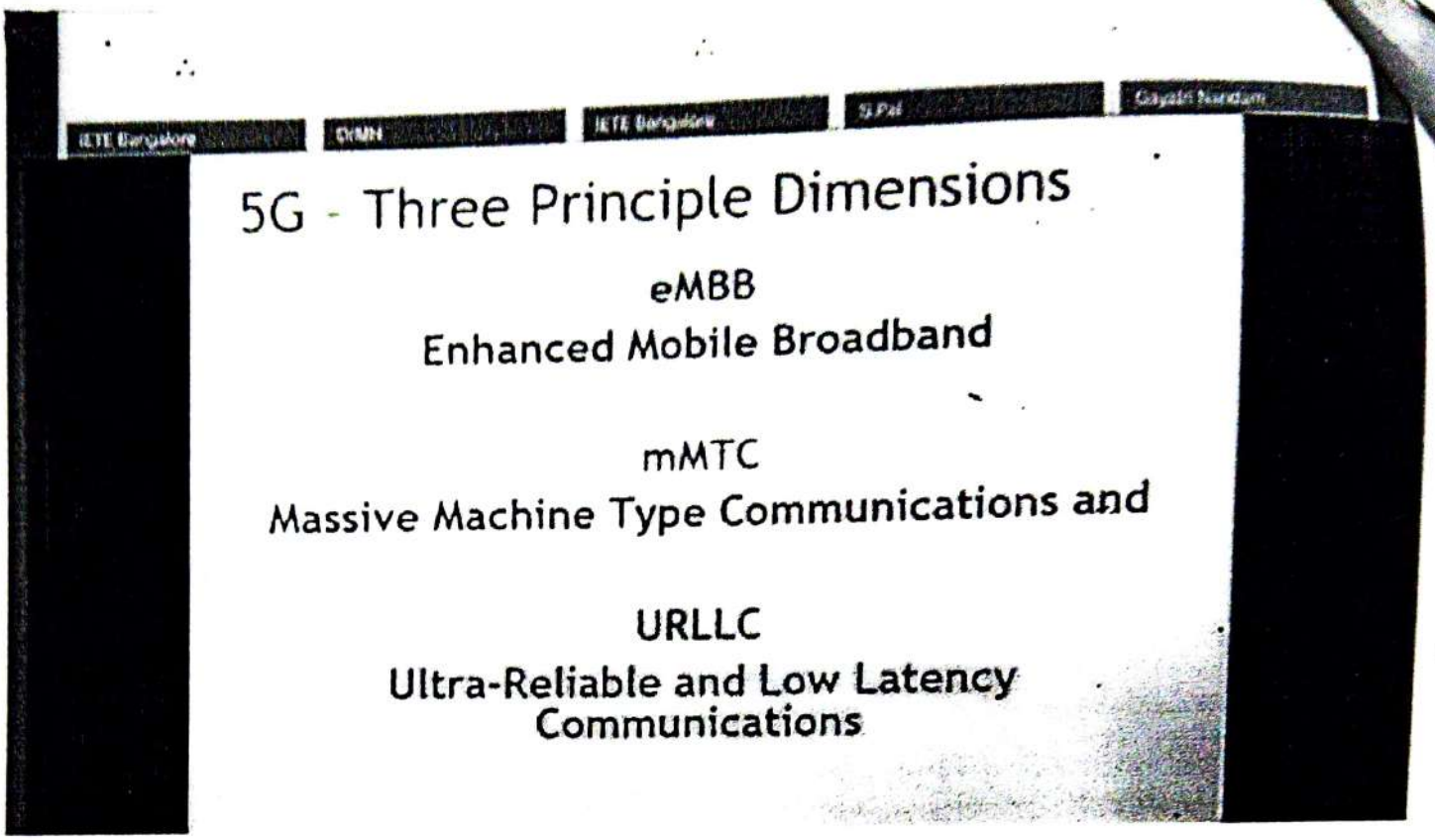
Afternoon Session

Topic : Antennas for Wireless/ Mobile Communications – with Emphasis on 5G

Resource Person : Dr. M. H. Kori, Distinguished Fellow IETE, Technical Director (Retd.), Alcatel-Lucent Technologies

The speaker discussed about:

- Adaptive antenna technologies
- Evolution of LTE- Advanced
- 5G-Three principle Dimensions
- Reconfigurable Antenna



Day-03

Morning Session

Topic : Spacecraft Antennas

Resource Person : Prof Mahadevan, Scientist ISRO(R)/ Professor PESUniv, Bangalore

The speaker discussed about :

- Space craft subsystems overview
- Altitude and Orbit control systems(AOCS)
- Fine Positioning
- Orbit insertion & maintenance

Day-03

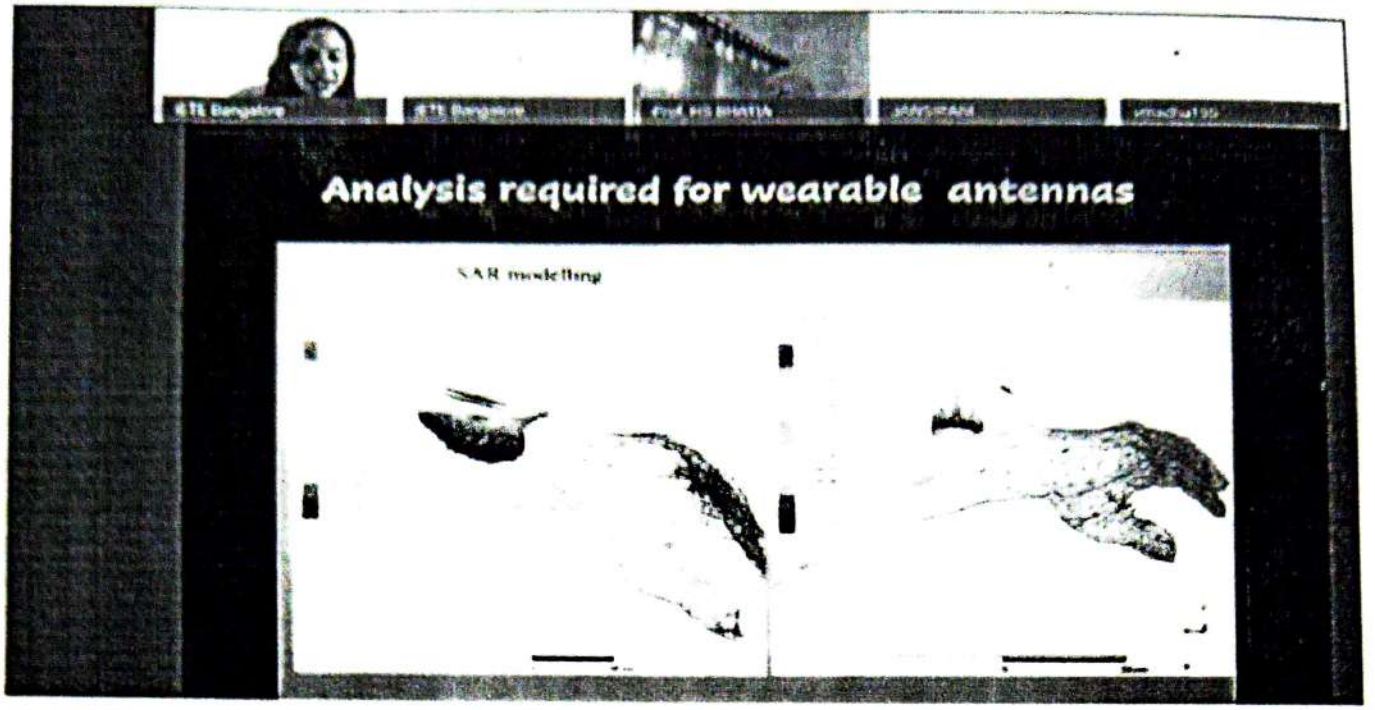
Afternoon Session

Topic : Challenges in design and analysis of Active and Passive Wearable Antennas

Resource Person : Dr. Swetha Amit, Assistant Professor, Ramaiah Institute of Tech, Bangalore

The speaker discussed about :

- Challenges f wearable antenna
- Antenna detuning & impedance matching
- Analysis required for wearable antenna
- Factors influencing the performance of Textile antenna



Day-04

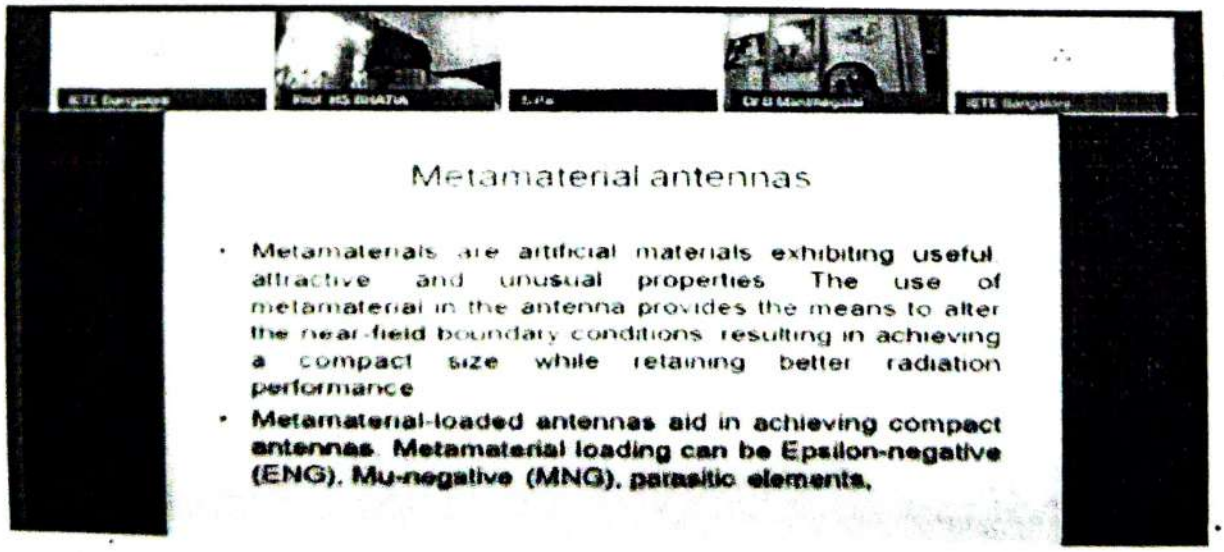
Morning Session

Topic . : Compact Multiband antennas and Numerical Modelling

Resource Person : Dr. B. Manimegalai, Professor, Thiagarajar College of Engineering, Madhurai

The speaker discussed about :

- Wireless connectivity technologies
- Challenges in wireless RF frontend
- FRACTALS as antenna
- New trend in antenna design techniques



Day-04

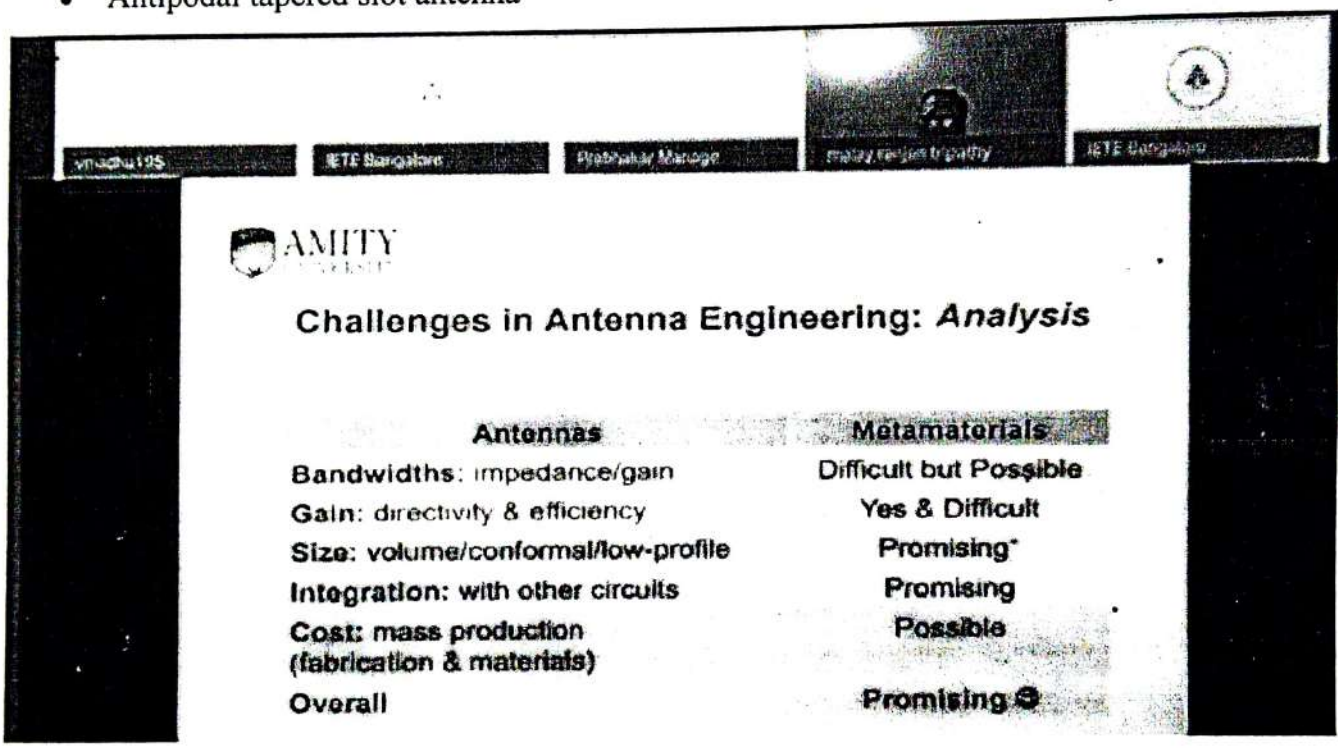
Afternoon Session

Topic : Metamaterial based antenna designs and applications: Prospects and Challenges

Resource Person : Dr. Malay Ranjan Tripathy, Professor, Amity University Uttar Pradesh, Noida, U.P., India

The speaker discussed about :

- Potentials in Antenna Engineering
- Challenges in Antenna Engineering
- Metamaterial devices
- Antipodal tapered slot antenna



Day-05

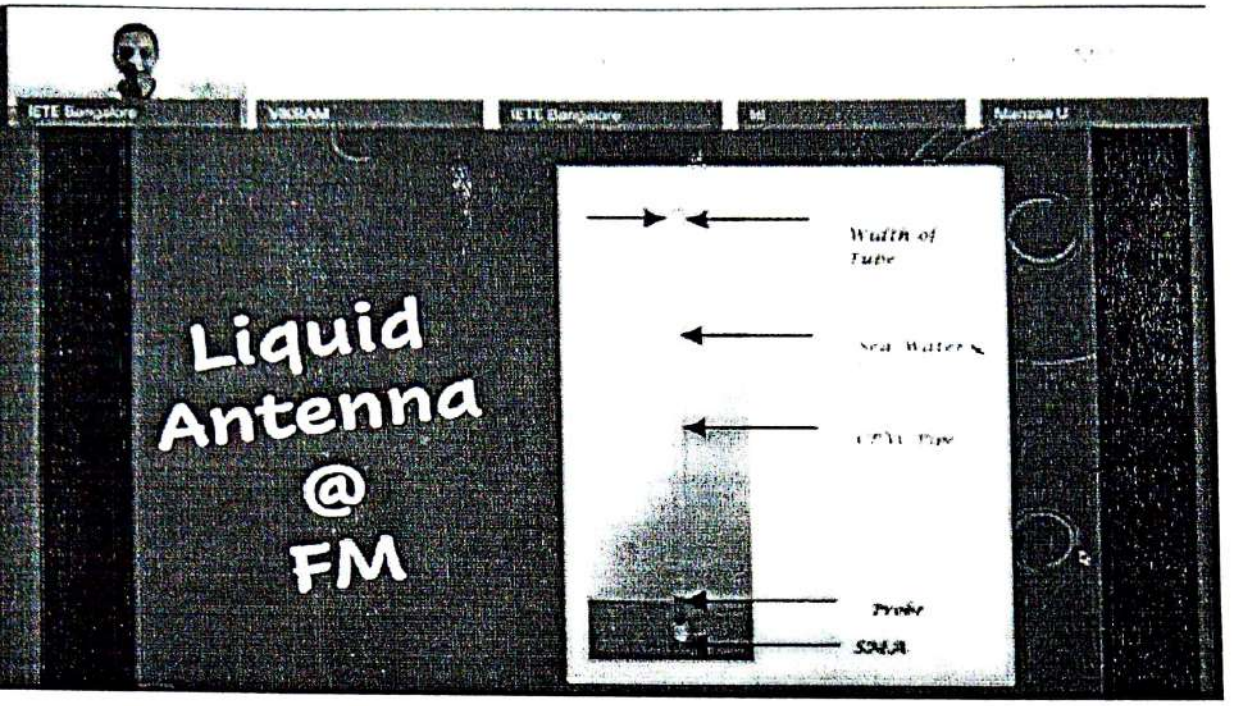
Morning Session

Topic : Research ideas on Liquid Antennas

Resource Person : Dr. Swetha Amit, Assistant Professor, Ramaiah Institute of Tech, Bangalore

The speaker discussed about :

- Sea water antenna
- Sea water conductivity
- Salt water antenna as a fountain
- Salt water concentration to distance covered



Day-05

Afternoon Session

Topic : Space Technologies which changed our lives

Resource Person : Shri. Kali Shankar Shukla, Retd. Senior Scientist ISRO

The speaker discussed about :

- Medical applications of Space technology
- Examples of space technology in day today life
- Applications of space technology in fitness & gym clubs
- Search & rescue service

Day-06

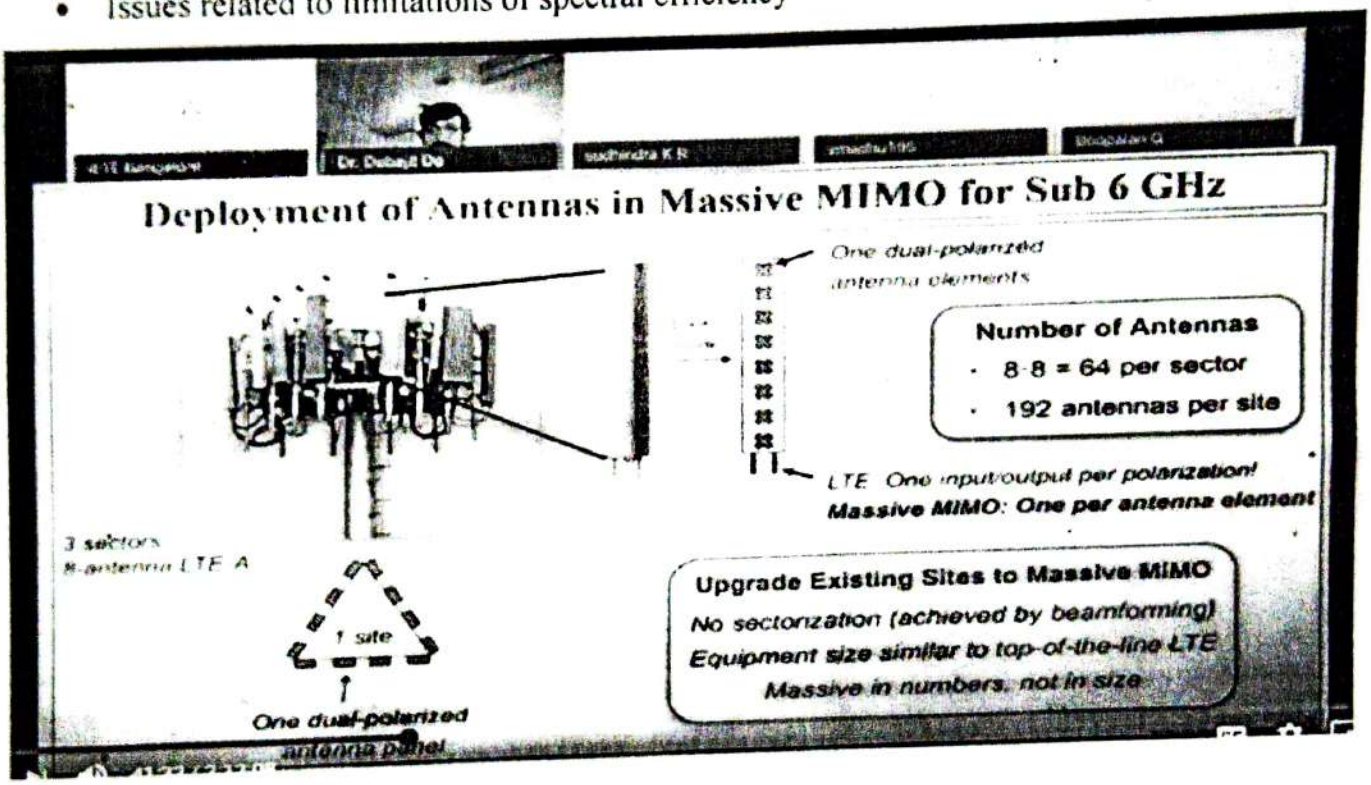
Morning Session

Topic : 5G and Beyond

Resource Person : Dr. Debajit De, Senior RF Engineer, VVDN Technologies Private Limited, Odisha

The speaker discussed about :

- How to improve cellular networks
- Massive MIMO & beam forming
- Challenges of manufacturer for small cell radio
- Issues related to limitations of spectral efficiency



Program	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2
Webinar on "Advanced Antenna Design and Development for RF Communication Systems"	3	3	2	2	2	2	1	-	1	1	1	1	3	1

- PO1:Staff gained the knowledge of mathematics, science and engineering fundamentals
- PO2:Staff can able to analyze complex engineering problems
- PO3:Staff can able to design and develop model
- PO4:Staff can identify complex problems for research work
- PO5:Staff can utilize modern tools for research work
- PO6: Staff can understand the consequent responsibilities relevant to the professic engineering practice.
- PO7: Staff can demonstrate the knowledge of, and need for sustainable development.
- PO9: Staff can function effectively as an individual, and as a member or-leader in diverse teams, and in multidisciplinary settings
- PO10:Staff can communicate effectively by gaining knowledge
- PO11: Staff can apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments
- PO12: Staff can engage in independent and life-long learning in the broadest context technological change.
- PSO1: It provided an ability to understand and analze basic concepts & systems relating o the field of communication
- PSO2: It provided an ability to apply the understandings & publish literature .

Participants:

Dr. Chanda V Reddy
Ms. Rekha N
Ms. Devika B
Ms. Srividya R

6/8/2020

Dr. Chanda. V. Reddy

HOD,TCE

HEAD OF THE DEPARTMENT
Dept. of Telecommunication Engg
K. S. Institute of Technology
Bengaluru - 560 109

7/8/2020

Principal

PRINCIPAL
K.S. INSTITUTE OF TECHNOLOG
BENGALURU - 560 109.

CERTIFICATE OF PARTICIPATION

Dr. Chanda V Reddy

Professor of K.S. Institute of Technology

For participating in the One Week Webinar on *"Advanced Antenna Design and Development for RF Communication Systems"* held during 20th to 25th July 2020, Jointly Organized by The Institution of Electronics and Telecommunication Engineers (IETE) Bangalore and Antenna Test & Measurement Society of India (ATMS)

Dr. Swetha Amit	Dr. S G Shivaprasad Yadav	Shri C Satyanandan	Shri R K Malaviya
Coordinator & Member, ATMS	Coordinator & Hon. Secretary, IETE Bangalore	Chairman IETE Bangalore	Secretary ATMS, India

CERTIFICATE OF PARTICIPATION

REKHA N

ASSOCIATE PROFESSOR of K S INSTITUTE OF TECHNOLOGY

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Coordinator &	**Coordinator &**	**Chairman**	**Secretary**
Member, ATMS	Hon. Secretary, IETE Bangalore	IETE Bangalore	ATMS, India

CERTIFICATE OF PARTICIPATION

SRIVIDYA R

ASSISTANT PROFESSOR of K S INSTITUTE OF TECHNOLOGY

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Coordinator &	Coordinator &	Chairman	Secretary
Member, ATMS	Hon. Secretary, IETE Bangalore	IETE Bangalore	ATMS, India

CERTIFICATE OF PARTICIPATION

DEVIKA B

Assistant Professor of K. S. Institute of Technology

has participating in the One Week Webinar on *"Advanced Antenna Design and Development for RF Communication Systems"* held during 20th to 25th July 2020, Jointly Organized by The Institution of Electronics and Telecommunication Engineers (IETE) Bangalore and Antenna Test & Measurement Society of India (ATMS)

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