AICTE-ISTE

Sponsored One Week Faculty Induction Programme on "Recent Trends of Robotics and Automation" (5th January– 11th January, 2022)

Organized by
Department of Electronics and Communication Engineering
Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur

Coordinator:

Mr. Pallav Rawal
Department of Electronics and Communication
SKIT, M & G, Jaipur

About Institute

Swami Keshvanand Institute of Technology, Management & Gramothan (SKIT) is **Ranked No.1 (Fifth consecutive year) Engineering College in Rajasthan declared by Rajasthan Technical University (RTU), Kota**. SKIT is a selective comprehensive institution offering undergraduate and postgraduate programmes in Engineering and Management. The institute was established in the year 2000 by a team of committed professionals and academicians. During all the past years SKIT has emerged as a premier center of technical education not only in Rajasthan but also in northern India which has been realized through efficient and dedicated faculty members, innovative teaching learning methods, state of the art infrastructures and core value of discipline. The various undergraduate programmes of the institute are accredited by the National Board of Accreditation (NBA).

Vision, Mission and Quality Policy of Institute

Vision

To promote higher learning in advanced technology and industrial research to make our country a global player

Mission

To promote quality education, training and research in the field of Engineering by establishing effective interface with industry and to encourage faculty to undertake industry sponsored projects for students

Quality Policy

We are committed to 'achievement of quality' as an integral part of our institutional policy by continuous self-evaluation and striving to improve ourselves.

Institute would pursue quality in

• All its endeavours like admissions, teaching- learning processes, examinations, extra and co-curricular activities, industry institution interaction, research & development, continuing education, and consultancy.

• Functional areas like teaching departments, Training & Placement Cell, library, administrative office, accounts office, hostels, canteen, security services, transport, maintenance section and all other services."

About Department of ECE

Department of Electronics & Communication Engineering (ECE) was started in the year 2000. Department has well qualified and experienced faculty members. Department is actively involved in conducting Conferences and Workshops periodically. Department has well equipped laboratories with a view to strengthen research & development activities. Electronics and Communications Engineering (ECE) involves researching, designing, developing and testing of electronic equipment used in various systems. Department provides an in-depth education in engineering principles and motivate the students to take leadership positions. The Electronics and Communication Engineering Department at SKIT, while imparting the curriculum knowledge, works on the principle of bringing forth insightful improvements in all the products and services of the specified field.

Vision and Mission of Department

Vision

To evolve the department as a center of excellence in the field of Electronics & Communication Engineering for enriched education, higher learning, research and development.

Mission

To empower students by imparting quality education in Electronics and Communication Engineering for better employability and preparing them to be competent in dealing with industrial and societal challenges.

Brochure of FIP

Patron

Shri Raja Ram Meel, Patron, SKIT
Shri Surja Ram Meel, Chairman, SKIT

Advisors

Shri Jaipal Meel, Director, SKIT
Prof. S.L. Surana, Director (Academics), SKIT
Mrs. Rachna Meel, Registrar, SKIT
Prof. Ramesh Kumar Pachar, Principal, SKIT
Mrs. Abba Meel, Adviser, SKIT
Prof. R. K. Jain, Dean, SKIT
Prof. Mukesh Arora, Head, OFA & ECE, SKIT
Prof. Sangeeta Vyas, Head Student Affairs, SKIT
Prof. Anil Choudhary, HOD (IT), SKIT
Prof. Mukesh Gupta, HOD (CSE), SKIT
Prof. Dheeraj Joshi, HOD (ME), SKIT
Prof. D.K. Sharma, HOD (CE), SKIT
Dr. Dhanraj Chitara, HOD (EE), SKIT
Dr. Ona Ladiwal, HOD (DMS), SKIT
Prof. Rohit Mukherjee, Incharge, B.Tech. I Year SKIT
Prof. S. K. Bhatnagar, ECE, SKIT
Prof. Satyan Vijayvergiya, ECE, SKIT

Course Coordinator

Mr. Pallav Rawal, ECE, SKIT

Co-Coordinators

Dr. Praveen Kumar Jain, ECE, SKIT
Mr. Praveen Saraswat, ME, SKIT
Mr. Rajeev Kumar, BSH, SKIT

Organizing Committee

Dr. Shubhi Jain, ECE, SKIT
Ms. Gloria Joseph, ECE, SKIT
Mr. Harshal Nigam, ECE, SKIT
Mr. Neeraj Jain, ECE, SKIT
Mr. Abhinandan Jain, ECE, SKIT
Mr. Rahul Pandey, ECE, SKIT
Ms. Priyanka Sharma, ECE, SKIT
Mr. Brij Mohan Sharma, ME, SKIT

Registration Link

https://forms.gle/8ij2HYGowc4JxKA7A

Registration fee:

There is **no registration fee** for this program.

Eligibility

Faculty members working in AICTE approved Institutions / Colleges / Polytechnic colleges are eligible for the programme.

Session Timings:

Session I: 9:00 AM-10:30 AM
Session II: 11:00 AM-12:30 PM
Session III: 1:30 PM-3:00 PM

Contact Details:

Mr. Pallav Rawal
Email: pallav@skit.ac.in
Mobile: 9413287953

Mr. Praveen Saraswat
Email: praveen.saraswat@skit.ac.in
Mobile: 9785018458

AICTE-ISTE sponsored ONE WEEK FACULTY INDUCTION PROGRAM ON "RECENT TRENDS OF ROBOTICS AND AUTOMATION"

(January 05 - 11, 2022)

Organized by

Department of Electronics and Communication Engineering

Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur – 302017
Website: www.skit.ac.in

About SKIT

Swami Keshvanand Institute of Technology, Management & Gramothan (SKIT) is **Ranked No.1 (Fifth consecutive year) Engineering College in Rajasthan declared by Rajasthan Technical University (RTU), Kota**. SKIT is a selective comprehensive institution offering undergraduate and postgraduate programmes in Engineering and Management. The institute was established in the year 2000 by a team of committed professionals and academicians. During all the past years SKIT has emerged as a premier center of technical education not only in Rajasthan but also in northern India which has been realized through efficient and dedicated faculty members, innovative teaching learning methods, state of the art infrastructures and core value of discipline. The various undergraduate programmes of the institute are accredited by the National Board of Accreditation (NBA).

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About ISTE student chapter

The Indian Society for Technical Education (ISTE) is the leading National Professional non-profit making Society for the Technical Education System in our country with the motto of Career Development of Teachers and Personality Development of Students. SKIT- ISTE Student Chapter arranges lectures and invites eminent personalities from Industries and other Organizations to deliver lecture at our campus to keep the students updated about the recent technologies.

Objectives & Context

This Course is designed to provide an exposure to the fundamentals of robotics and automation. Hands-on training and practice sessions will help participants gain confidence on robotic concepts, their simulation and implementation including sessions on intelligent agents. The course will be useful for faculty of engineering and sciences who are interested in the learning robotics and intelligent systems. The prime objective of this refresher program is to educate & acquaint the participants with the advanced & recent development in Robotics &Automation.

Relevance

Robotics and automation is most relevant area now a days. This is relevant to the courses related to emerging technologies introduced by AICTE, like mechatronics, AI, ML etc. Robotics and automation are helpful in healthcare industries, manufacturing industries, farming industries, packaging industries, automobile industries etc. Robotics can be defined as the science and engineering of machines with capabilities that are considered intelligent by the standard of human intelligence. This field can be defined as the design, development and use of electro-mechanical machines with sensors and actuator.

Session Topics

- Introduction to robotics & automation
- Kinematics & Dynamics
- Sensors and Actuator Control
- Microcontrollers and processors for robots
- Robotics simulation and programming **(hands on)**
- Application of Cyber physical system in automation
- Advances in Robotics
- Pneumonia detection using AI based robot **(Hands on)**
- Mental & emotional development, stress management, meditation, human values and ethics, health and happiness
- Basics and Architecture of PLC
- Ladder Programming **(Hands on)**
- Collaborative robots
- National education policy 2020
- Automation in Agriculture using AI
- Industrial automation
- Role of AI and Machine Learning in Industrial Robotics and Automation

Resource Persons

The various sessions of FDP will be taken by the eminent Faculty from IIT, IIIT, and other reputed institutions.

Note

- The FDP will be conducted through online platform Cisco Webex
- The final schedule of the FDP will be shared before the event.
- Link to join the session will be provided on participant's registered mail id or WhatsApp group
- The certificates shall be issued to only those participants who have attended the program with minimum 80% attendance and scored minimum 60% marks in the tests, both daily and final.

Poster of FIP

List of Resource Persons

Sr. No	Name	Affiliation	Field of Interest	Contact
1	Dr Santhakumar Mohan	IIT Palakkad	Robotics & control	santhakumar@iitpkd.ac.in
2	Dr Ankur Jaiswal	MIT	Mechatronics	ankur.jaiswal@manipal.edu
3	Dr. Vijay Kumar Dalla	NIT, Jamshedpur	Robotics & control	vijaydalla.me@nitjsr.ac.in, vijaydalla@gmail.com
4	Dr. Ravi kumarMandava	NIT, Bhopal	Biologically inspired Robot	ravikumar1013@manit.ac.in,
5	Prof. Asim Tewari	IIT Bombay	IoT& Artificial Intelligence	asim.tewari@iitb.ac.in,
6	Dr. Rajeev Agrawal	MNIT, Jaipur	Cyber physical system	ragrawal.mech@mnit.ac.in
7	Mr. Ajay Godara	NITTTR, Chandigarh	Sensors	ajaygodara12@gmail.com
8	Dr. Vijaya Kumar Manupati	NIT, Warangal	AI, ML	manupati.vijay@nitw.ac.in
9	Dr. Shruti Wadhwa	Nidus Technologies Pvt. Ltd.	AI agriculture	shrutiwadhwa99@gmail.com
10	Dr Mohit Bijaka	Yoga health care center	Stress man.	mohit.bijaka@gmail.com
11	Dr. Anurag Gaur	NIT Kurukshetra	NEP	anuragdph@gmail.com, anuragdph@nitkkr.ac.in
12	Mr. Prosenjit Mitra	Siemens Ltd.	PLC, Industrial Automation Domain	prosenjit.mitra@siemens.com
13	Mr. Robin Singh	Siemens Ltd.	Factory Automation	robin.singh@siemens.com
14	Dr Dheeraj Joshi	SKIT Jaipur	3D printer	dheeraj.joshi@skit.ac.in
15	Dr. Amit M Joshi	MNIT Jaipur	ML in healthcare	Amjoshi.ece@mnit.ac.in

Brief Profiles of Speakers

Prof. Pratapsingh Kakaso Desai (Chief Guest)
President ,ISTE ,New Delhi

Prof.Pratapsinh Kakasaheb Desai completed his Master's Degree in Mechanical Engineering and Master of Business Administration. He is pursuing PhD from Shivaji University. He is the son of Shri. Krantiveer Kakasaheb Desai the most sought freedom fighter.The Desai family rendered five freedom fighters to nation and he was raised with strong values and principles. .He has a prominent background of Social Reforms, Patriotism and Education.

Prof Pratapsinh Kakasaheb Desai is working on design and development of femur bone prosthesis research. He delivered key note addresses in India and abroad in conferences. Especially his deliberation on opulent Indian Education and its history is Highly Revered. He has Numerous National and International Research Papers to his credit. Prof Pratapsinh Kakasaheb Desai has actively participated as member of All India Federation for Polytechnic Teachers Association. During his tenure in various organizations he was Instrumental in advocating the issue of granting pay band-4 to all Engineering and Polytechnic Colleges. Currently he is working on salaries to be paid by State Government to self financed Engineering Institutes. He is a member of various committees and task teams constituted by government of Maharashtra. Prof Pratapsinh Kakasaheb Desai attended and Participated as member of Indian delegation on various International meets such as **World Engineering Education Forum (WEEF), International Federation of Engineering Education Societies (IFEES),Global Engineering Dean's Council (GEDC)** in Countries like **US, Argentina, China, Japan, Dubai, Australia.** He is associated with numerous technical Education associations. Prof Pratapsinh Kakasaheb Desai is **youngest ever President** of the prestigious organization ISTE, New Delhi, Past Vice President of ISTE, New Delhi, ISTE Executive Council Member for two terms, Member representing India in **Global Deans Council**, Chairman, **Indian Engineering Dean's Council**, Convener, **Maharashtra State Technical Teachers Association**, President, **Mouni Vidyapeeth Staff Association**. He is a Council Member of All India Council for Technical Education; Member of Governing Council, Engineering Staff College of India; Member of the Advisory Committee for the Overall Curriculum Development Cell, IIT, New Delhi

Professor Ashu Dehadani **(Guest of Honor)**

Rajasthan Section ISTE

- Ashu Dehadani is Associate Director (Technical Development) at GBCI India with 15 years of experience in energy efficient design, climate resilience, and low carbon buildings and cities. Ashu is an architect with Masters in Sustainable Architecture. As part of the technical team at GBCI, she focuses on client solutions for APAC and MENA region, and technical development & certification of LEED for Cities projects globally.

- Previously, she has worked at GRIHA Council, New Delhi; Centre for Energy and Environment, Jaipur; and Malviya Institute of Technology, Jaipur. She had won the Rajaram Bapu Patil National Award for Promising Engineering Teacher (For creative work done in technical education) in 2009 in National Environment Awareness Campaign & Innovations in Teaching and was awarded a gold medal during the master's degree. As a member of the State Level Scrutiny Committee for the Prime Minister Skill Development Scheme, she contributed to selecting deserving institutions to implement the scheme. She is also Chairman, Rajasthan chapter, Indian Society for Technical Education.

DAY -1 Session -2
11:00am -12:30 pm

Professor Asim Tewari
Mechanical Engineering
IIT Bombay

- Asim Tewari is G.K. Devarajulu Chair Professor in the Department of Mechanical Engineering at Indian Institute of Technology Bombay, Mumbai. Prior to this, he was a staff researcher at General Motors, Global R&D center in Bangalore.
- He graduated with a B. Tech degree from IIT Kanpur followed by MS and Ph.D. from Georgia Institute of Technology, Atlanta, USA. After his doctorate, he was briefly with the National Aerospace Laboratories, Bangalore.
- After his doctorate, he was briefly with the National Aerospace Laboratories, Bangalore. Subsequently, he joined IIT Kanpur, where he served as an assistant professor before joining General Motors Global R&D center in Bangalore.
- Professor Asim Tewari established several advanced state-of-the-art facilities including advanced machining excellence cell, fiber composite research laboratory, 4D x-ray microscopy laboratory with capabilities of in-situ thermo-mechanical deformation, an experimental lab for thermo-mechanical simulation and Nano-characterization texture laboratory.
- His personal area of research is in mathematical models for microstructural-mechanics. He has over 100 international journal & conference publications and 10 international patents.

DAY -2 Session -1
9:00am -10:30 am

Mr. Ajay Godara
NITTTR Chandigarh

- Ajay kumar Godara currently works at the Department of Mechanical Engineering, National Institute of Technical Teachers Training and Research. Ajay does research in Manufacturing Engineering.
- He has a wast experience of design, development & deployment of IoT platform from smart home to Smart Factory. He has delivered more than 100 talks and workshop on National Platform and taken many expert session on ICT based workshop at NITTTR (National Institute of Technical Teachers Training & Research), Chandigarh.
- His articles has been published in many reputed magazines and EFY is one of them. Currently he is working on smart village project.

DAY -2 Session -2
11:00am -12:30 am

Dr. Dheeraj Joshi
Professor & Head, Department of Mechanical Engineering

- Dr. Dheeraj Joshi received his Bachelor's and Master's degree in Production and Industrial Engineering from MBM Engineering College, Jodhpur in the year 2002 and 2011 respectively. He completed his PhD from Malviya National Institute of Technology Jaipur in 2019 with a specialization in project scheduling.
- He has also authored more than 25 research papers in journals and conferences of national and international repute. His research interest includes project management and scheduling, optimization techniques, applications of artificial intelligence, teaching-learning processes and quality assurance in engineering education.
- He is also a life member of reputed professional bodies namely Indian Society for Technical Education (ISTE), Institution of Engineers, India (IEI), and Indian Institution of Industrial Engineering (IIIE).

DAY -2 Session -3
1:30am -3:00 pm

Dr. Ankur Jaiswal
MIT Manipal ,Karnataka

- **Dr. Ankur Jaiswal** received the Bachelor's Degree in Mechanical Engineering from Chhattisgarh Swami Vivekanand Technical University (CSVTU) Bhilai, Chhattisgarh India, M.Tech. Degree in Machine Design Central University Bilaspur, Chhattisgarh, India, in 2013, and received his Ph.D. Degree in 2019 from the Department of Mechanical Engineering, Visvesvaraya National Institute of Technology (VNIT) Nagpur, Maharashtra, India.
- His current research interests include Mechanical Design and simulation, Serial and Parallel manipulators, Optimization, Product Design and Development, Agricultural, Exoskeleton, rehabilitation and Soft robots. Biomedical devices.
- **He has received best paper award in article entitled "Comparative study of 3-dof strain gauge force transducer using FEM" at International Technological Congress (Techno Congress), 2017, Technology Research Centre, Pune.**
- **He is a BOS Member** in G. H. Raisoni Institute of Business Management, Jalgaon, Maharashtra,**Advisory Member** in UG curriculum at GMR Institute of Technology, Rajam, Andhra Pradesh. **UG project Coordinator** in Department of Mechatronics, Manipal Institute of Technology, Manipal, **PG Faculty Advisor** in Industrial Automation and Robotics, Manipal Institute of Technology, Manipal.

DAY -3 Session -1
9:00am -10:30 am

Dr. Rajeev Agrawal
Associate Dean Research
MNIT Jaipur

- Dr. Rajeev Agrawal is Fellow of The Institution of Engineer's (IEI),India. He has more than 21 years of Professional Experience. He has B.E. (1998 in Mech. Engg, GEC Jabalpur), ME (2001 in Production , MNNIT Allahabad) and Ph.D. (Engg. Birla Institute of Technology, Mesra-Ranchi). He is presently working as Associate Professor in Department of Mechanical engineering M.N.I.T. Jaipur. As a researcher, he has guided/guiding 02/05 PhD scholars, 20 ME dissertations and more than 50 UG projects till date.
- His research interest is on Lean Six Sigma, Sustainable Manufacturing, Supply chain Design, Solving real life Operations management related problems, Automation in Manufacturing and reconfigurable manufacturing system. He serves on the editorial board of three international journals and has guest edited special issues in around 8 journal and books.
- One of the objectives of his current research is to address conversion quickly for the production of new product by providing customized flexibility and can be improved , upgraded and reconfigured in response to fluctuating demands for automotive companies situated in India.

DAY -3 Session -3
1:30am -3:00 pm

Dr. Shruti Wadhwa
Chief Operating Officer
Nidus Technologies Pvt. Ltd

- Shruti Wadhwa received B.Tech from PTU, M.Tech from the National Institute of Technical Teacher's Training & Research (NITTTR), Chandigarh. She is the Chief Technical Officer of Nidus Technologies Pvt. Ltd. Her areas of research interest include Computer Networks, Web Security, Cyber Security, and Cloud Computing, Virtualization & Artificial Intelligence.
- She has many research publications in referred to International and National Journals and Conferences. She also delivered expert lectures on Web Security Audit at Sardar Patel University of Police Security and Criminal Justice, Jodhpur and on Campus Wide Network Security & Implementation of IPv6 at College of Engineering & Management.
- She has more than 5 years of experience in teaching and organizing various training programs in the areas of CSE and IT for the faculty of engineering colleges, polytechnics, and students.

DAY -3 Session -2
11:00am -12:30 pm

Dr. Ravi Kumar Mandava

(NIT Bhopal)

- Dr. **Ravi kumar Mandava** received his Ph.D. degree from IIT Bhubaneshwar in 2019 and joined as a faculty at MANIT Bhopal.He is a Member Of IEEE ID-97587699, Institute of Electrical and Electronics Engineers (IEEE).
- Dr Ravi Kumar has research work on Robotics, Soft Computing & Manufacturing. He has published 40 papers which includes 15 International Journals (**6 in SCI 9 in SCOUPUS**), 14 in International Conference and 1 in National Conference
- He has also published 4 International Book Chapters , 6 International Lecture Notes. He Received best paper award for "Study on influence of hip trajectory on the balance of a biped robot", presented at ICECIT 2015, Anantapur, Published by LNEE.

DAY 4 Session -1
9:00am -10:30 am

Dr. Mohit Bijaka

Director, Yoga Health Care Center

- He has been in this field since year 2005. He has completed her Ph.D. in Yoga & Naturopathy . In academics, he had received Diploma course of Yoga & Naturopathy . He has written many articles in renowned yoga & naturopathy magazines.
- He is also practicing medical astrology with palmistry and Vaastu practice. He is pursuing Ph.d. in Astrology also. He is co. founder & director of Yoga Health Care Centre which is operational since 2001. The Centre was initially started in Jaipur and a branch in Gurgaon in the year2009. He is passionate about Yoga and love to manage disease aspects with this approach.

DAY 4 Session -3
12:30am -2:00 pm

Mr. Robin Singh

Project Engineer, Siemens Ltd.

- Mr. Robin Singh Technical Sales Support Professional having 6 years of total experience in Industrial Automation domain with 3.5 years in Project Engineering and currently working as a Technical Consultant for Factory Automation, Siemens Ltd.

DAY 4 Session -2
11:00am -12:30 pm

Mr. Prosenjit Mitra

Manager, Siemens Ltd.

- Mr. Prosenji Mitra is a Manager and having 15 years of total experience in Industrial Automation Domain with 5 years in Handling Projects of Steel, Paper, F&B, Pharma, Automotive. Etc., and 10+ years in Siemens Ltd. for Presales Support.

DAY 5 Session -1
9:00am -10:30 am

Dr . Vijay Kumar Dalla
Assistant Professor
National Institute of Technology Jamshedpur

- Dr. Vijay Kumar Dalla is Assistant Professor in the Department of Mechanical Engg. at NIT Jamshedpur. His areas of interests are robotics, dynamics, and control. Before joining NIT Jamshedpur, he has been associated with 6 various institutes at different cities.
- He was associated with two BRNS Projects during his Senior Research Fellowship at IIT Bombay after his MTech in Materials Science from IIT Bombay in 2008. He pursued his PhD from IIT Roorkee in Robotics in the year 2016. He completed Bachelor of Engineering (B.E.) in Mechanical Engineering from Govt. Engg. College Bilaspur, Chhattisgarh, in 2006. He has 7 years learning exposure of two IITs and 9 years teaching exposures.
- His teaching interests are robotics & automation; kinematics, dynamics and control of mechanical systems, AI in robotics; machine learning in mechanical engg; smart materials. His research areas are space robotics, dynamics, and control. Other than his robotics learning, he has also practical exposure of fracture mechanics, materials science, and ceramic powder processing .
- He has published 06 research papers in reputed international journals and 11 in various conference proceedings. He has also submitted 3 funding research projects in various funding agencies. At present, he is presently guiding 4 PhD students, one is in advanced stage. He is lifetime member of Machines and Mechanism (AMM) and The Robotics Society.

DAY -5 Session -2
11:00am -12:30 pm

Dr. Amit Mahesh Joshi

MNIT Jaipur

- **Amit M. Joshi (M'08) has completed his M.Tech (by research) in 2009 from National Institute of Technology, Surat (NIT,Surat) and obtained Doctoral of Philosophy degree (Ph.D) from the same institute NIT, Surat in August,2015.**
- **He is currently working as Assistant Professor at National Institute of Technology, Jaipur since July,2013. His area of specialization is Biomedical signal processing, Smart healthcare, VLSI DSP Systems and embedded system design.**
- **He has also published papers in international peer reviewed journals with high impact factors in related fileds of smart embedded system for healthcare. He has published six book chapters and also published 50+ research articles in excellent peer reviewed international journals/conferences.**
- **He has worked as a reviewer of technical journals such as IEEE Transactions/ IEEE Access, Springer, Elsevier and also served as Technical Programme Committee member for IEEE conferences which are related to biomedical field.**
- **He supervised 18 M.Tech projects and 14 B.Tech projects in Biomedical Signal Processing, VLSI/Embedded Systems. Presently, He has already supervised five full-time PhD students and two part-time PhD who are also working in field of biomedical signal processing**

DAY -6 Session -1
9:00am -10:30 am

Dr. Santhakumar Mohan

IIT Palakkad

- **Dr. Santhakumar Mohan** got his Ph.D. (Robotics and Control) from the Indian Institute of Technology Madras, Chennai (India) in 2010. From June 2010 to March 2011, he worked as an assistant professor in the Department of Mechanical Engineering at the National Institute of Technology Calicut (NITC), Kerala (India).
- He is holding visiting faculty positions at IISc Bangalore, India, BSTU, Belgorod, Russia, KAIST, Daejeon, Republic of Korea, RWTH Aachen, Germany, and ECN, France. His active research areas include Service and Field Robots in specific, design & motion control of underwater and wheeled mobile robots, Parallel Robotic Platforms, Assistive and Rehabilitation Robots.
- He has published more than 100 articles in various journals and conference proceedings. He has edited three books and completed six sponsored projects.
- Currently, he is serving as Technical Editor, IEEE/ASME Transactions on Mechatronics, Associate Editor, IEEE Robotics and Automation Letters, and ASME Letters in Dynamic Systems and Control.

DAY -6 Session -2
11:00am -12:30 pm

Dr. Vijaya Kumar Manupati,

NIT Warangal

- Dr. Vijay Kumar Manupati is currently working as Assistant Professor in Department of Mechanical Engineering, NIT Warangal. He received his PhD in the Department of Industrial and Systems Engineering from Indian Institute of Technology Kharagpur.
- He obtained his Masters Degree from Department of Mechanical engineering with Industrial Engineering and Management as a specialization from National Institute of Technology Calicut and B-Tech degree in Department of Mechanical Engineering from Acharya Nagarjuna University.
- His current research interests include Intelligent manufacturing systems, agent/multi-agent/mobile-agent systems for distributed control, simulation, integration of process planning and scheduling in manufacturing, Sustainable Supply Chain and Evolutionary Algorithms.
- He has published more than 60 publications which include most reputed Journals like International Journal of Production Research, Computers and Industrial Engineering, International Journal of Advanced Manufacturing Technology, Journal of Engineering, Journal of Measurements and International Journal of Computer Integrated Manufacturing.
- He is a member of Institute of Industrial and Systems Engineering (IISE), Institute of Engineers (IEI) India, Life member of International association of Engineers, USand also acting as a technical committee member of various International conferences.

DAY 5 Session -2
1:30pm -3:00 Pm

Dr. Anurag Gaur
National Institute of Technology Kurukshetra

- Dr. Anurag Gaur received his Ph.D. degree from IIT Roorkee in 2007 and joined as a faculty at National Institute of Technology Kurukshetra in 2008. Presently he is on Lien for 02 years from NIT Kurukshetra and working as an Associate Professor in Department of Physics, J C Bose University of Science & Technology Faridabad.
- Dr Gaur has research work on Functional Nanomaterials, Energy Storage Devices and Spintronics. He has published more than 120 research papers in reputed research journals in India and abroad. He has handled 08 research project funded by Department of Science & Technology, Govt of India, Council of Scientific and Industrial Research, New Delhi and Department of Atomic Energy, Govt of India.
- Dr Gaur is the Editor of Applied Science Letter and reviewer of various international research journals including AIP, Elsevier, IOP, Springer Journals. He has also written book on Energy storage and conversion devices. He is also the life member of Material Research Society of India and American Chemical Society. He has delivered invited talks in India and abroad on different topics and also visited various countries including Australia, Singapore, Switzerland, France, U.K., Japan etc. for academic and research assignments.

Schedule of FIP

AICTE-ISTE Sponsored One Week Faculty Induction Programme on
"Recent Trends of Robotics and Automation"
(5 January – 11 January, 2022)
(Organized by Department of Electronics and Communication Engineering, SKIT M&G, Jaipur)

Time / Date	9:00 -10:30 am		11:00 am-12:30 pm		1:30- 3:00 pm
05/01/2022 (Wednesday)	Session 1(Inauguration)		Session 2: Introduction to Robotics and Automation (Prof. Asim Tewari, IIT Bombay) E-mail: asim.tewari@iitb.ac.in		Session 3: (Cancelled due to Covid +) Kinematics & Dynamics of Robots (Dr. Suril V Shah, IIT Jodhpur) E-mail: surilshah@iitj.ac.in
06/01/2022 (Thursday)	Session 1: Sensors and Actuators (Mr. Ajay Godara, NITTTR, Chandigarh Startup) E-mail: ajaygodara12@gmail.com		Session 2: 3D printer (Dr. Dheeraj Joshi, HoD, ME) E-mail: dheeraj.joshi@skit.ac.in		Session 3: Robotics simulation and Programming (hands on) (Dr. Ankur Jaiswal, MIT Manipal, Karnataka) E-mail: ankur.jaiswal@manipal.edu
07/01/2022 (Friday)	Session 1: Application of Cyber physical system in automation (Dr. Rajeev Agrawal,MNIT Jaipur) E-mail: ragrawal.mech@mnit.ac.in	Break	Session 2: Automation in manufacturing (Dr. Ravi kumarMandava, NIT Bhopal) E-mail: ravikumar1013@manit.ac.in	Break	Session 3: Pneumonia detection using AI based robot (Hands on) Dr. Shruti Wadhwa, Chief Operating Officer, Nidus Technologies Pvt. Ltd. E-mail: : shrutiwadhwa99@gmail.com
8/01/2022 (Saturday)	Session 1: Mental & emotional development, Stress management (Dr. Mohit Bijaka, Director, Yoga Health Care Center) E-mail: mohit.bijaka@gmail.com		Session 2: Basics of PLC (Mr. Prosenjit Mitra, Manager, Siemens Ltd.) E-mail: prosenjit.mitra@siemens.com		Session 3: (12:30-2:00 pm) Ladder Programming (Hands On) (Mr. Robin Singh, Project Engineer, Siemens Ltd.) E-mail: robin.singh@siemens.com
10/01/2022 (Monday)	Session 1: Collaborative robots (Dr. Vijay Kumar Dalla) E-mail: vijaydalla.me@nitjsr.ac.in,		Session 2: Machine learning in Healthcare: case study of robotic arm for amputees (Dr. Amit M Joshi) E-mail: amjoshi.ece@mnit.ac.in		Session 3: Automation in Agriculture using AI (Hands On) Dr. Shruti Wadhwa, Chief Operating Officer, Nidus Technologies Pvt. Ltd. E-mail: shrutiwadhwa99@gmail.com
11/01/2022 (Tuesday)	Session 1: Advances in Robotics Dr Santhakumar Mohan E-mail: santhakumar@iitpkd.ac.in		Session 2: Role of AI and Machine Learning in Industrial Robotics and Automation (Dr.Vijaya Kumar Manupati, NIT Warangal) E-mail: manupati.vijay@nitw.ac.in		Session 3 followed by Valedictory National education policy 2020 Dr. Anurag Gaur E-mail: anuragdph@nitkkr.ac.in

Report of the Event

1. Title of the activity: AICTE-ISTE sponsored one week faculty induction program on "Recent Trends of Robotics and Automation".

2. Activity Detail:

a.) Objective: This Course was designed to provide an exposure to the fundamentals of robotics and automation. Participants have learnt kinematics of mobile robots, design aspects, trajectory planning, path planning and control and how to embed intelligence in robotic tasks.

The prime objective of this refresher program is to educate & acquaint the participants with the advanced & recent development in Robotics & Automation.
The main objectives are to:

- Understand the basics of Robotics and Automation in the context using Robotic products
- Understand the various skills needed to become a Robotic and Automation Expert
- Understanding the process configurations and their realization of given robot
- Understanding the mechanical aspects of robots

b.) Program detail: Department of Electronics and Communication Engineering, Swami Keshvanand Institute of Technology, Management & Gramothan (SKIT M&G), Jaipur organized a One-week Faculty Induction Programme on "Recent Trends of Robotics and Automation" during January 05-11, 2022. This FIP was sponsored by **AICTE-ISTE** and conducted on webex online platform.

This One-week FIP *comprised sixteen thoughtful informative sessions* each of one and half hour delivered by the experts from the various reputed institutes. 103 faculty members from various universities and institutes of all over the country have participated in this FIP.

Inauguration of FIP

The FDP was inaugurated on the 5 January 2022 by the Chief Guest Dr. Pratapsinh Kakaso Desai, President ISTE and Guest of Honor Prof. Ashu Dehadani, Section Chairperson, Rajasthan section ISTE. Dr. Mukesh Arora, Head ECE and Head OFA, Prof. Rohit Mukerjee (Incharge I year, SKIT), Dr. Praveen Kumar Jain, Dy. HOD ECE and Mr. Pallav Rawal, Coordinator FIP also graced the inaugural function of the programme.

Prof. Mukesh Arora welcomed the guests and participants of FIP and appreciated the new mode of the conduction of FIP. He also talked about the need for and importance of such type of induction programs for faculties. Prof. Rohit Mukerjee introduced the audience about SKIT and ISTE-Student chapter.

Swami Keshvanand Institute of Technology Management & Gramothan, Jaipur

AICTE-ISTE Sponsored One Week Faculty Induction Program

on

"Recent Trends of Robotics and Automation-2022"

January 05-11, 2022

Mr. Surjaram Meel
Chairman,
SKIT Jaipur

Mr. Jaipal Meel
Director,
SKIT Jaipur

Prof. S. L. Surana
Director (Acad.),
SKIT Jaipur

Ms. Rachna Meel
Registrar,
SKIT Jaipur

Prof. R. K. Pachar
Principal,
SKIT Jaipur

Prof. R. K. Jain
Dean,
SKIT Jaipur

Prof. Mukesh Arora
Head, OFA & ECE,
SKIT Jaipur

Inaugural Ceremony

Date: January 05, 2022

Time: 10:00 AM Onwards

Chief Guest

Dr. Pratapsinh Kakaso Desai

President, ISTE

Guest of Honor

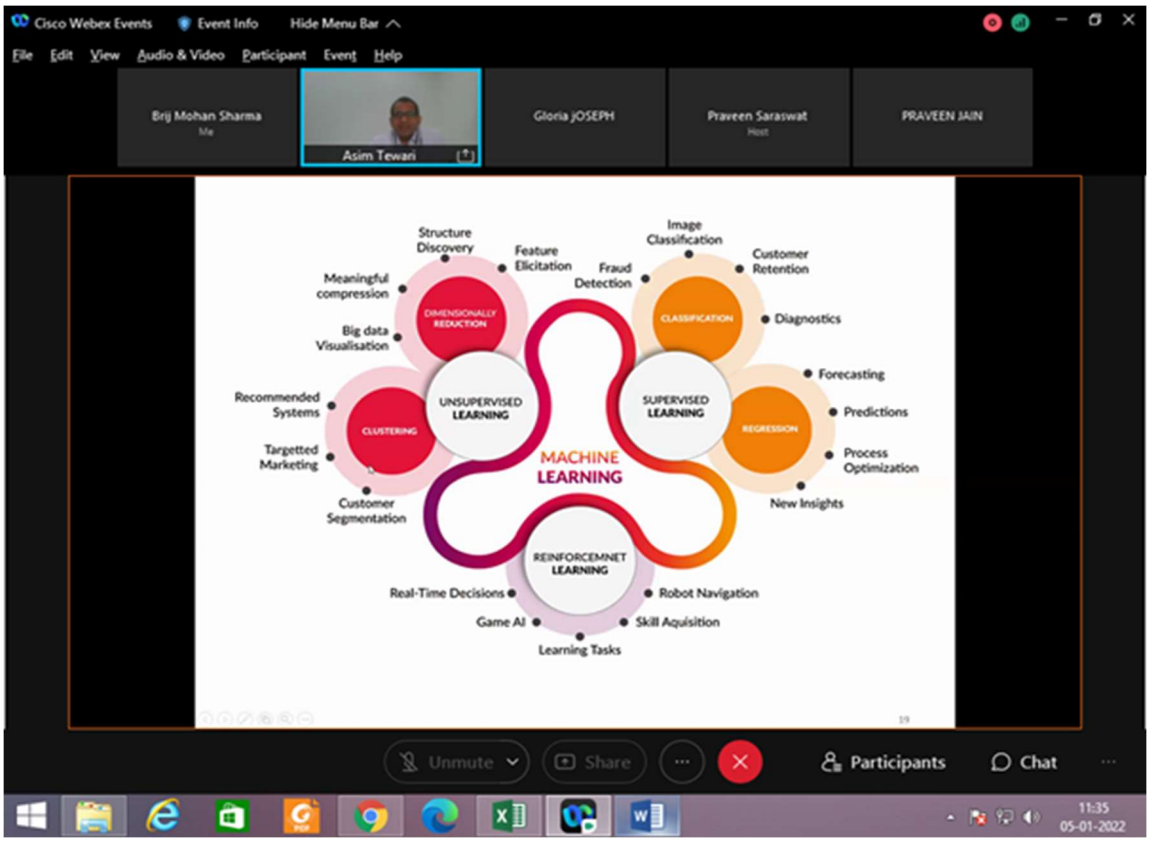
Prof. Ashu Dehadani

Section Chairperson, Rajasthan section ISTE

Organized by

Department of Electronics and Communication Engineering

In the first session of the first day Prof. Asim Tewari, IIT Bombay discussed the role and contribution of artificial intelligence and robotics in various fields ranging from medical to household to defence sector. He started his session with the use of technology in advanced machining research and modelling of fatigue failure, permeability, 3D printing etc., and connected it to the base platform Robotics which is a sum of sense, intelligence, and actuation. He took an interesting example of how a kid learns to walk using neural architecture and further connected it with how AI based algorithms are going to control robots. He also explained different aspects of machine learning namely, supervised, unsupervised and reinforcement learning. Reinforcement learning is playing the most pivotal role in the control of robotics. Further, he briefly discussed ML Techniques in Data Analytics with differentiating deep learning and conventional learning. Deep learning performed better when there is a lot of data available. He also discussed various projects based on AI and Robotics i.e. da Vincy surgical system. Google DL Retinography, Lip-reading AI, Deep Image reconstruction, self driving vehicles, Paro robot (robotic pet), Sophia robot (social humanoid robot) etc. He ended his session by stating that the real challenge is in terms of ethics not in terms of technology. He warned that this will be the Doom's day for humanity if the progress in AI and robotics are not handled ethically.



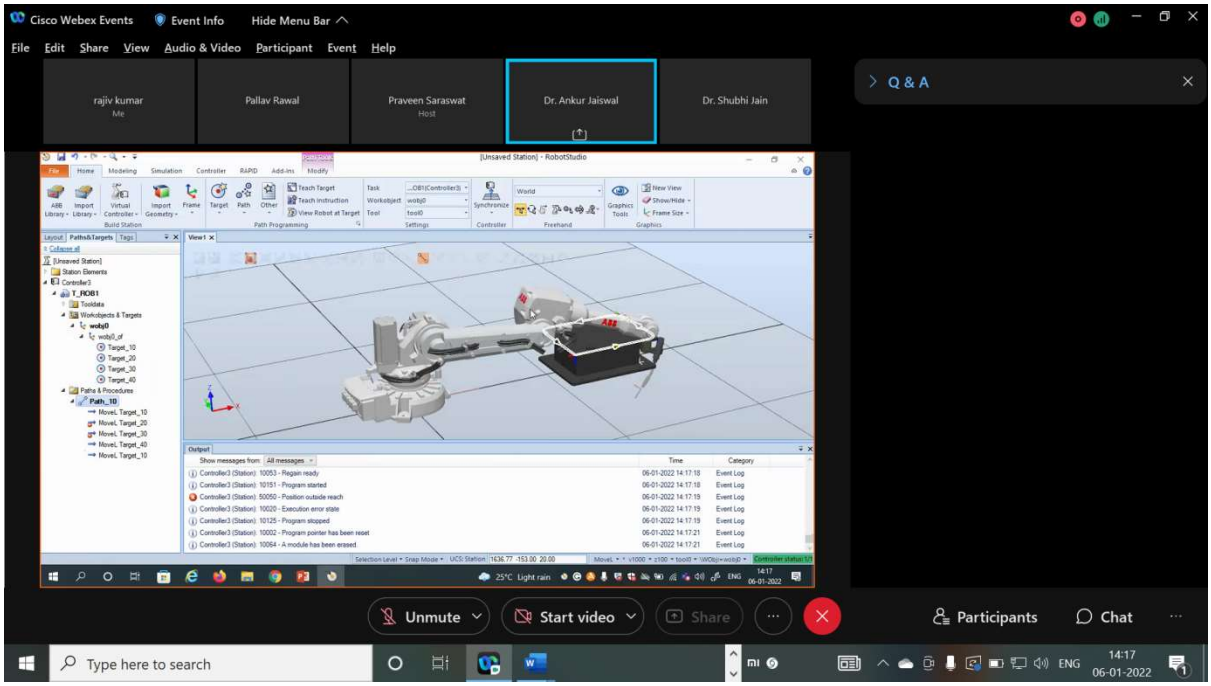
Second day of Faculty Induction Program:

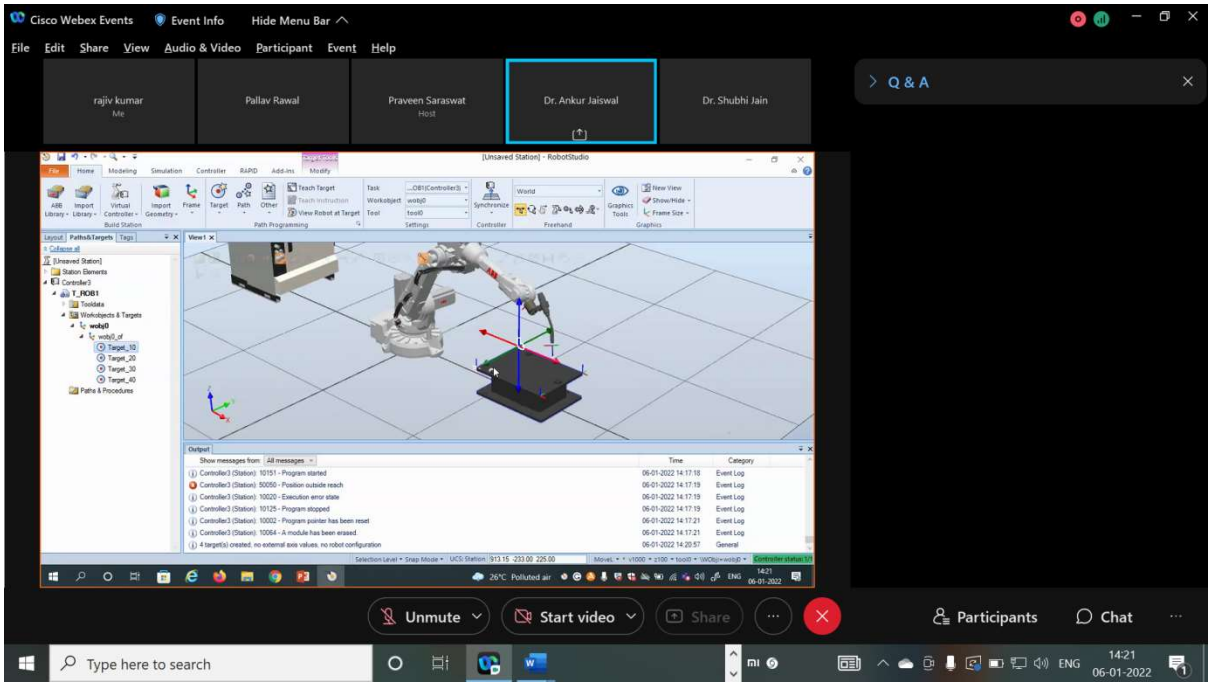
In the first session, Mr. Ajay Godara from NITTTR Chandigarh Startup enlighten us with sensors & actuators used in robotics field. He discussed various types of sensors & actuators responsible for measuring position, acceleration, torque and detecting objects. Expert

provided all the participants a great hands-on exposure on the Tinker cad Online software for Circuit Design. During this hands-on session, interfacing of Arduino uno with various sensors & actuators was demonstrated along with the coding part.

In the second session, Prof. Dheeraj Joshi, Head, Mechanical Department of SKIT Jaipur shared their knowledge of 3D printer & its technique which is responsible for making three dimensional solid objects from a digital file. He made us aware about the materials used, working principle, its applications, limitations as well as future research areas in 3D printing.

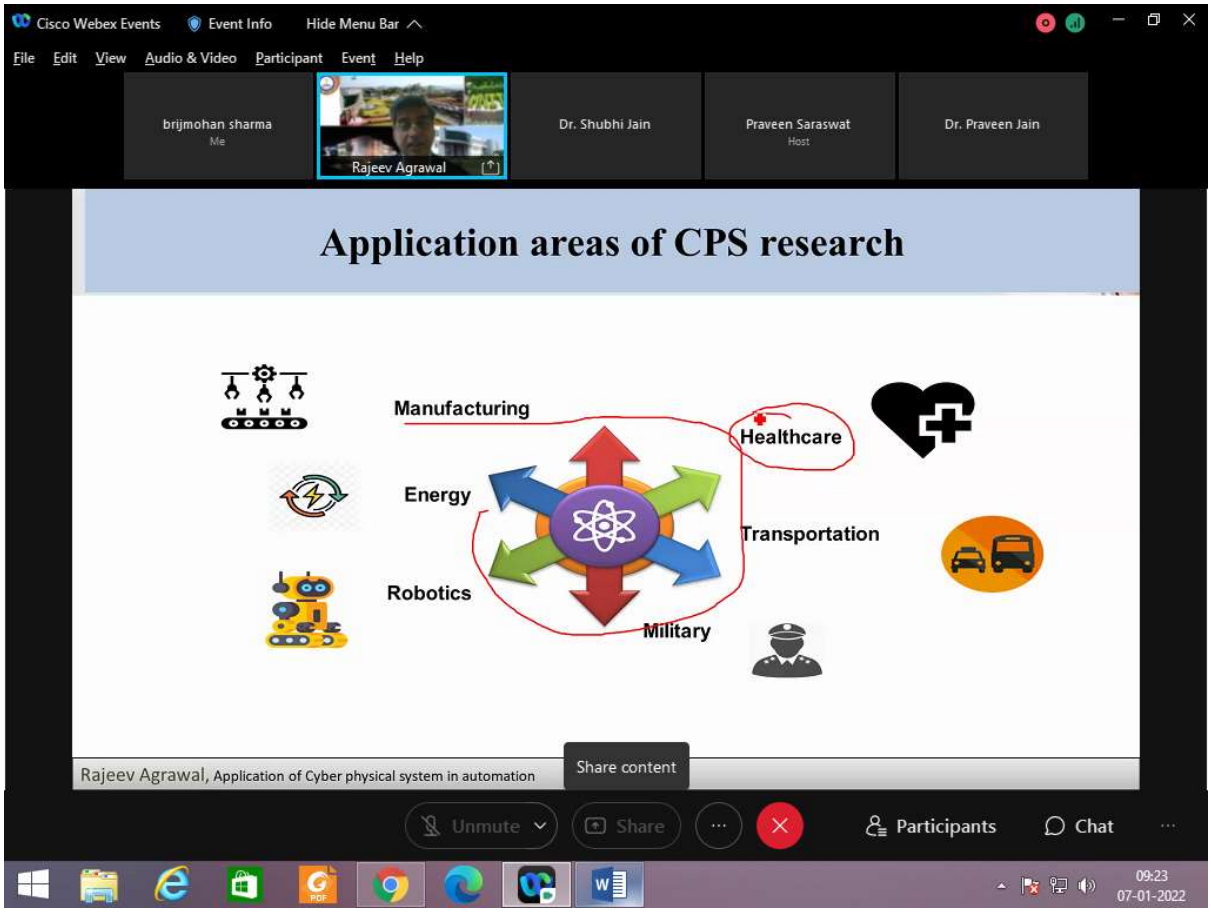
In third session, Dr. Ankur Jaiswal explained and demonstrated about Robotics simulation and programming. In this hands-on session he used Robo Analyzer simulation software to design Robot functions. He showed that this software has many robotics tools and he used IRB2600-20-165-C-01 tool to demonstrate the degree of freedom behaviour and perform its basic operation such as tracking of trajectory with an example of square path trajectory.





Third day of Faculty Induction Program:

First session was delivered by Dr. Rajeev Agarwal, Associate Professor, Department of Mechanical Engineering, MNIT Jaipur on "Application of Cyber-Physical System (CPS) in Automation". He explained the journey of paradigm shift from 19th century to 21st century i.e. ford assembly line to china manufacturing. He further explained how cyber-physical systems integrate computation, control, networking, and sensing into physical objects and then how to connect these things to the internet and to each other. So Cyber-Physical System is a combination of embedded systems and physical environment. Next he talked about working of CPS. It records physical data using sensors and affects physical processes using actuators. It evaluates the data and then it connects with one other and global network via digital communication facilities. He also suggested the research areas i.e. manufacturing, healthcare, transportation, energy, robotics, defence etc for cyber-physical system. Finally, he had discussed a case study related to design and implementation of CPS developed by Navantia and University of Acoruna. It is shown in this case study that how production processes can be accelerated using CPS.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brijmohan sharma
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Rajeev Agrawal
Dr. Shubhi Jain
Praveen Saraswat
Host
Dr. Praveen Jain
Application areas of CPS research
Manufacturing
Healthcare
Energy
Transportation
Robotics
Military
Rajeev Agrawal, Application of Cyber physical system in automation
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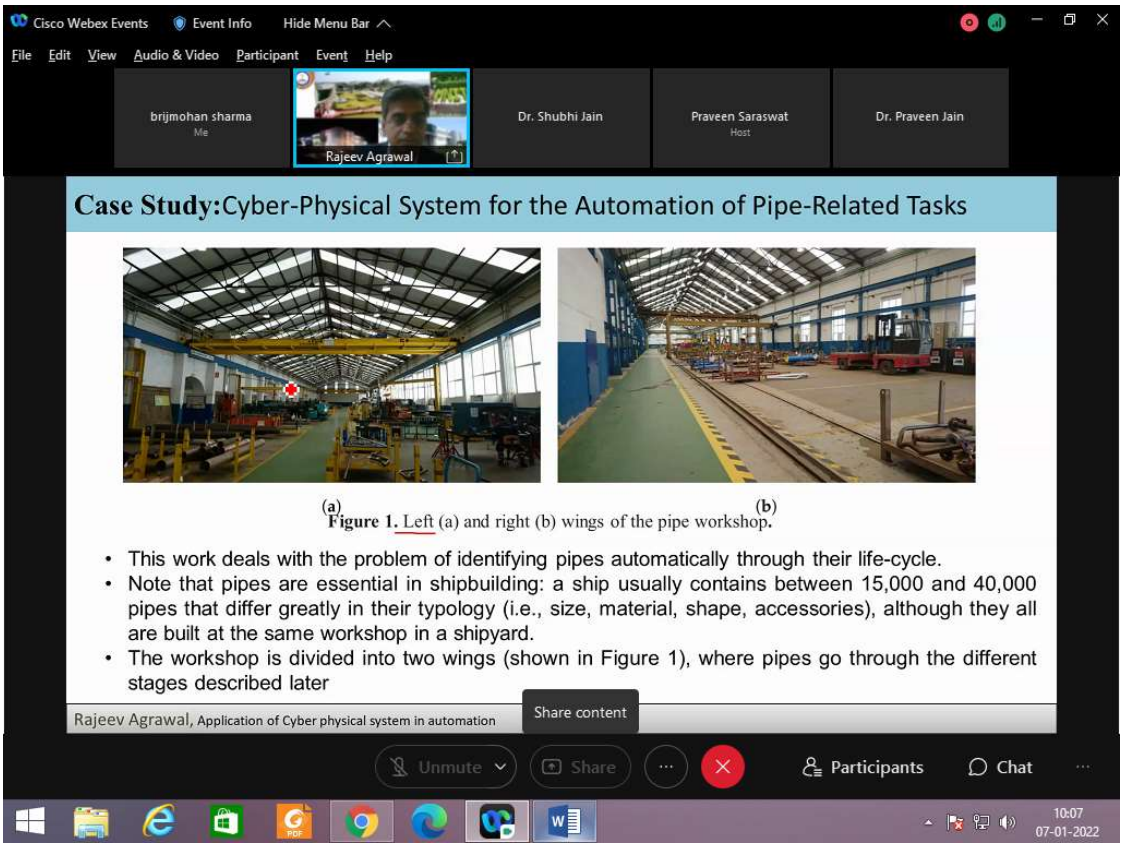
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brijmohan sharma
Me
Rajeev Agrawal
Dr. Shubhi Jain
Praveen Saraswat
Host
Dr. Praveen Jain
Case Study:Cyber-Physical System for the Automation of Pipe-Related Tasks
(a)
(b)
Figure 1. Left (a) and right (b) wings of the pipe workshop.
• This work deals with the problem of identifying pipes automatically through their life-cycle.
• Note that pipes are essential in shipbuilding: a ship usually contains between 15,000 and 40,000 pipes that differ greatly in their typology (i.e., size, material, shape, accessories), although they all are built at the same workshop in a shipyard.
• The workshop is divided into two wings (shown in Figure 1), where pipes go through the different stages described later
Rajeev Agrawal, Application of Cyber physical system in automation
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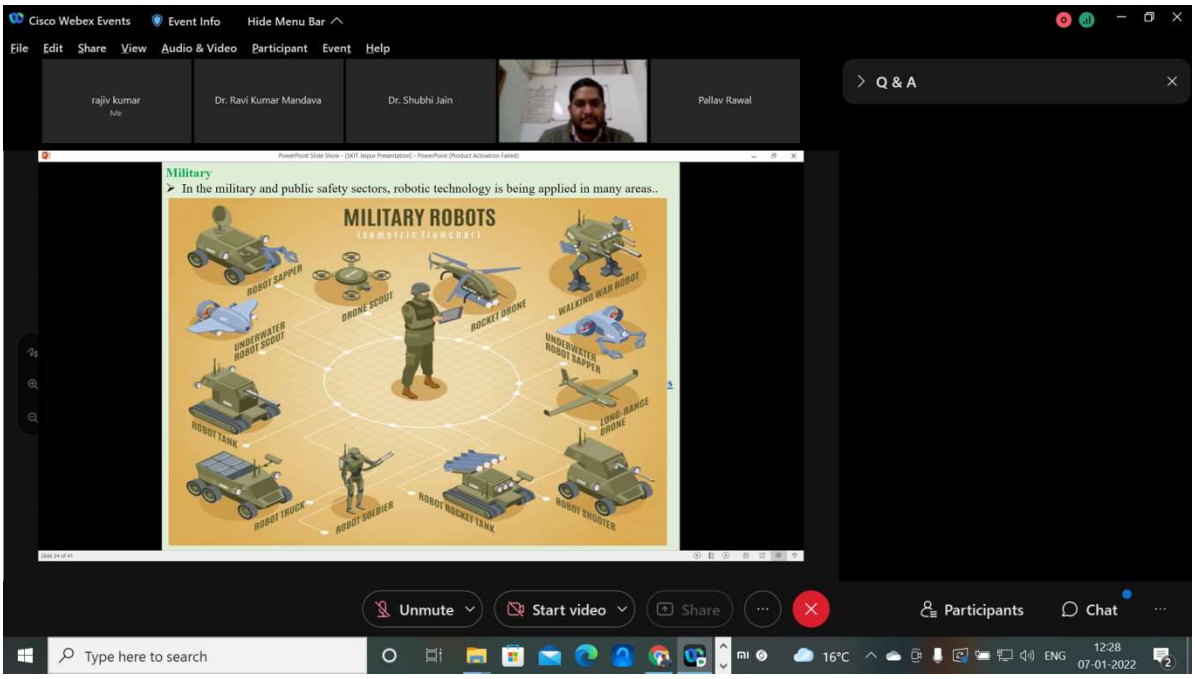
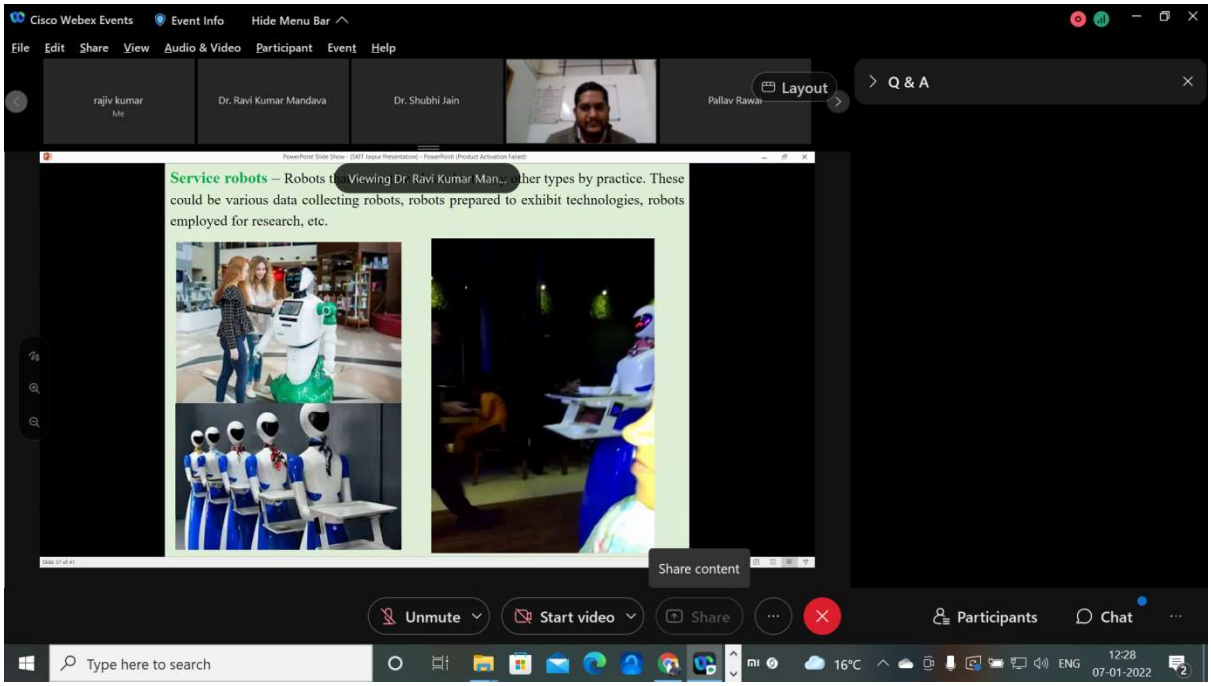
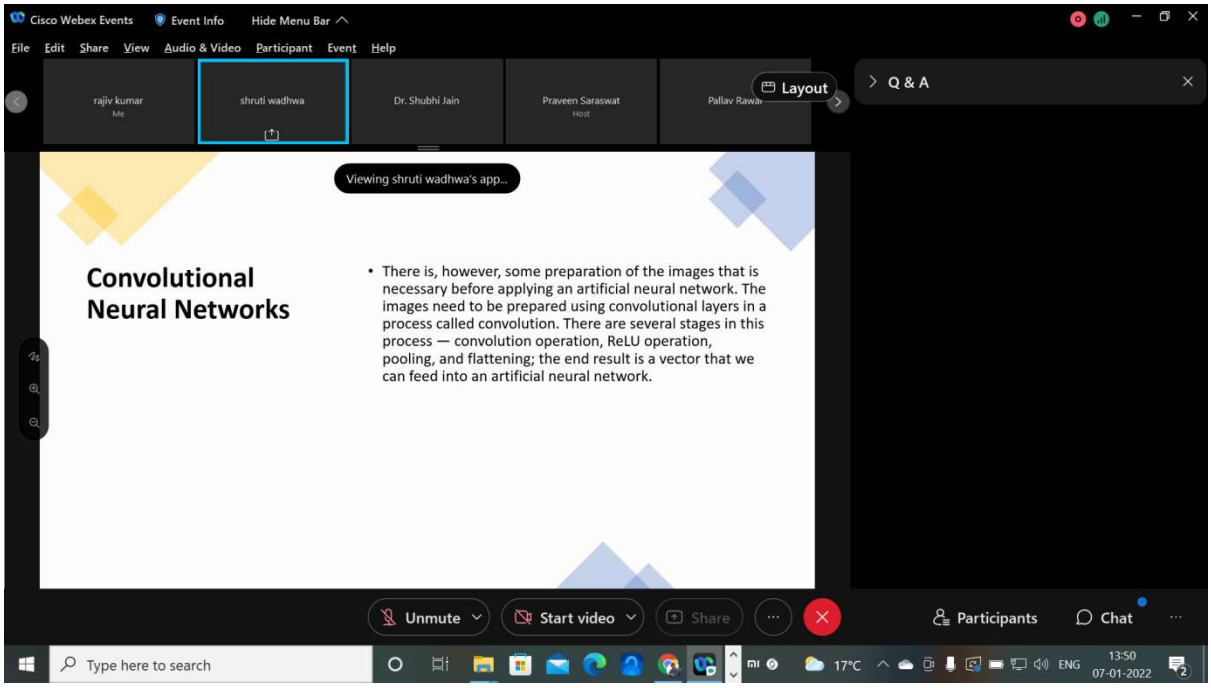
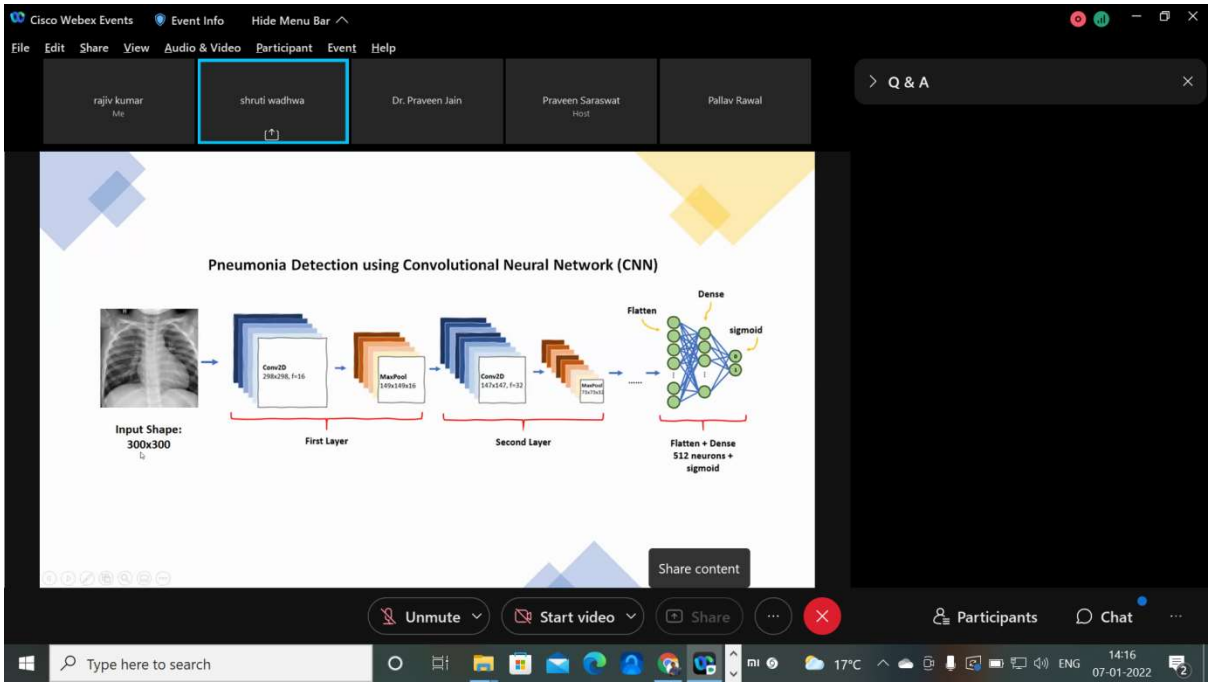
In the second session, Dr. Ravi Kumar Mandava, NIT Bhopal emphasizes on automation in manufacturing. He explained various applications like welding, pick & place, plucking operations using robots. He gave us fundamental approach on robots, their history, essential characteristics like sensing , movement & energy etc., their usages, advantage as well disadvantages. Expert benefitted us with the knowledge that how robotic systems are used to reduce the need for human work in the production of goods and services.





In the third session, Dr. Shruti Wadhwa, Chief Operating officer, Nidus Technologies private Ltd, explained the concept of convolutional neural network in pneumonia detection.

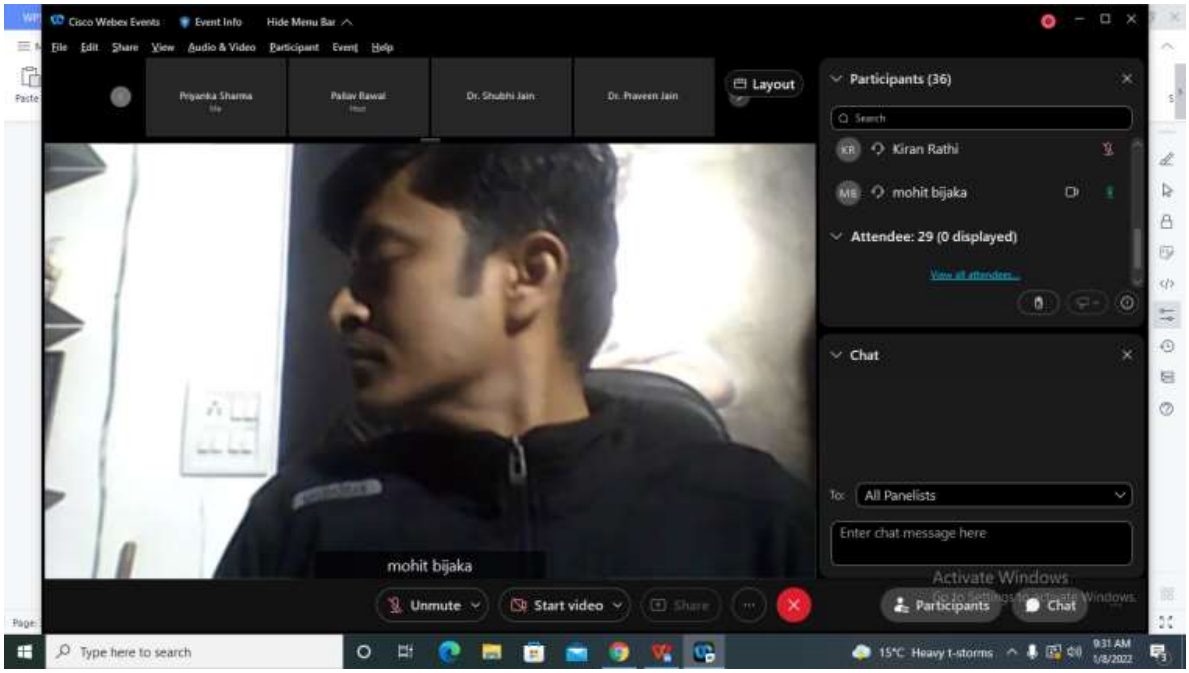




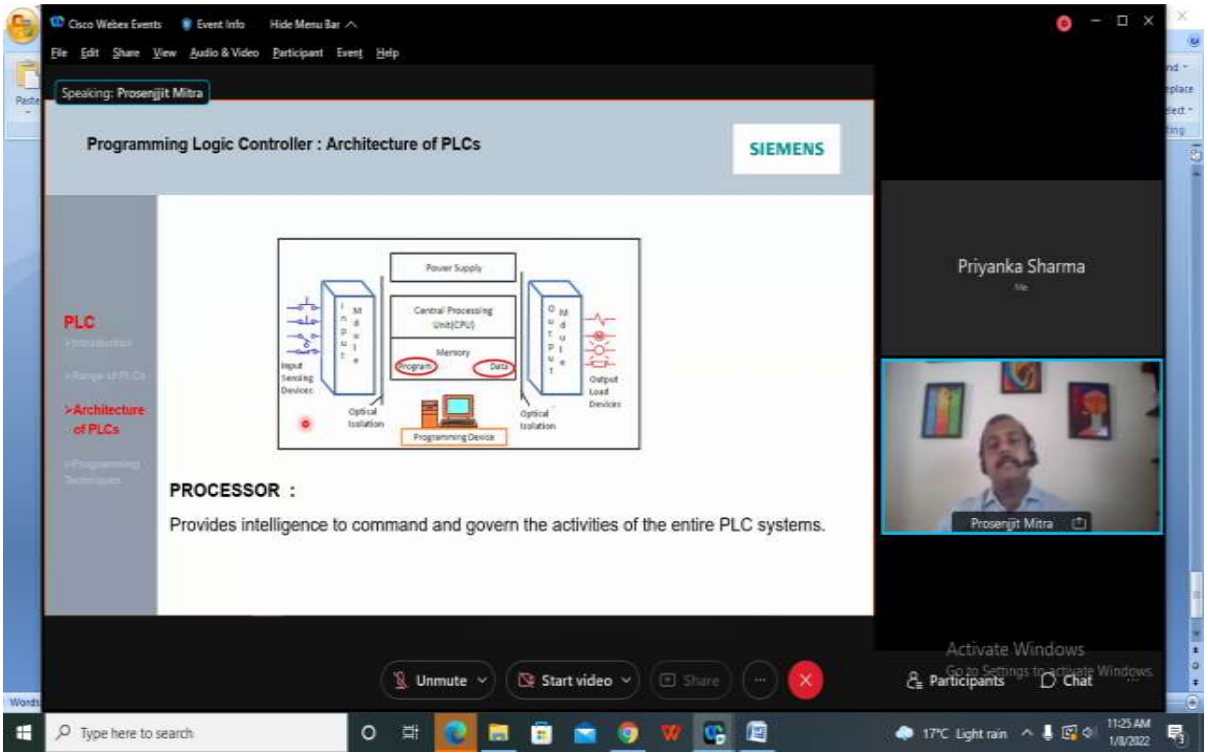
Fourth day of Faculty Induction Program:

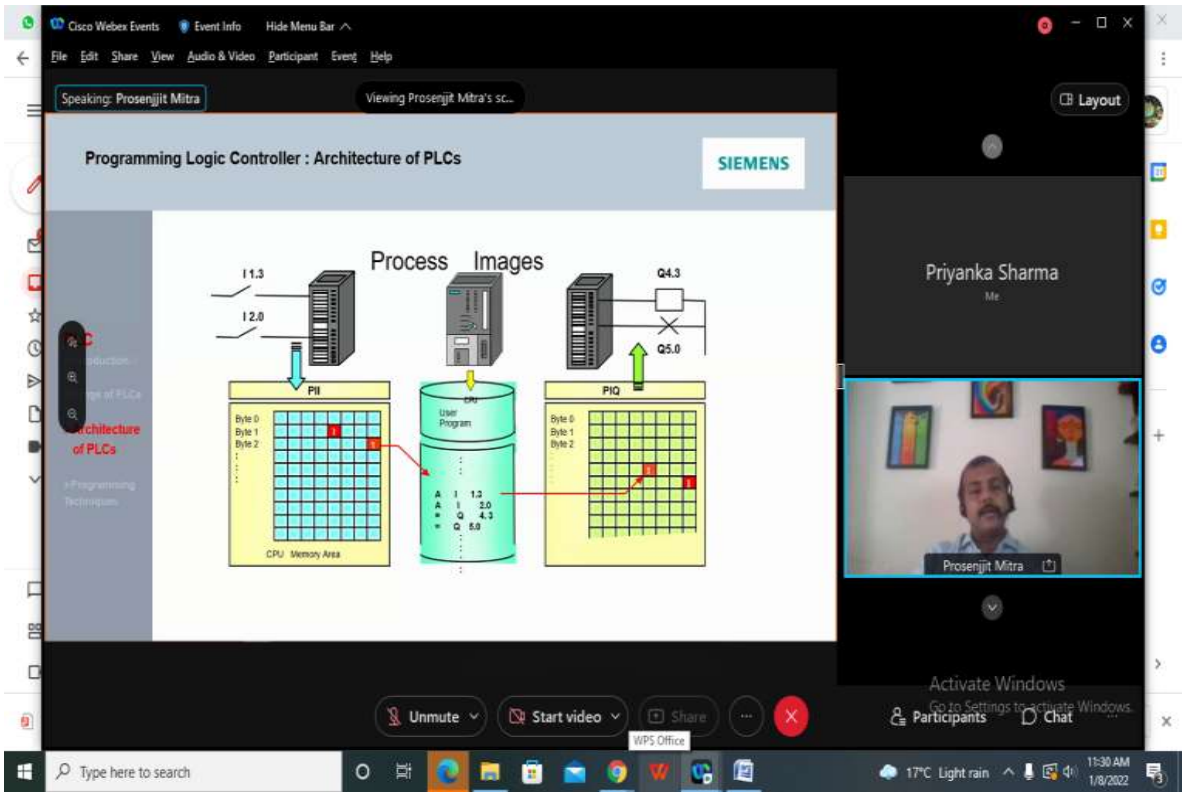
In the first session, Dr. Mohit Bijaka, Director, Yoga Health Care Centre emphasized on the benefit of yogasana and pranayams on our body and mind. He enlightened us with the powerful pranayams and demonstrated many techniques for relieving stress by stretching the whole body and breathing with inhalation & exhalation. He acquainted us with instant relaxing technique by breathing in many poses. Brahmaripranayam was demonstrated which

is very powerful for relaxing brain with the buzzing sound.It good for mental health. Then meditation was practiced after relaxing the brain with it as centre point.

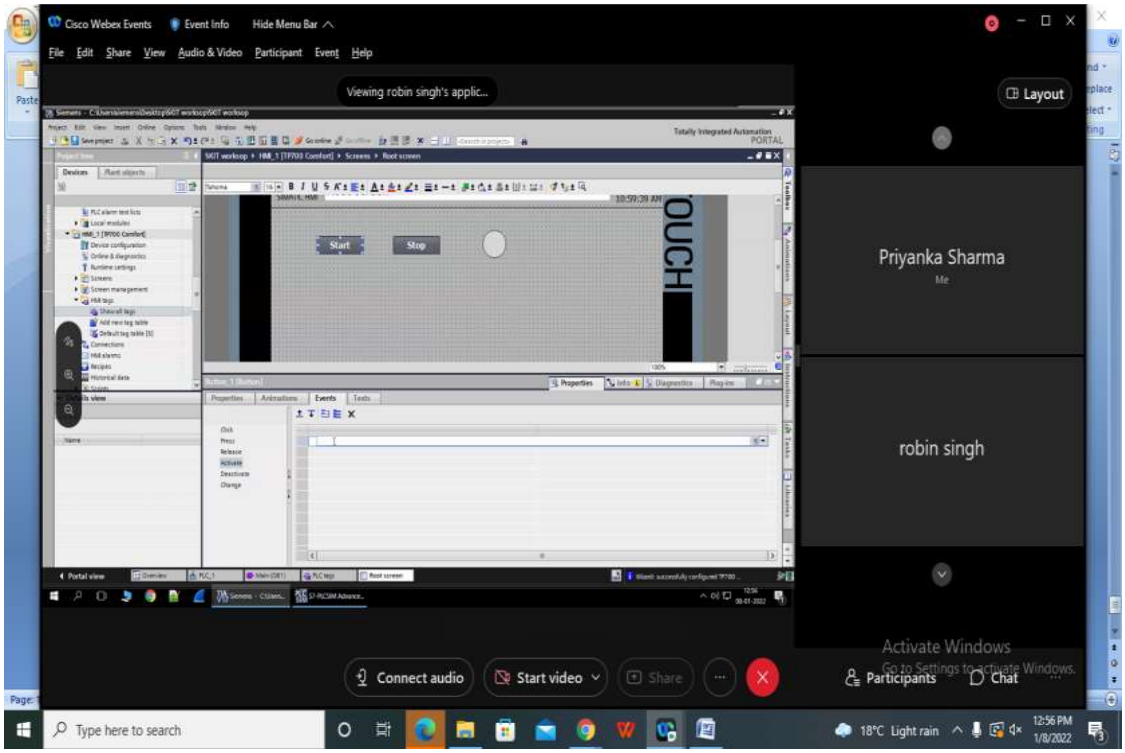


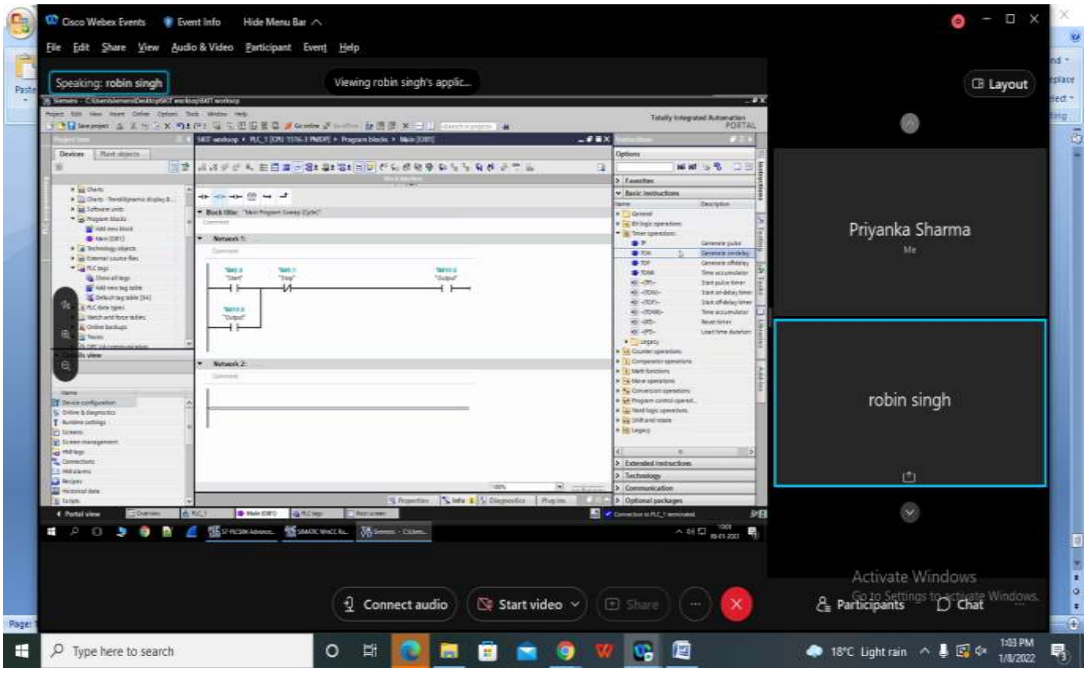
In the second session, Mr. Prosenjit Mitra, Manager, Siemens Ltd. India throwed light on the fundamentals of Automation using PLC & SCADA. He focused on different types of control techniques, PLC architecture, characteristics, advantages, applications, and its mixing process and presented a case study on SIMATIC controller. Various aspects of SCADA were presented alongside with HMI and visualization.





In the third session, Mr. Robin Singh, Project Engineer, Siemens Ltd. India, gave very clear hands on exposure on ladder programming. Participants got benefitted with this practical exposure of graphical PLC programming language which expresses logic operations with symbolic notation.

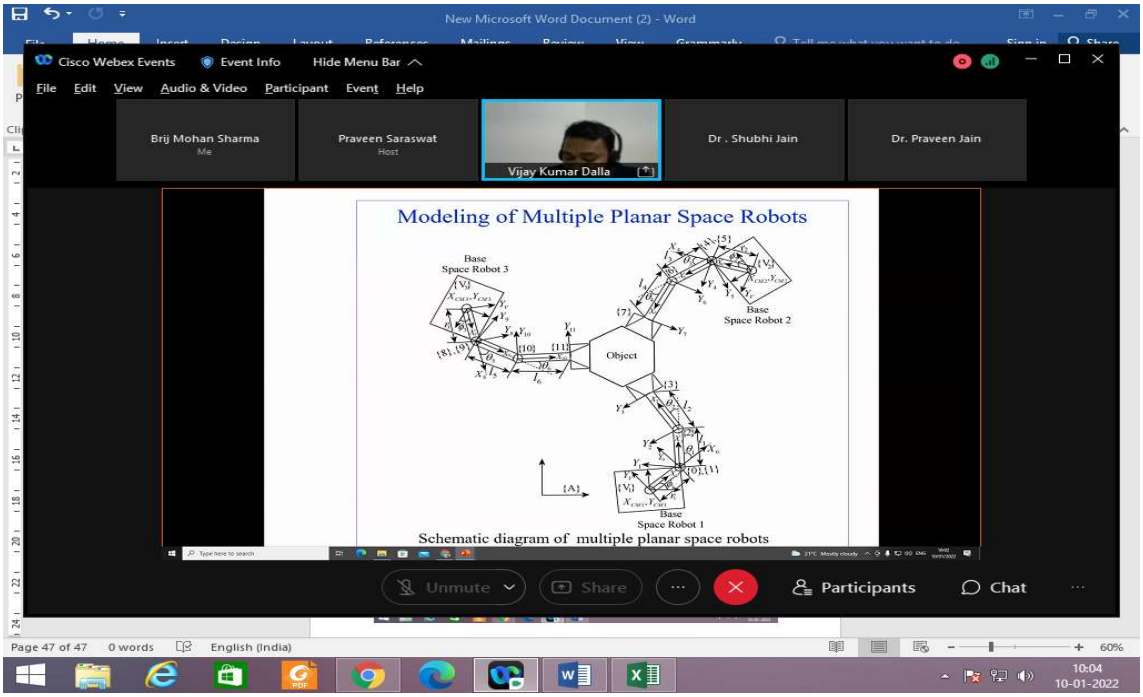


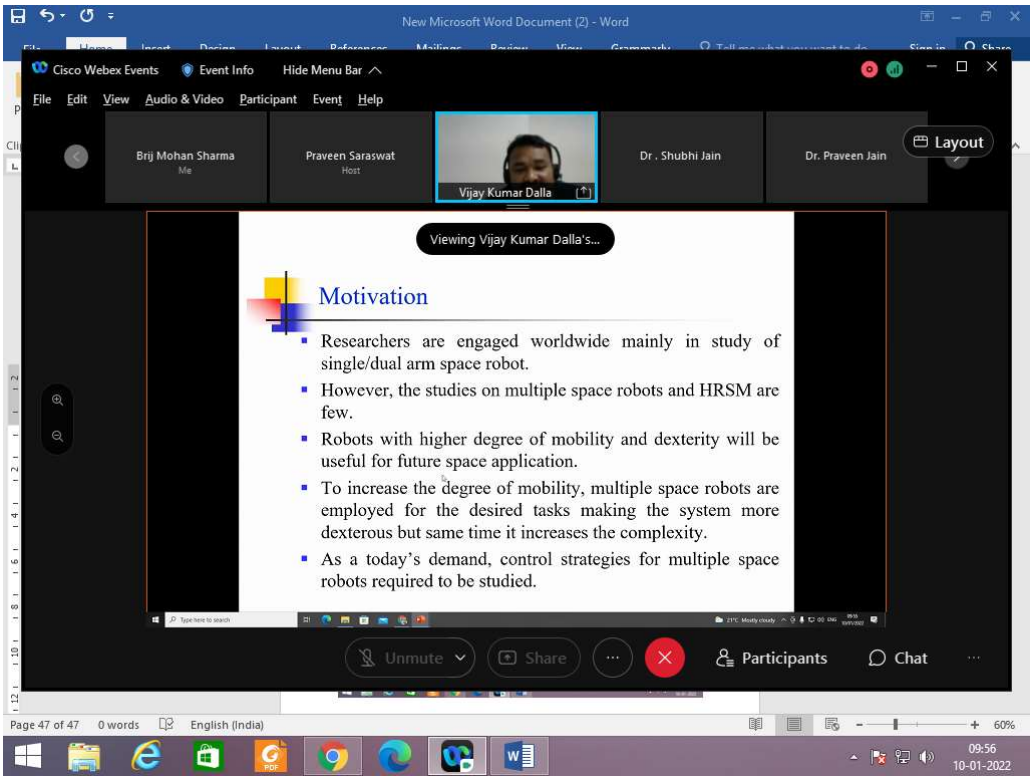


Fifth day of Faculty Induction Program:

In the first session, Dr. Vijay Kumar, Assistant Professor, Department of Mechanical Engineering, NIT Jamshedpur has delivered his presentation on “Collaborative Robots”. He started his with introduction, development and advantages of space robots. He also discussed the challenges of Hyper Redundant Space Manipulator (HRSM) i.e. cost, no. of sensors and actuators used, complexity, algorithms used etc. He also discussed modelling of multiple planar space robots (MPSR) in details with velocity and acceleration equation. He also demonstrated the software Symbols 6.0 used for modelling MPSR, specifically how to create

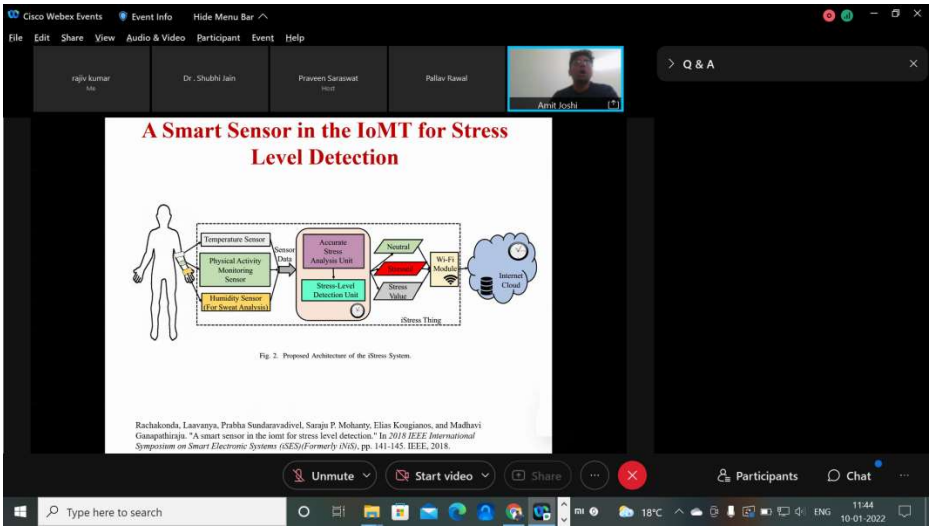
Word Bond Graph. Finally, he discussed about attitude and trajectory control of multiple space robots.

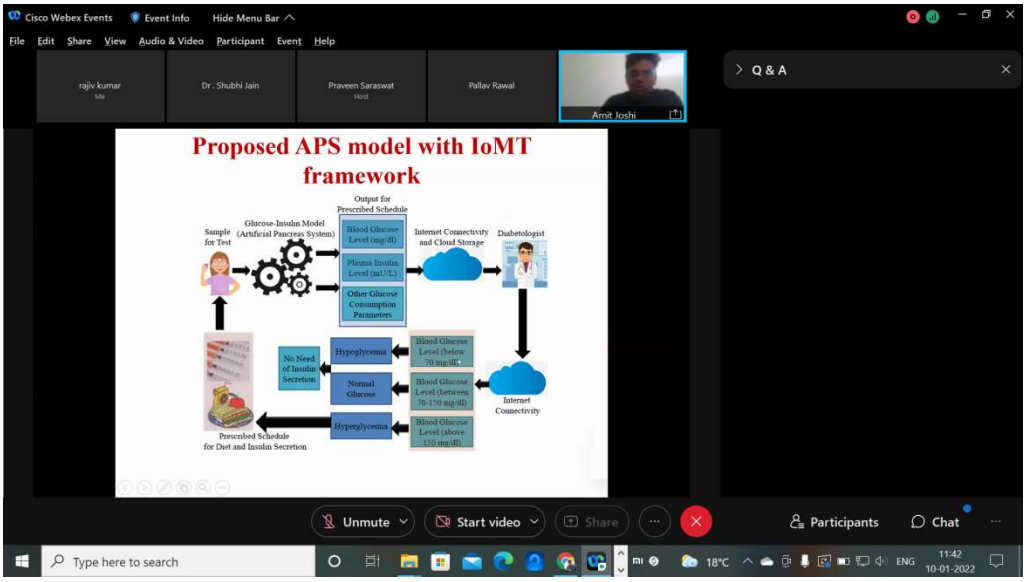




In the second session, Dr. Amit M joshi explained the role of machine learning on Traditional health care to smart health care. He explained the advantage of smart health care system over traditional health care system. In his presentation, the important role of IOT in s-health, m-health, c-health was discussed. He showed various types of attributes and characteristics of s-health such as hands free, environmental aware, sensing, Anticipatory, responsive etc. He

said that the quality of life is improved by using s-health electronic devices such as wrist watch, glasses EEG and ECG. He also discussed the various applications of m-health such as medication alerts, e-prescription for patients. He discussed smart electronic health care for automation in diabetic detection. He presented the functioning of non-invasive I-GLU device with IoMT framework to provide the detection of diabetic state of smart health care solution. He discussed stress level detection, deep learning model for depression. He presented the usefulness of EMG signal in robotic arm for amputated person.

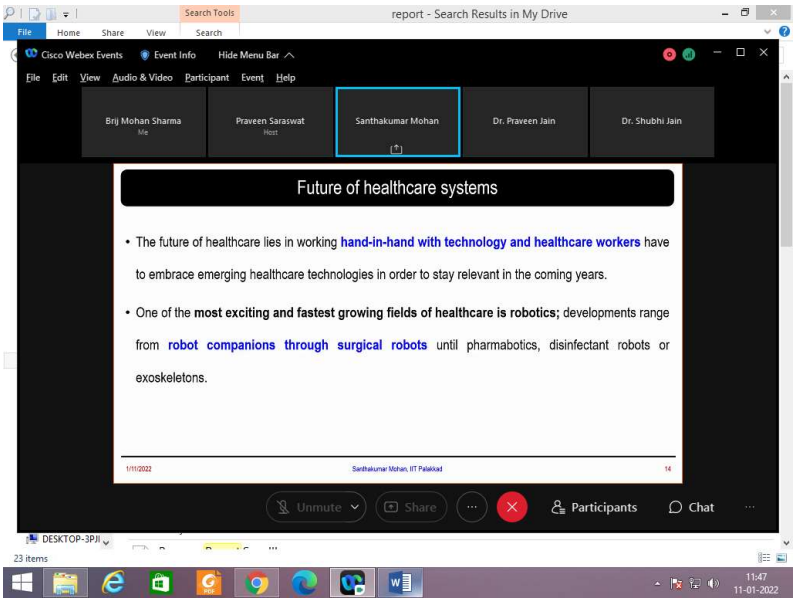


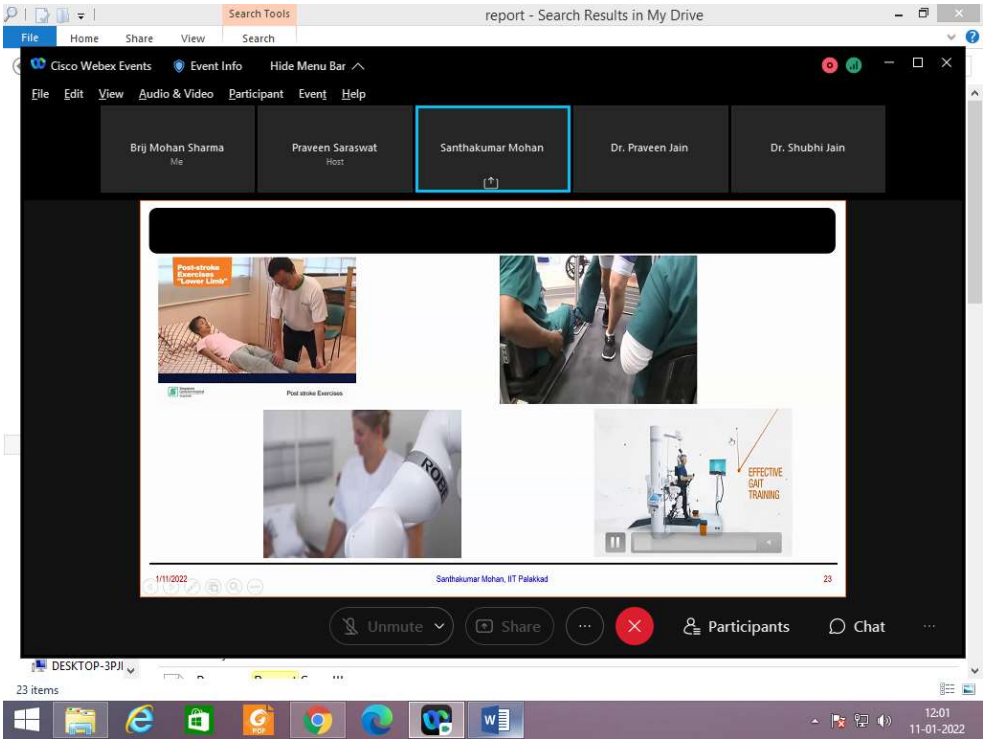


Sixth day of Faculty Induction Program,

First session has been delivered by Dr Santhakumar Mohan, Associate Professor, Department of Mechanical Engineering, IIT Palakkad on "Advances in Robotics". In his presentation he explained the changes or shift in the industry and how much critical is the role of robotics and automation in this industrial development. He also discussed the type of robots i.e. effectors, manipulation (robotic manipulator), locomotion (mobile robot) etc. In his presentation, broader themes of robotics have been discussed. One theme is related to economics point of

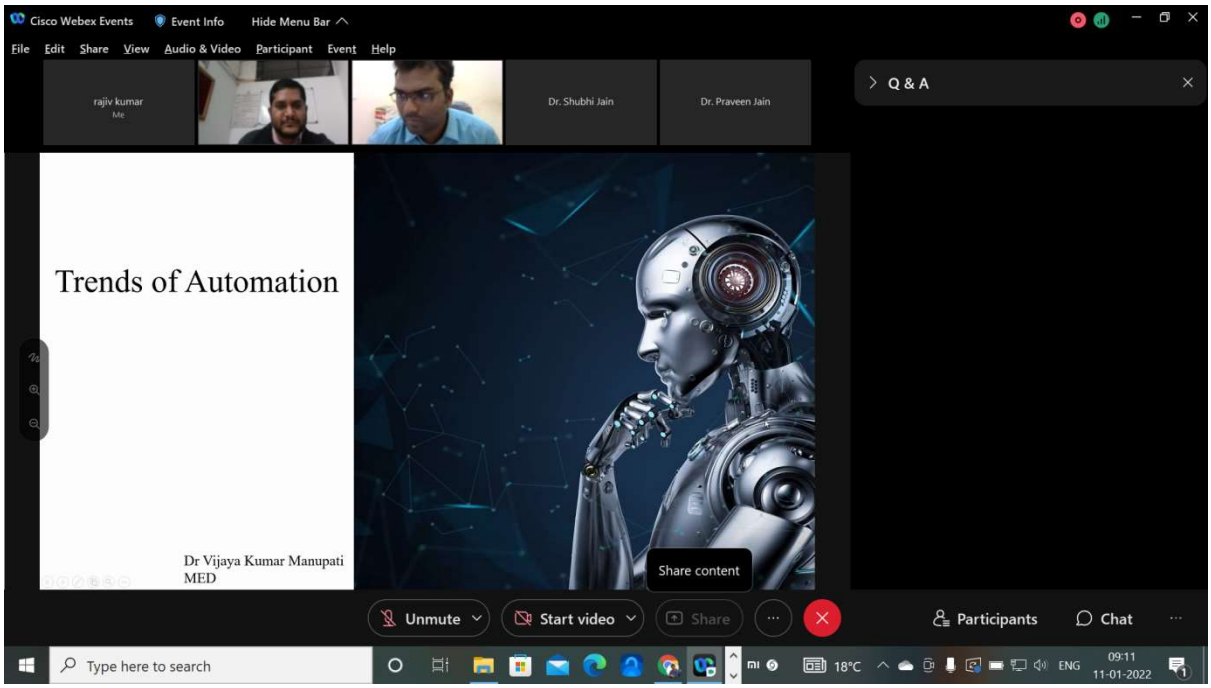
view, the robots which are being used in smart industries and another theme is the robot which are making human life easy. These robots are known as companion robot i.e. robot dog. He also explained that robots are not only used in the industry only, but the other areas of applications are also medical, entertainment, personal service, space, defence etc. At last, he demonstrated the future healthcare system assisted with various types of robots to be used for various applications starting from reception to servicing of patient to surgery.

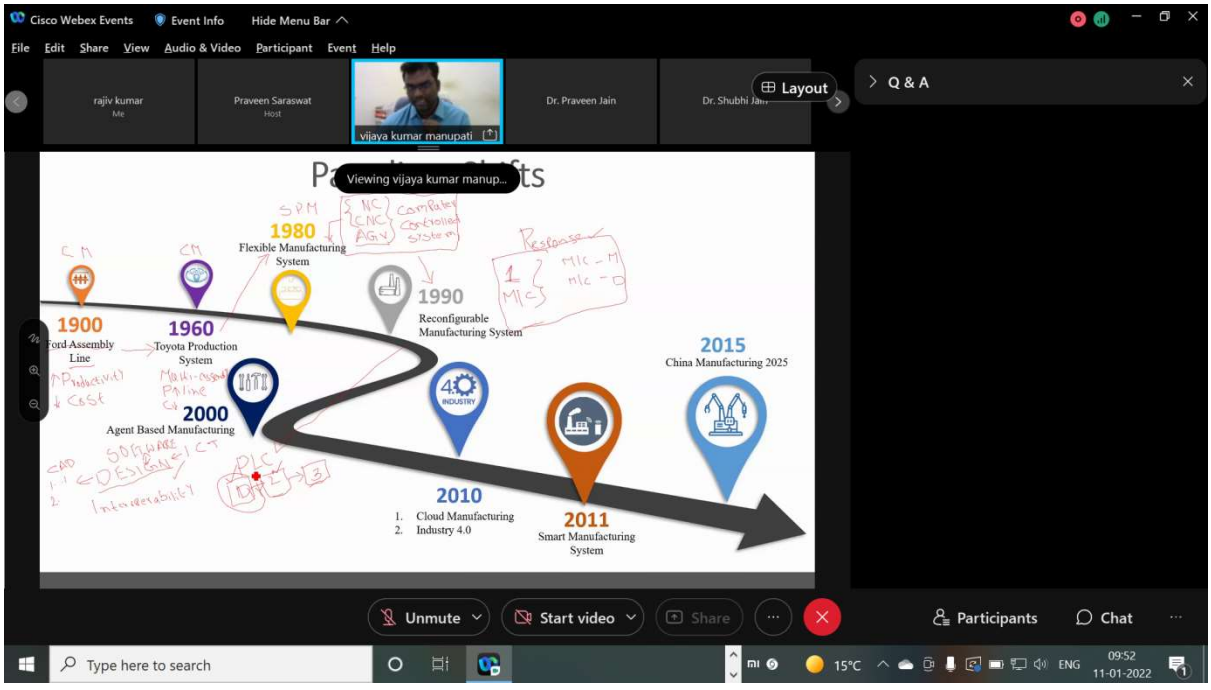




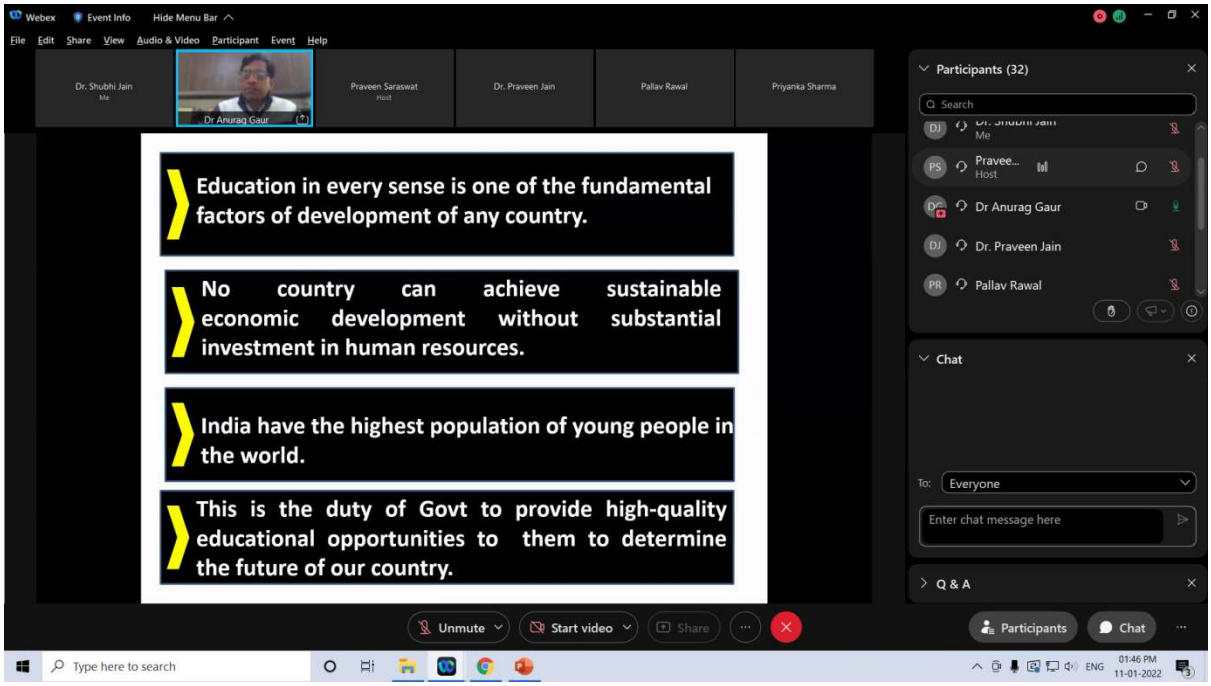
In the second session, Dr. Vijaya Kumar Manupati, NIT Warangal, explained the trends of automation in automobile industry. He explained the need of automation in today's industry.

He showed that how automation industry shift from Ford Assembly line (1900) to China Manufacturing (2025). He also showed the evolution of manufacturing system from craft production (1850), personalized production (2000), Self X functions such as self-healing, self-optimization to next generation manufacturing system.





In the last session of final day was delivered by Dr. Anurag Gaur, J C Bose University of Science & Technology Faridabad. Very nice session was delivered on NEP 2020.



In the valedictory session, Prof. R. S. Meena, Dean Research, RTU Kota, Dr. Anurag Gaur, J C Bose University of Science & Technology Faridabad, Prof. Mukesh Arora, Prof. P.K. Jain, Mr. Pallav Rawal and organizers of the event were present. Prof. R. S. Meena had appreciated the efforts of organizing team to conduct such type of FIP. He had congratulated the organising team for successful conduction of this FIP. Mr. Pallav Rawal, Coordinator of FIP has given a summary of the events conducted in FIP. Feedback of FIP was also taken in valedictory. At the end, Mr. Praveen Saraswat, Co-coordinator FIP, has expressed his vote of thanks to everyone involved in this event and appreciated the group effort of the whole organizing team.

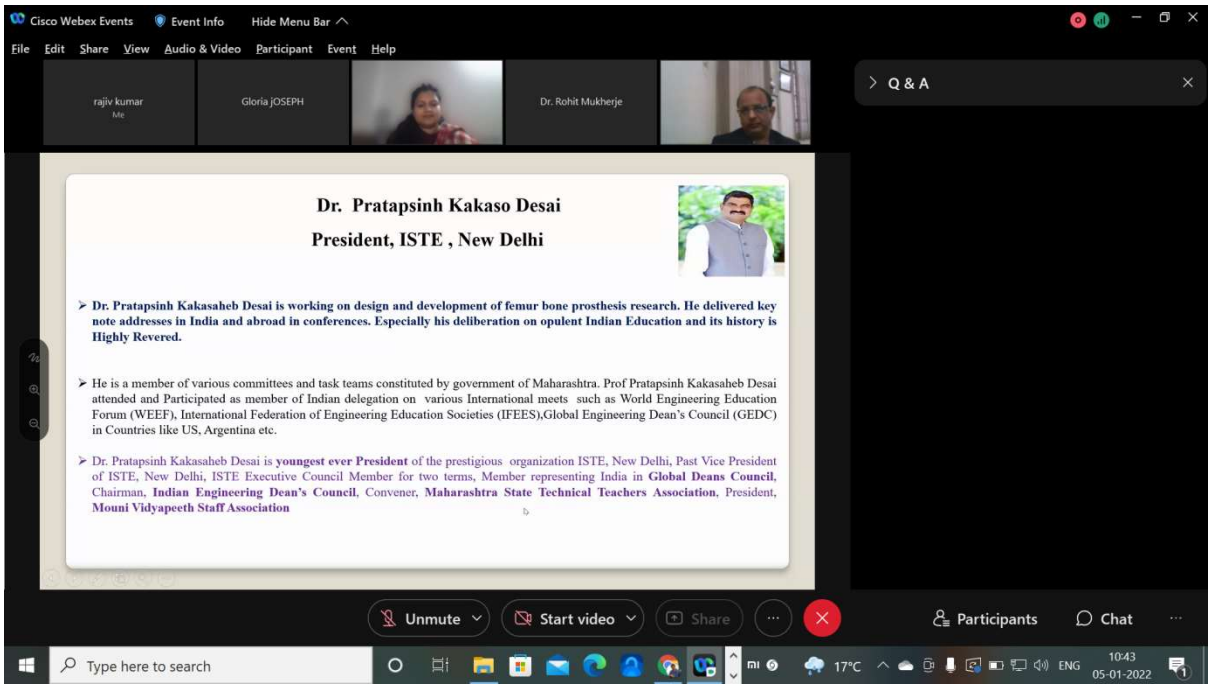
Outcome of FIP: All the 16 sessions were very much informative. The discussed areas are of great benefit for the participants as they were enlightened with recent advancement in Robotics and Automation.

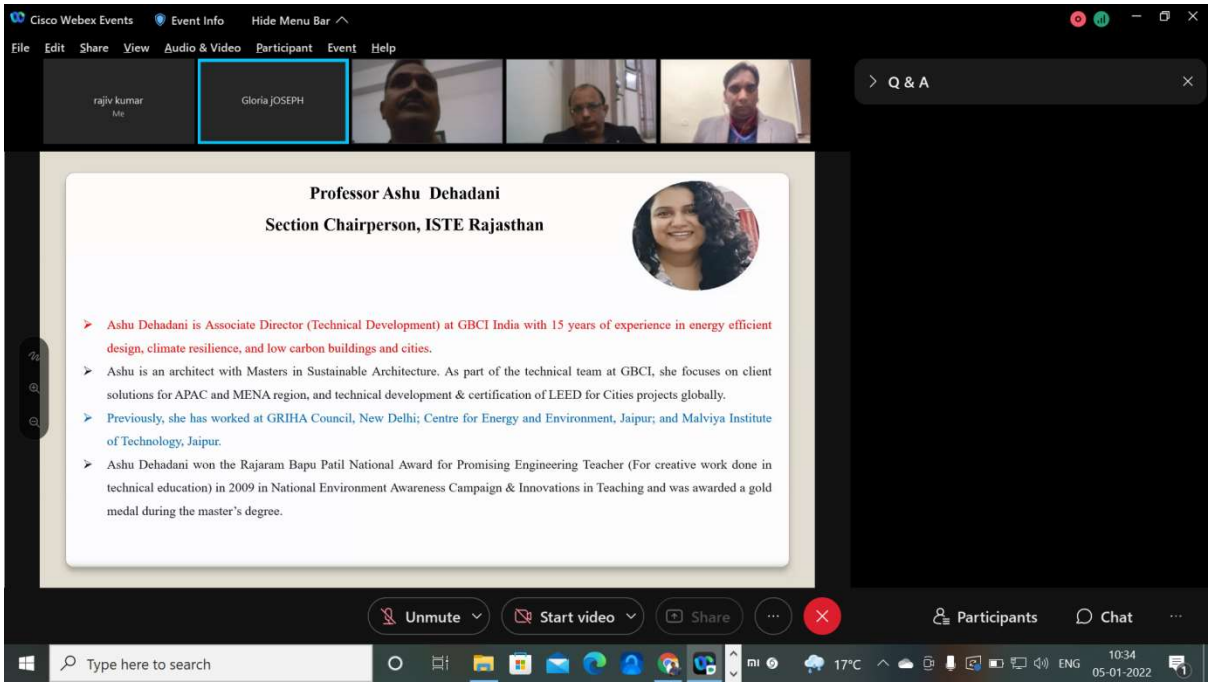
The outcomes of the FIP are:

- To understand and promote conceptual clarity in the field of emerging Robotics technology.
- To get motivated for further studies in this field of Automation
- To train professionals in the said area so that they can act as 'Resource Persons' in guiding and motivating young students.
- To get aware about the current challenges in the field of robotics and automation.
- To understand the future aspects and applications of the concerned field.
-

a. **No. of Participants** – 113
b. **Attainment of the activity:** The One-week FIP provided a better insight into the recent trends in the field of Robotics and Automation.
c. **Recommendations:** We recommend such types of FIP in future.

Photographs of Inaugural and Valedictory Ceremony:





Feedback Analysis:

- All participants shown great interest to attend more FIP in Swami Keshvanand Institute of Technology Management and Gramothan, Jaipur.
- Some topics suggested by participants are: Advanced Characterization Techniques Nanotechnology, Renewable Energy, Non-conventional energy etc.
- Overall experience of the course is excellent.

News Coverage

एसकेआईटी मे छः दिवसीय फैकल्टी इंडक्शन प्रोग्राम का शुभारंभ

P3 News@

जयपुर ! जगतपुरा स्थित स्वामी केशवानंद इंस्टीट्यूट ऑफ टेक्नोलॉजी, मैनेजमेंट एंड ग्रामोथान में इलेक्ट्रॉनिक्स एवं कम्युनिकेशन डिपार्टमेंट द्वारा एआईसीटीई - आईएसटीई प्रायोजित ÷रीसेंट ट्रेंड्स ऑफ़ रोबॉटिक्स एंड ऑटोमेशन÷ पर छः दिवसीय फैकल्टी इंडक्शन प्रोग्राम का शुभारंभ हुआ। इस कार्यक्रम के मुख्य अतिथि डॉ. प्रताप सिंह काका साहेब देसाई, (प्रेसिडेंट आईएसटीई) तथा विशिष्ट अतिथि प्रो. आशु देहदानी (सेक्शन चेयरपर्सन, आईएसटीई राजस्थान सेक्शन) रहे। कार्यक्रम की शुरुआत में विभागाध्यक्ष प्रो. (डॉ.) मुकेश अरोड़ा ने सभी गणमान्य व्यक्तियों एवं पार्टिसिपेंट्स का स्वागत किया तथा रोबोटिक्स एवं ऑटोमेशन के महत्व पर प्रकाश डाला। डॉ. रोहित मुखर्जी, (इंचार्ज बी.टेक.प्रथम वर्ष), ने एसकेआईटी के आईएसटीई स्टूडेंट चैप्टर और संस्थान की विभिन्न क्षेत्रों में उपलब्धियों से सभी को परिचित कराया।

प्रो. आशु देहदानी ने कोविड-19 की रोकथाम में रोबॉटिक्स के योगदान को रेखांकित किया और इस कार्यक्रम की अग्रिम सफलता की कामना की । डॉ. प्रतापसिंह काका साहेब देसाई ने सभी संस्थानों को नॉलेज सेंटर बन कर उभरने के लिए प्रोत्साहित किया ताकि भारत फिर से अपनी लीगेसी को प्राप्त करके अंतरराष्ट्रीय स्तर पर तकनीकी ज्ञान तथा शोध के क्षेत्र में अग्रणी रहे।

कार्यक्रम के कोर्डिनेटर पल्लव रावल ने सभी प्रतिभागियों के साथ एफआईपी का संक्षिप्त प्रारूप साझा किया। उद्घाटन समारोह के अंत में उप-विभागाध्यक्ष डॉ. पी. के. जैन ने सभी आगंतुकों को धन्यवाद ज्ञापित किया।

कार्यक्रम के टेक्निकल सत्र मे प्रो. असीम तिवारी, (आई.आई.टी.मुंबई) ने आर्टिफीसियल इंटेलिजेंस और रोबॉटिक्स का वर्तमान और भविष्य में विभिन्न क्षेत्रों में योगदान के बारे में बताया। उन्होंने बताया कि मेडिकल और डिफेन्स में इन उभरती हुई टेक्नोलॉजीज को कैसे इस्तेमाल किया जा सकता है । इस कार्यक्रम का संचालन मिस ग्लोरिया जोसेफ ने किया। इस कार्यक्रम में कुल 97 चयनित प्रतिभागी सम्मिलित हुए।

एसकेआईटी मे एफडीपी संपन्न

खबरों की दुनिया

जयपुर। स्वामी केशवानंद इंस्टीट्यूट ऑफ टेक्नोलॉजी में इलेक्ट्रॉनिक्स एवं कम्युनिकेशन डिपार्टमेंट द्वारा आयोजित ÷रीसेंट ट्रेंड्स ऑफ़ रोबोटिक्स एंड ऑटोमेशन विषय पर चल रही फैकेल्टी इंडक्शन प्रोग्राम का समापन मंगलवार को हुआ। एआईसीटीई एवं आईएसटीई द्वारा प्रायोजित इस एफ.आई.पी.के समापन समारोह में मुख्य अतिथि प्रोफेसर आर एस मीणा रहे। उन्होंने रोबोटिक्स क्षेत्र में मौजूद विभिन्न अवसर तथा चुनौतियों पर प्रकाश डाला।

समापन समारोह की शुरुआत में विभागाध्यक्ष प्रो. मुकेश अरोड़ा ने सभी अतिथियों का स्वागत किया तथा इस एफडीपी के सफल आयोजन पर सभी को बधाई दी।

समन्वयक पल्लव रावल ने इस कार्यक्रम की विस्तृत रिपोर्ट प्रस्तुत की तथा प्रवीण सारस्वत ने धन्यवाद ज्ञापित किया।

छह दिवसीय इस एफडीपी में आईआईटी, एनआईटी तथा देश के अन्य प्रतिष्ठित संस्थानों से विभिन्न एक्सपर्ट्स शामिल हुए तथा रोबोटिक्स एंड ऑटोमेशन के विभिन्न अनुप्रयोगों पर विस्तृत चर्चा की । इस कार्यक्रम का संचालन डॉ शुभि जैन ने किया।

एसकेआईटी मे एफडीपी संपन्न

महानगर संवाददाता

जयपुर। स्वामी केशवानंद इंस्टीट्यूट ऑफ टेक्नोलॉजी में इलेक्ट्रॉनिक्स एवं कम्युनिकेशन डिपार्टमेंट द्वारा आयोजित "रीसेंट ट्रेंड्स ऑफ रोबोटिक्स एंड ऑटोमेशन विषय पर चल रही फैकेल्टी इंडक्शन प्रोग्राम का समापन मंगलवार को हुआ। एआईसीटीई एवं आईएसटीई द्वारा प्रायोजित इस एफ.आई.पी.के समापन समारोह में मुख्य अतिथि प्रोफेसर आर एस मीणा रहे। उन्होंने रोबोटिक्स क्षेत्र में मौजूद विभिन्न अवसर तथा चुनौतियों पर प्रकाश डाला। समापन समारोह की शुरूआत में विभागाध्यक्ष प्रो. मुकेश अरोड़ा ने सभी अतिथियों का स्वागत किया तथा इस एफडीपी के सफल आयोजन पर सभी को बधाई दी। समन्वयक पल्लव रावल ने इस कार्यक्रम की विस्तृत रिपोर्ट प्रस्तुत की तथा प्रवीण सारस्वत ने धन्यवाद ज्ञापित किया। छह दिवसीय इस एफडीपी में आईआईटी, एनआईटी तथा देश के अन्य प्रतिष्ठित संस्थानों से विभिन्न एक्सपर्ट्स शामिल हुए तथा रोबोटिक्स एंड ऑटोमेशन के विभिन्न अनुप्रयोगों पर विस्तृत चर्चा की । इस कार्यक्रम का संचालन डॉ शुभि जैन ने किया।

AICTE-ISTE

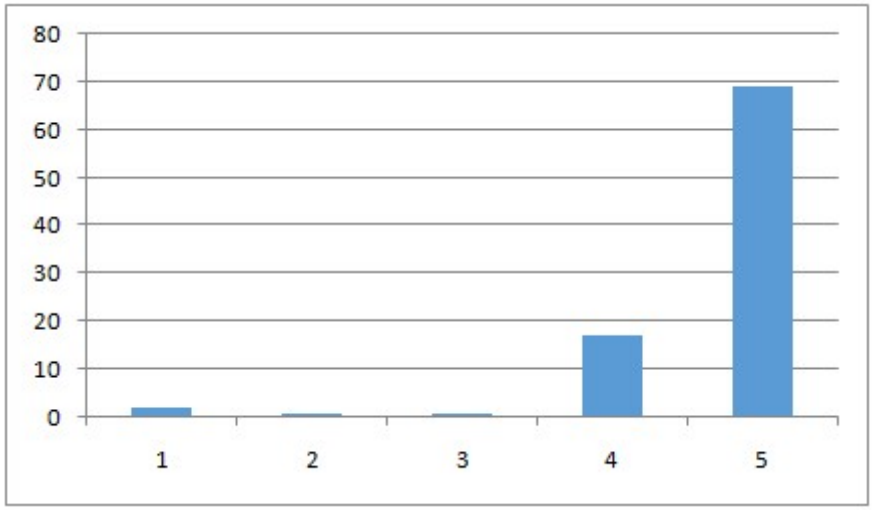
Sponsored One Week Faculty Induction Programme on "Recent Trends of Robotics and Automation" (5th January– 11th January, 2022)

Participant Feedback Report and Impact analysis

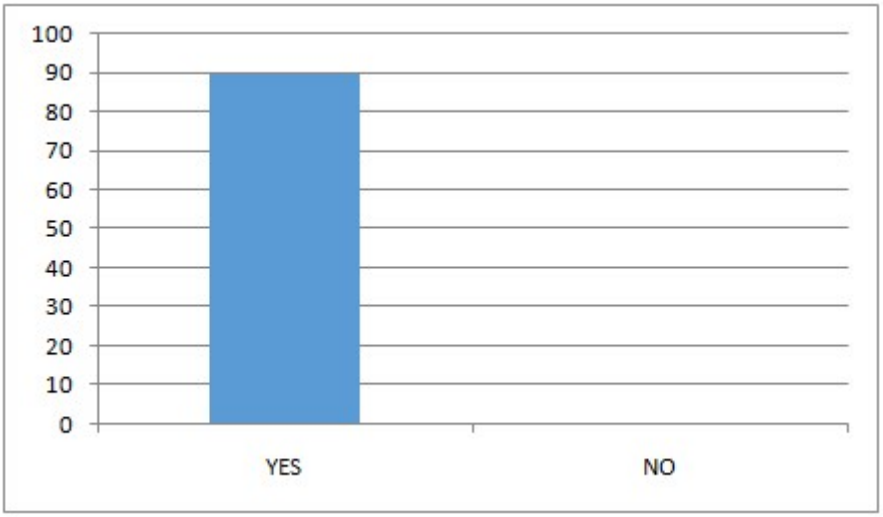
Prepared by:

Mr. Pallav Rawal
Department of Electronics and Communication
SKIT, M & G, Jaipur

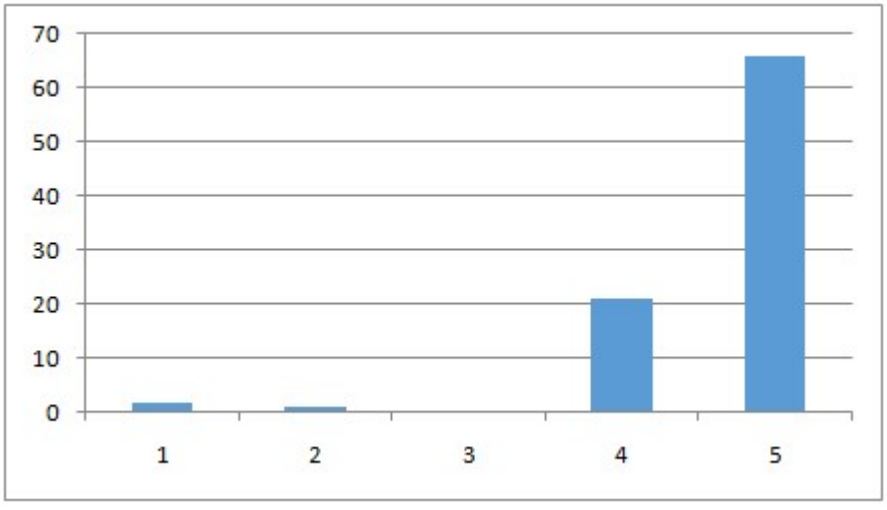
1. Your experience about this FIP.



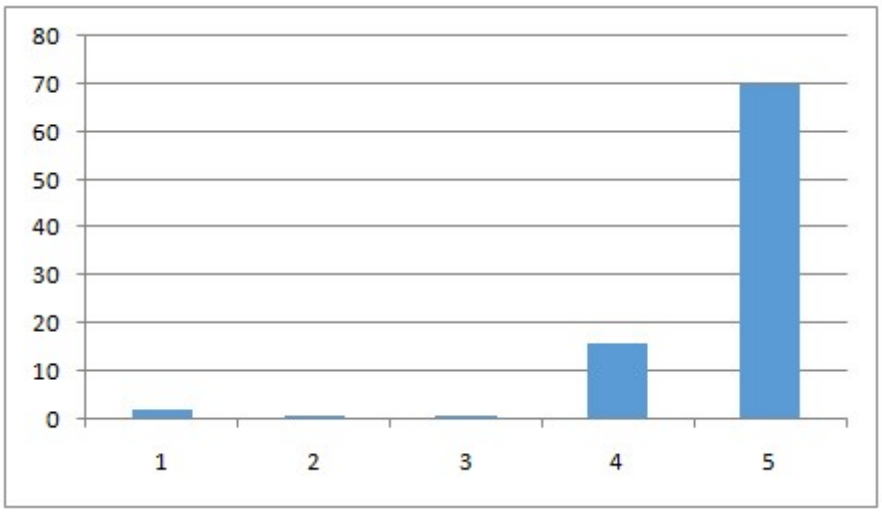
2. Is this FIP useful?



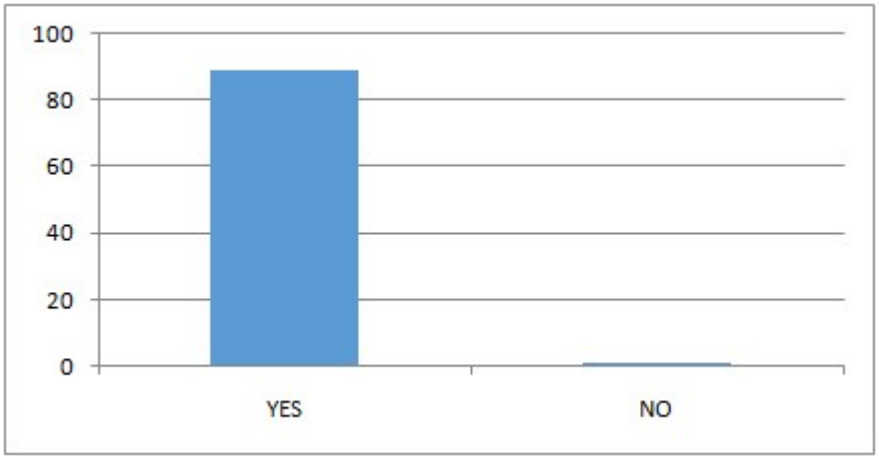
3. Relevancy of Topic with FIP.



4. About speakers.



5. In future you want to attend such FIP at SKIT, Jaipur



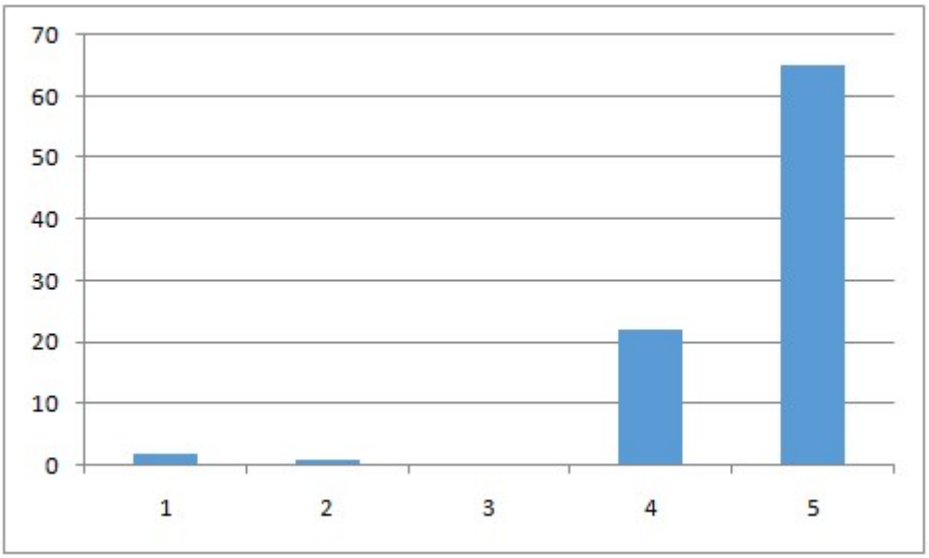
6. Topic that can be covered in next FIP related to this field.

AI and ML
MI
Robotics in Industry
ANYTHING RELATED TO ECE
Control systems
agriculture related recent technology
Wireless network
Robotics and AI
IoT
IOT
Power Quality management FACTS CONTROLLER, power electronics device
Recent Trends of Robotics
Awasome FIP
wireless networks
AI
AI

VLSI IN 4.O
Advance Robotics
VLSI in 4.O
Data Science
MI
AI
Robotic Process Automation
Hands on software alone with enough time
Drone
Biomedical robotics
Practical implementation on software
Any latest technologies, ProgLang., New S/w etc
Snesors
INDUSTRIAL MANAGEMENT
Computer Oraganaisation and Arch
PLC
Agricultural related
Advancements in Industrial Automation
Excellent inputs
Advanced plc
Advanced PLC
CFD
National Educational Policy 2022
Image Processing
Thermal engineering
Automation in manufacturing specific
Robotics
Blockchain
DRONE TECHNOLOGY
AI and ML
robotics
scheduling and flexibility aspects in automation
Advanced topics
Power Quality management
Advanced topics
About production related
Data analytics
IOT
Electric Vehicle
Industry 4.0
wireless networks
Research topic
Image Processing
iot
IOT based
Agriculture related
INDUSTRIAL ENGINEERING
Mechatronics
MANUFACTURING ASPECTMSPECIFICALLY
Manufacturing related
programming of CNC
Automation working

Sensors
Data Science
Advvances in robotics
optical fibre
Industry oriented topics
Automation
IoT
automatic control
Recent Trends
Latest technology in day to day life.

7. Overall experience



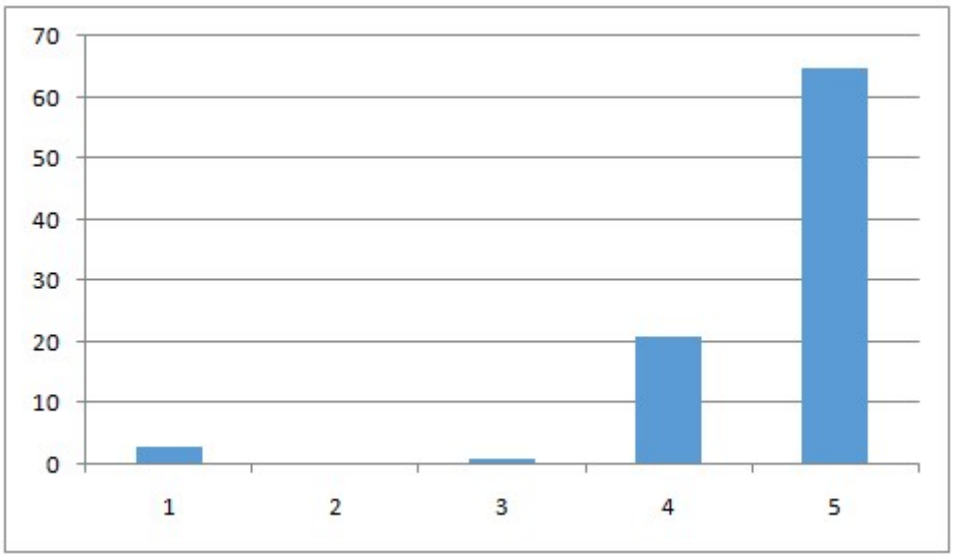
8. Knowledge gained by the course

Very Good
AI
Good
YSE
Good
good
ya
Immense
informative knowledge gained from this course
UHV
Excellent
Very good,, Idea about different Robotics area
yes
current Trends of Robotics and Automation
Emerging trends
Yes
everything
Lot
Concepts
Good

Yes
Robotics related advancement
Yes
Informative Sessio
Ai
Robotics
About Automations
Updation in the field of upcoming technologies with software in all fields
Very good
Good
Good
More knowledge gained
Robots and allied domain knowledge
Knowledgeable
YES
came to know abt various terms in RObotation andnautomation
Good
Ya
Research aspects in Robotics
Excellent
Yes
Yes
Good
Educational rules
Activities with robotic sets contribute to the learning of individuals' robot building, algorithmic thinking, collaborative work, creativity.
Good
Yes
Good
Robotics
LEARNT ABOUT ROBO TECHNOLOGY
Very Good
yes
learnt basics and technical aspects of automation and robotics
Yes
Very good
Yes
Yes
Good
Robotics,automation,iot,NEP,AI
Extraordinary
yes
More
immense
Yes
Yes
good
Content related to Robotics
Ya
Yes
Yes
YES

yes
About Robotics
Excellent
Excellence
Good
All
Good
Good
Update with latest trends in robotics and automation
Technical aspects of robotics
Role of robots in various fields
useful
Gained unknown content
The expert sessions covered in this course was very informative.This course enlightened the participants with upcoming technologies.

9. General arrangements



10. Suggestions.

Good
VERY INFORMATIVE FIP
Overall good
if any fdp or fip conducted pls informthroug emailor whats app
when you will be conducting session on any program so please taking time in evening because whole days busy in college schedule
Excellent
Overall session is very good
well organized and eminent speakers
Very Informative FIPG
Informative
Good
Excellent
Hands on
Good

Organized well
good
Course material can be shared in our classroom group. So that it will be beneficial for long term.
More interactive sessions
NICE FIP
good keep it up
Overall good experience
Nice and useful sessions
Excellent
New content learned
New topic learned
Good
Do FIP's more like this
More IIT facilities as speaker as well as from outside India also
organizers really deserves a great applause.
Excellent session
More such FIP shoul be conducted
Good
Good
Do more FIPs like this.
more interactive sessions
Very good FIP
Nice
Overall good
Good
Excellent
Nice
video presentation
Very informative
This FDP was very informative for all participants.