

www.iipeonline.org

IIPE MANUFACTURING NEWS

Editor-in-chief Dr. K. Gopalakrishnan

Monthly Newsletter of the Indian Institution of Production Engineers

Editor: Dr. M. S. Ganesha Prasad, Principal, Sai Vidya Institute of Technology, Bangalore

Prof. R. M. Vasagam, National Chairman, IIPE

Dr. Wooday P Krishna, National President, IIPE

Vol. 10 Issue: 01 Ann

Annual Subscription: Rs. 100 January 2025

Dr. Prakasha Rao PJVKS Conferred with Honorary Doctorate and Felicitated at Alliance University



L to R: Prof. Athira, Alliance University, Dr. K. Gopalakrishnan, Project Director, 75 Students' Satellites Consortium Mission and National Secretary, IIPE, Dr. Prakasha Rao PJVKS, Former Director, Space Infrastructure Program Office (SIPO), ISRO-HQ and IN-SPACe, Dr. Priestly Shan Boaz, Vice Chancellor, Alliance University, Ms. Inbisat Yousuf Nath, UNISEC India Students Representative and Mr. Sainath Vamshi, UNISEC India

On 22 Dec 2024 at 13th Convocation of Alliance University, Bangalore, Our Respected Scientist of ISRO, **Shri. Prakasha Rao PJVKS** (Former Director, SIPO, ISRO-HQ) also has been conferred with Honorary Doctorate! IIPE Congratulates **Dr. Priestly Shan Boaz** for being appointed as Vice Chancellor of Alliance University, it is well deserved recognition for his contributions to Research and Higher Education System in India and Abroad!

Heartfelt Congratulations to Dr. Priestly Shan Boaz Vice Chancellor, Alliance University! Well Deserved Recognition!!









www.iipeonline.org

Interactions on Progress of 75 Students' Satellites Mission Projects



Puneeth Satellite Review: Shri Shanmugam S, Manager, ITCA, Dr. R. T. Venkatesha, Scientist-SE, KSTePS, Dr. K. Gopalakrishnan, Secretary General, ITCA, Project Director, 75 Students' Satellite Mission, Shri Sadashiva Prabhu B, IAS, Director, Dept. of Science & Technology, GoK/MD, KSTePS, Dr. L.V. Muralikrishna Reddy, President, ITCA and Shri Srinivas Durvasula, Program Manager, ITCA



Ramaiah Satellite Review: Padma Bhushan & Padma Shri Dr. A. Sivathanu Pillai, Mentor of 75 Students' Satellite Mission has reviewed the progress of the Ramaiah Satellite Team Dr. M Sivapragasam, Dr. Varun D, Dr. Praveen L S, ITCA Team: Dr. K. Gopalakrishnan, Secretary General, ITCA, Project Director, 75 Students' Satellite Mission, Dr. L.V. Muralikrishna Reddy, President, ITCA, Shri Srinivas Durvasula, Program Manager, ITCA and Shri Shanmugam S, Manager, ITCA

www.iipeonline.org

UNISEC India Team at ISRO Satish Dhawan Space Center, Sriharikota



UNISEC India Team at India's Spaceport Satish Dhawan Space Center-ISRO Sriharikota with USA and German Scientists on 11 Nov 2024! Also held interactions with ISRO Scientists/Visited Mission Control Centre and Satellites Launch Pads! It was the Wonderful Experience!





ERODE SENGUNTHAR ENGINEERING COLLEGE



(AUTONOMOUS) Perundurai, Erode - 638 057

Department of Mechanical Engineering & Institutions Innovation Council (IIC)

Inauguration of Mechanical Engineering Association & Guest Lecture on

Career Opportunities in Armed Forces

Mechanical Engineering Association was inaugurated by **Commander Rige Bagra**, Officer in-charge, Service Training Team, Indian Naval Academy, Ezhimala on 05-09-2024, 11.30 am at Seminar Hall, Mechanical Engineering Block. After inauguration, Guest Lecture given on Career Opportunities in Armed Forces and also he interacted with our Mechanical students. Chief Guest was graduated in Mechanical Engineering-2011 passed out from Erode Sengunthar Engineering College (ESEC).





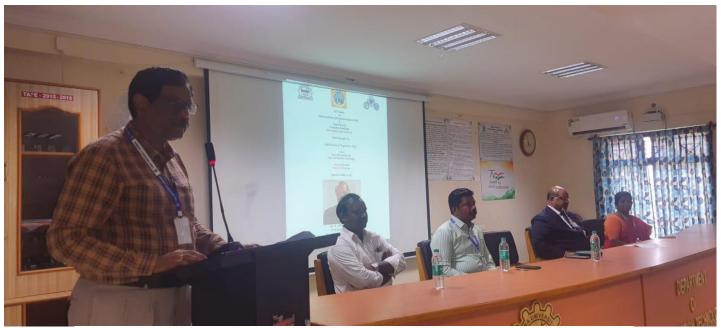
Commander Rige Bagra, Officer in-charge, Service Training Team, Indian Naval Academy, Ezhimala. Alumni of Dept of Mech Engg, ESEC (2007-11 Batch)





I

Engineers Day Celebrations at MIT, Anna University Jointly with IIPE Chapter







On the occasion of Engineers Day Celebrations at the Department of Production Technology, MIT Campus, Anna University, Chennai, Tamilnadu on 16.09.2024 followed by the special lecture by Mr. P. Abdul Kadhar, Managing Director, AK Properties & Pranam Leathers, Chennai. Dr. K. Ravichandran, Dean (MIT Campus), Dr. J. Jancirani, HOD/Production Technology, Dr. A. Sidharthan, Professor & former HOD and Dr.G.B.Bhaskar, Professor & Convenor (IIPE-MIT Chapter) were chaired the dais. Mr. P. Abdul Kadhar has delivered the motivational talk to the students and faculty members.

THE ASSOCIATION OF PRODUCTION ENGINEERS TAPE INAUGURATION — IIPE STUDENT CHAPTER At MIT, ANNA UNIVERSITY

The Department of Production Engineering is thrilled to announce the successful inauguration of **TAPE** (The Association of Production Engineers) on 09/10/2024 and the guests, Mr. S. Ganesh (Chief Guest), Mr. R.R. Clement IRS (Guest of Honor). This momentous occasion marked the beginning of a new era for the students, who are eager to explore the vast opportunities within the field of production engineering. TAPE was formed to cultivate an environment that fosters innovation, technical skills, leadership, and collaboration among students, all while connecting them to industry trends and advancements.

The event held at MIT campus Production Department SRK Hall, was attended by esteemed faculty members, industry professionals, and a large gathering of students from both the undergraduate and postgraduate streams. The inauguration of TAPE reflects the department's commitment to providing students with a robust platform to grow not only academically but also professionally, empowering them to become future leaders in the field of production engineering.

A highlight of the event was the **distribution of membership certificates** for the **Indian Institute of Production Engineers (IIPE)**, an esteemed national-level body committed to advancing the standards of production and manufacturing engineering in India. A total of **74 new members**, consisting of students from B.E. 2nd year and M.E. 1st year, were officially welcomed into the IIPE family. This milestone formalized their entry into a professional network that will connect them with industry experts, mentors, and countless opportunities for career development. With this, all students in the department are now part of IIPE, further strengthening the academic-industry link.









The inauguration featured keynote addresses from senior faculty members, who underscored the importance of TAPE's role in bridging the gap between academic knowledge and realworld applications. They highlighted the various initiatives planned under TAPE's banner, including technical workshops, industry visits, quest lectures by leading engineers, and collaborative projects that will be undertaken in the coming months. These programs aim to ensure that students not only excel in their academic endeavours but also gain hands-on experience with modern tools, techniques, and industry practices. As we embark on this exciting new chapter, the entire community looks forward to seeing the remarkable contributions these young engineers will make. With the unwavering support of the IIPE, TAPE is well-positioned to become an integral part of the academic journey of these students, providing them with countless opportunities to gain the technical expertise, leadership skills, and professional network they need to excel in the competitive world of production engineering.





JANSONS INSTITUTE OF TECHNOLOGY

(Autonomous)

Accredited by NAAC 'A Grade' and ISO 9001: 2015 Certified Institution
Approved by AICTE and Affiliated to Anna University
Coimbatore – 641 659, Tamil Nadu, India.



Event Report

Title : "3D Digital Twin" - An Innovative Product Modelling Challenge

Venue (offline) : CAD Laboratory, JIT

Organised by : Indian Institute of Production Engineers

In association with : JIT- IIC & National Digital Library of India (NDLI) Club

0

https://www.facebook.com/photo/?fbid=980203153911630&set=a.522181053047178



https://www.instagram.com/p/DAsxaXQvzul/?utm_source=ig_web_copy_link



https://x.com/JIT_Offl/status/1842156170385211553/photo/1

Event Objective: The objective of the Technical Contest is exploring students towards the design software towards the Innovative product modelling for the Digital Twin

Event Summary: Prototyping is a draft version of a product or the overall design concept to users before investing time and money into development. A digital twin is a digital representation of a physical object, process, service or environment that behaves and looks like its counterpart in the real-world. A Digital Twin Prototype is a great way to ease communication between product developers. Using the Digital Twin Prototype provides the user with the opportunity to modify parameters and operating conditions of different components and allows observing the response of the entire system. During the design phase of a product, a digital twin allows representing the ideal version of the coming product using 3D models and simulations. A digital twin updated with real-time conditions of the physical product makes it possible to perform data analysis and run what-if scenarios for predictive maintenance. Based on the process, performance and operational data of both the physical and digital part of the product, the new insight can be feedback, through the digital twin, to improve the next generation in the product line. To explore students towards the design software for digital replica of an object in the physical world, a Technical Contest - "3D Digital Twin" - An Innovative Product Modelling Challenge was conducted for the Mechanical Engineering Students by the Indian Institution of Production Engineers (IIPE) in association with JIT-IIC and NDLI Club on Sep 28, 2024 from 09.30 AM onwards. In this Contest, the participants are provided with a finished component (Physical model) and they have to create a digital replica with mechanical design software. The event planned for a team (Maximum of three members) in the CAD Laboratory, JIT. Registration form was shared to all the students of mechanical engineering department and Interested students actively registered for the event. All the Participating teams are provided with a Vernier Calliper to measure the accurate and exact dimensions of the components. The participating teams were evaluated based on Product Modelling, Dimensioning and Presenting the modelled component. Based on the Scores obtained, the best performing teams were selected and honoured with Appreciation E-Certificate and all the participants are provided with an E-Certificate. Feedback form was shared to the participants; Participants felt that the contest was interesting and helpful to familiarize the mechanical design software and the related tools in making Innovative Digital Prototyping.

Event Outcomes: Students will be aware of the different tools and software used in the Industries to make the Innovative 3D Product design for manufacturing



Event Explanation to Participants by the IIPE Coordinator



Participating Team of the Contest "3D Digital Twin"





Participants Measuring the given physical Components

Modelling of the Digital Prototype in the Software





Participants Presenting the modelled component

Physical Component of the "3D Digital Twin" Contest



Inauguration of IIPE Chapter at Stella Mary's College of Engineering, Aruthenganvilai, Kanyakumari Dist



IIPE Chapter Inaugurated by Dr. R. Thirukkumaran on 26/11/2024 at Department of Mechanical Engineering, Stella Mary's College of Engineering, Aruthenganvilai, Azhikal Post, Kanyakumari District, 629202, Tamil Nadu, India.

The IIPE Professional Society Students Chapter Inauguration is a significant milestone that aims to inspire and empower students in the fields of industrial innovation and emerging technologies. The event will feature Dr. R. Thirukkumaran, M.E., Ph.D., Head of Research and Development (IoT) at SkillsDA-INGU's Knowledge Academy Pvt Ltd, Chennai, as the esteemed resource person.

Dr. R. Thirukkumaran, a recognized leader in the domains of IoT and Industry 4.0, will deliver an engaging session on "Smart Factories and Industry 4.0." The talk will cover the fundamental principles and applications of Industry 4.0 technologies, such as IoT, Artificial Intelligence, robotics, and big data analytics. He will shed light on how these advancements are revolutionizing traditional manufacturing processes, enabling smart factories to achieve higher efficiency, sustainability, and innovation.

The session will provide participants with practical insights into the transformative potential of Industry 4.0, highlighting its implications for the industrial sector and the role engineers will play in shaping the future of connected industries. Dr. Thirukkumaran's expertise will motivate students to explore cutting-edge solutions and equip themselves with the skills needed to thrive in a technology-driven world.

As part of this inaugural event, **Certificates of Student Membership** will be distributed to officially welcome new members into the IIPE Professional Society Students Chapter. These certificates symbolize the beginning of a journey into a community dedicated to excellence, innovation, and professional growth.

This event not only celebrates the establishment of the IIPE chapter but also sets the stage for a vibrant platform where students can network, exchange ideas, and gain exposure to advancements shaping the industrial landscape. It promises to be an enriching experience, inspiring future leaders to drive progress in smart manufacturing and Industry 4.0.

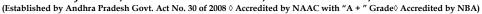


Student Chapter of

INDIAN INSTITUTE OF PRODUCTION ENGINEERS (IIPE)

Department of Mechanical Engineering

University College of Engineering Kakinada (Autonomous) JNTUK, KAKINADA - 533 003, Andhra Pradesh, India





EVENT - I

INAUGURATION OF CLUB APEX AND CLUB YUGTRONIX

An important milestone for the Department of Mechanical Engineering was reached on August 30, 2024, with the launch of Club Apex and YugTronix. This occasion served as a reminder of the department's dedication to encouraging students' creativity and technical proficiency.





I



Inauguration of CLUB APEX and YugTroniX Student Clubs

As the Chief Guest, **Dr. N. Mohan Rao, Principal** of the University College of Engineering Kakinada, JNTUK, graced the occasion. **Dr. Lingaraju Dumpala, HMED, UCEK, JNTU**K, gave a welcome address to kick off the program and emphasized the value of student organizations in developing technical abilities and teamwork. The remainder of the event was inspired by his speech.

Unveiling the club logos for YugTroniX and Club Apex was a major event highlight. This served as the official start of the two clubs' future initiatives. The clubs' vision and objective were mirrored in the lively and well-designed logos, which gave guests a sense of excitement about the prospects these platforms would offer.



Publication of CLUB APEX LOGO



The goals of Club Apex, which mostly concentrate on automotive engineering and creative projects like creating a go-kart, were explained in detail by **Mr. Sriram, President of Club Apex**. He underlined the club's dedication to improving students' practical understanding and giving them first-hand experience with vehicle design and manufacture. Additionally, he provided a schedule of the club's next events, which includes seminars, workshops, and live project demonstrations.



Publication of YugTroniX LOGO

In his speech, Mr. Surya, President of YugTroniX, emphasized the club's mission to advance robotics, automation, and advanced technology. He talked about their current initiatives, which include the creation of robotic arms, remote-controlled (RC) cars, and quadcopters. He also provided information about the club's future plans, which include workshops to give students advanced technical skills, intercollegiate competitions, and cooperative projects.







It offered a venue for communication, teamwork, and inspiration for students to work on creative projects. A bright future for Club Apex and YugTroniX began when the club presidents' addresses encouraged attendees to get involved in the clubs' projects. With the active participation of over 100 students, Faulty Coordinators, Teaching Staff, Non-Teaching Staff, and Student Coordinators, the event was a huge success.

EVENT - II: ACADEMIC VISIT TO GODAVARI GLOBAL UNIVERSITY, Rajamahendravaram, AP

On August 31, 2024, our students went to the AUTOMOBILE CLUB at Godavari Global University in Rajamahendravaram, Andhra Pradesh, to learn more about the club's programs, activities, and facilities with an emphasis on how they relate to mechanical engineering and automotive innovation.





Interaction session with Dr. V. Subrahmanyam, HEAD, Dept. of AE, GGU

The purpose of this tour was to increase the students' understanding and provide them with hands-on experience in research and projects linked to automobiles. It assists students in locating possible areas of cooperation or knowledge sharing throughout universities, allowing them to advance their proficiency in pertinent sectors.







Our students concentrated on the different tools, equipment, and resources that the Automobile Club has to offer during their visit. In order to assess how involvement in the club contributes to career development and industry readiness, they have gone through projects like vehicle prototypes, design innovations, or competitive participation (e.g., SAE Baja, Formula SAE). They have also learned about workshops or training sessions that are held for students to enhance practical skills, and they have interacted with team members to understand their roles, responsibilities, and collaborative efforts.

EVENT – III: Technical Quiz

On September 20, 2024, a technical quiz competition was held for second-year mechanical engineering students. The event's objectives were to assess and improve knowledge of important topics including engineering mechanics and mechanics of solids (MOS). These courses serve as the cornerstone of mechanical engineering, and the occasion gave students a special chance to review their fundamentals and investigate more complex approaches to problem-solving. Over 40 second-year students took the quiz. The senior fourth-year students carefully crafted the test, drawing on their background knowledge to craft a variety of difficult and concept-based questions.

EVENT – IV: Technical Game on Brain Teasers

For Mechanical Engineering students, a highly engaging and dynamic Brain Teasers technical game was organized on October 26, 2024. The carefully planned brainteaser exercises at the event were intended to assess attendees' capacity for critical thought, collaboration, and problem-solving. Almost 150 children from various school years eagerly took part in the activity.

Initiated IIPE J&K State Centre at NIT Srinagar

Congratulations to Chairman & Secretary of J&K State Centre of IIPE!



Dr Saad Parvez, Chairman, IIPE J&K State Centre
Associate Professor, Department of Mechanical Engineering
National Institute of Technology (NIT) Srinagar



Dr. Dinesh Kumar Rajendran, Secretary, IIPE J&K State Centre
Assistant Professor, Department of Mechanical Engineering
National Institute of Technology (NIT) Srinagar











Engineers Day 2024 Celebrated at MIT Campus of Anna University



Mr. P. Abdul Kathar

Engineers Day - 2024 Celebrations held on 16-09-2024 at 15:30 hrs at Prof. SRK Seminar Hall, MIT Campus with the Special Address by Mr. P. Abdul Kathar, (7th Batch of Production Technology, MIT, Chrompet) Managing Director, AK Properties & Pranam Leathers, which is organised by the Department of Production Technology, MIT, Anna University Chennai in Association with MIT Chapter of Indian Institution of Productions Engineers (IIPE).

UNISEC India Team Interactions with Eminent Scientists/Technocrats





Ms. Inbisat Yousuf Nath, UNISEC India Students' Representative Interacted with Padma Bhushan & Padma Shri Dr. A. Sivathanu Pillai,
Mentor of 75 Students' Satellite Mission at ITCA 75 Satellites Consortium Secretariat





UNISEC India Team with Padma Bhushan & Padma Shri Dr. A. Sivathanu Pillai and Padma Shri Dr. Mylswamy Annadurai





UNISEC India Team with Dr. Wooday P Krishna, National President, Indian Institution of Production Engineers (IIPE)

UNISEC India Team Interactions with Eminent Scientists and Visit to Integrated Foundry and Metal Casting Process of Making Sculptures





UNISEC India Team Interactions with Eminent Scientist of National Institute of Ocean Technology (NIOT) Dr. R. Venkatesan





UNISEC India Team Interactions with Eminent Scientist of ISRO Mr. V. Mahadevan, MPAD, Dr. Gopal Mugeraya, Former Director, NIT Agartalaand NIT Goa and Dr. Marie Wilson, Managing Director, Jeppiaar Institute of Technology, Sriperumpudur



UNISEC India Team Interactions with Eminent Scientists at IISc, Bangalore









UNISEC India Team Interactions with Eminent Scientist Prof. Jagadeesh Gopalan, IISc and Prof. Dwaraka Dasa, IISc, Bangalore













Indo-Southeast Asian SpaceTech Delegation

Singapore-Malaysia-Vietnam-Cambodia-Laos-Thailand <u>I 07</u>-18 December 2024



Dr. K. Gopalakrishnan
Project Director
75 Students Satellites Mission
Secretary General, ITCA/UNISEC India
Advisor (R&D), Kalvi Group/SIET/JIT/CIT



Nikhil Riyaz CEO, Hexeia Alumnus of SIET & R&D Team of Kalvi Group/CCCIR/CIT/JIT UNISEC India



Prof. Ashwin Reddy
Assistant Professor
Jeppiaar Institute of Technology
Alumnus of SIET& R&D Team of
Kalvi Group/CCCIR/CIT



Prof. Sainath Vamshi
Assistant Professor
Jeppiaar Institute of Technology
Alumnus of SIET & R&D Team of
Kalvi Group/CCCIR/CIT



Inbisat Yousuf Nath Research Associate R&D Team of Kalvi Group/ CCCIR/CIT/JIT/SIET UNISEC India

Indo-Southeast Asian Space Tech Delegation at Embassy of India at Hanoi, Vietnam











Interactions held at Center for Satellite Communication, College of Engineering, Universiti Teknologi MARA, Shah Alam, Malaysia on 12 Dec 2024



UNISEC India Team held Interactions at Smart City Emulator at SkillsDA Facilities at Chennai built with IIT Madras





I



JANSONS INSTITUTE OF TECHNOLOGY

(Autonomous)

Accredited by NAAC 'A Grade' and ISO 9001: 2015 Certified Institution
Approved by AICTE and Affiliated to Anna University
Coimbatore – 641 659, Tamil Nadu, India.



Event Report

Title : "THE MICROS - Views on Smallest Innovation"

Venue (offline) : Seminar Hall, JIT

Organised by : Indian Institute of Production Engineers

In association with : JIT- IIC & National Digital Library of India (NDLI) Club

Event Objective: The objective of the Technical Contest is to explore and highlight the transformative power of small-scale innovations across various fields of Industry. The event aims to inspire creativity, spark discussions, and showcase how the minor advancements can lead to significant societal and technological shifts and to drive future breakthroughs from these "micro" ideas.

Event Summary: Industrial Machine is the assembly of various machine elements to provide structure for the system and control its movement. Machines play a vital role in the different field and based on the need it's used in Micro Level Scale. Exploring and highlighting the transformative power of small-scale innovations across various industrial fields, a Technical Contest "THE MICROS - Views on Smallest Innovation" was conducted by the Indian Institution of Production Engineers (IIPE) in association with JIT-IIC and NDLI Club on Nov 09, 2024 at Seminar Hall. The event sought to inspire creativity, foster discussions, and provide a platform for networking and collaboration among professionals in innovationdriven fields. In this contest, the Participants (As a Team) Present a Technical Topic on the small-scale innovations or machine they came across in their life. Registration form was shared to all the students to brought together innovators, entrepreneurs, and thought leaders to showcase how seemingly minor advancements can lead to significant, transformative changes. The event began with an introduction to the contest, where participants were briefed on the objectives and expectations of the competition, focusing on the significance of small-scale innovations in various fields. Each team then presented their innovative machine designs, showcasing their projects and explaining the concepts behind them. Following the presentations, a questionnaire session allowed the audience to engage with the teams, asking questions to clarify technical details and design choices. This was followed by a discussion session where experts and participants shared insights and ideas for further development. The presentations were evaluated based on Objective / Purpose of the Innovation / Machine; Methods of Manufacturing / Process and Its Application with feedback provided to each team. The event concluded with a summary of the contest by the IIPE Faculty Coordinator, highlighting key takeaways and recognizing the teams for their contributions to the field of micro-innovation. Based on the Scores obtained, the best-performing teams will be selected and honoured with an Appreciation E-Certificate. Feedback form was shared to the participants; Participants felt that the contest was interesting and give good exploration of Machineries used for Industrial Field of Applications.













Event Outcomes: Students will be aware of the impact of small-scale innovations, inspire new ideas and collaborations, and showcase practical applications of these innovations. Attendees leave with fresh insights, potential partnerships, and a renewed appreciation for how even the smallest advancements can drive meaningful change across industries

Dr. K. Gopalakrishnan, National Secretary IIPE Awarded with World Productivity Science (WAPS) Fellowship, Canada for 2024



Congratulations to **Prof K Gopalakrishnan!**

We are pleased to announce that Prof K
Gopalakrishnan, a renowned technocrat, researcher,
and Secretary General of the Indian Technology
Congress Association (ITCA), has been awarded the
prestigious Fellowship of the World Academy of
Productivity Science (WAPS), Canada, for 2024.

This recognition acknowledges his significant contributions to productivity science and its

application in driving technology innovation and solutions.

As a productivity science expert, Prof Gopalakrishnan has been instrumental in promoting the adoption of cutting-edge technologies and innovative solutions to enhance economic growth, social well-being, and environmental sustainability. His work has had a profound impact on the industry and inspired a new generation of professionals and technoentrepreneurs.

This esteemed recognition places Prof Gopalakrishnan amongst an elite group of 500 global productivity science experts. Notable past recipients from India include top industrialists and entrepreneurs. ITCA founder fellows, such as former President of the Institution of Engineers (India) Dr LV Muralikrishna Reddy and educationist Dr Wooday P Krishna, are also part of this elite global association.

We extend our warmest congratulations to Prof Gopalakrishnan for this well-deserved recognition and thank everyone for their support and well-wishes.

Best regards,

Prof RM Vasagam
Padma Shri Recipient

Vice President, ITCA
Former Project Director, ISRO,
Former Vice Chancellor, Anna University



I







Cambridge Institute of Technology hosts cutting-edge metal 3D printing facility



(Left to right) Prakasam Anand, Country Head, EOS India; Dr Sanjay Barad, Scientist G at GTRE, DRDO; Dr P G Diwakar, ISRO Chair Professor, National Institute of Advanced Sciences; Dr K N Balasubramanya Murthy, Advisor, CIT; Dr V Narayan, Chairman, Indian Space Research Organisation; Nithin Mohan, CEO, CIT and Galactic-3D; Dr Shyamsunder M, former Principal Scientist, GE Research; Dr U Chandrasekhar, Vice Chancellor, Godavari Global University; Dr Indumathi G, Principal, CIT; Dr Nagesh B K, Scientist, GTRE, DRDO; and Dr Cyril Prasanna Raj P, Professor, Dept. of ECE, and Director, Cambrian Consultancy Center and Industrial Research.

n a move that promises to redefine the additive manufacturing landscape in the country, Galactic-3D, a leader in advanced 3D printing, recently inaugurated its cutting-edge metal 3D printing facility at Cambridge Institute of Technology (CIT). The state-of-the-art facility was inaugurated by Dr V Narayan, Chairman, Indian Space Research Organisation (ISRO), who was the chief guest at the event. Also present were Dr Arumugam M, Deputy Director, Liquid Propulsion Systems Centre, ISRO; Dr P G Diwakar, Chair Professor National Institute of DH Advanced Studies and Dr Sanjay Barad, Scientist G, DRDO. With its latest Metal 3D printing technology, the new facility will support key industries such as aerospace, healthcare,

Prakasam Anand, Country Head, EOS GmbH India, Nithin Mohan, CEO, Galactic-3D and Cambridge Institute of Technology announced a strategic partnership between them to drive the future of additive manufacturing in India. By bringing in the cutting-edge additive manufacturing technologies, this strategic partnership is expected to alter and elevate the country's position in precision manufacturing at the global level.

automotive and defence.

"We are extremely happy to

Advancements in additive manufacturing, especially in the metal printing space, are crucial for ISRO's mission to develop cutting-edge technologies for space exploration. This facility will play a key role in accelerating innovation across industries.

Dr V Narayan
Chairman
Indian Space Research
Organisation

have forged this partnership with EOS GmbH India. Together we aim to drive the innovation in the field of additive manufacturing, both in India and across the globe", said Nithin

Mohan.
Sharing his
happiness over the
collaboration, Prakasam
Anand stated, "We are excited
to bring our global expertise in
additive manufacturing to

India through this partnership

Altering the landscape

with Galactic-3D".

The new facility inaugurated by Galactic-3D is incidentally more than just a technical upgrade as it is set to alter the future of precision manufacturing in India. The facility incorporates rapid prototyping, custom manufacturing along with full scale production capabilities to forge ahead into the future of additive manufacturing. This is made possible by the access to

cutting-edge technology combined with the use materials such as titanium, stainless steel, aluminium and nickel alloys, where every phase of production comes with an uncompromising emphasis on sustainability and quality assurance.

Leveraging for space exploration

Dr Narayanan spoke about the significance of additive manufacturing in the future of space exploration. "The advancements in additive manufacturing, especially in the metal printing space, are crucial for ISRO's mission to develop cutting-edge technologies for space exploration. This facility will play a key role in accelerating innovation across industries," he said.

Dr Arumugam and Dr Sanjay Barad shared their thoughts on the importance of the increasing role of 3D printing in aerospace and defence sectors where it is being used for rapid prototyping and production of critical components.

D K Mohan, Chairman, Cambridge Group of Institutions, on fostering academia and industry collaborations, said, "At Cambridge Group, we are committed to supporting innovation and providing our students and industry partners with the best tools and technologies to succeed".

Curated by DH Brandspot







Felicitation of Jury Panel of IN-SPACe CanSat India Students' Competition Organised by Astronautical Society of India/ISRO/NSIL





On 10 Jan 2025 AN, CanSat India Competitions Review of Jury Board has been Felicitated and Presented with Chandrayaan 3 with Rover Memento to all Jury Panel members including Dr. Prakasha Rao PJVKS and Dr. K. Gopalkrishnan, Project director, 75 Students Satellites Mission, Secretary General, UNISEC India and National Secretary, IIPE

www.iipeonline.org

Unlimited Opportunities with UNISEC India for EEIs/HEIs in Space Technology

Innovative Indigenous Development of Satellite Subsystems:





















The Road Less Travelled...Opportunities are Unlimited...Unexplored Possibilities...

Dr.M.C.Sudhakar, Hon'ble Higher Education Minister, Govt of Karnataka has visited Satellite Centre at CIT, looks on 1U Satellite



Indian Team has been Selected for 9th Mission Idea Contest to the Moon to be held at Stellenbosch University, Cape Town, South Africa

Team from India, Consist of Members from CIT, SIET, JIT, CUK are Mentored by Indian Technology Congress Association-75 Students' Statellites Mission has been shortisted in TOP 10 for Find Round of International "9"h Mission Idea Contest (MIC) to the Moon" of University Space Engineering Consortium (UNISEC) Global, Japan to be held at South Africa during 27-29 Nov 2024 at 10"h UNISEC Global Meeting! (https://www.spacemic.net/) https://www.unissec-global.org/meeting/10.html



Dr. K. Gopalakriehnan ITCA/Project Director, 75 Satellites Mission GC Member, SIET



savana Savanth Inbisat Yousuf umnus of SIET, Research Scientist is Mellon University UNISEC Ind



Sainath Vamehi, Alumrus, Sri Shakthi Institute of





Mentored by Indian Technology Congress Association-75 Students' Satellites Consortium Mission
Mational Central University and University of Technology, Taywan



Major Achievements:













TOP 3 in Talwan International Missions fea Constets on CubeSat (TIMICO 2049), ortho; Organized by Talwan States A Genery (TASA) and the Department of Aerospace Engineering in Tamkang University during TAWAN International Assembly of Space Science, Technology, and Industry (TAST) 2043; 30 Nov. 40 Dec., 2022 at Analysis of Engineering Content, Talwan Charles Intelligence (Table 2044) 36 Nov. 40 Dec., 2022 at Analysis of Engineering Content, Talwan Charles Intelligence (Table 2044) 2043 (1945) 20

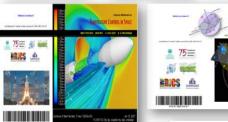
Team from India, Mentored by Indian Technology Congress Association 75 Satellites Mission has been shortlisted in **TOP 10** for Final Round of International **19** Mission Idea Contest (MIC) to the Illinoin' of University Space Enjoyeering Consortium (MISEC) Global, Japan to be held at South Africa during 72 7-27 Nov 2024 at 10 MISEC Global Meeting! (https://www.spacemic.net/) https://www.unisec-global.org/meeting10.html



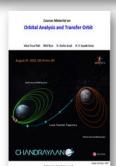












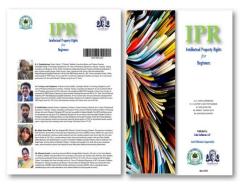
Publications with ISBN...













Patent Application No./ Date of Filing	Patent Filed/ Invention Title	Filing Date (Day/Month/Year)	Patent Journal No./ Publication Date/ Page No.	Inventors
202441060785	System, Design, Development and Method of Planning Cube Satellite Constellation Over Equatorial Region for Earth Observations	12/08/2024	The Patent Office Journal No. 04/2024 Dated 23/08/2024 Page No. 74538	Ms. Inbisat Yousuf Nath Dr. Khalid Sultan Dr. Debanjan Bose Mr. Nikhil Riyaz Dr. L. V. Muralikrishna Reddy Dr. K. Gopalakrishnan
202341081278 Filed on 24/11/2023	System, Design, Development and Orbital Analysis Using Smart Virtual Tools of 3D Printed CubeSat Structure for Class Room 1U CubeSat and Pocket Cube Satelliles			The Patent Office Journal No. 51/2023 Dt 22/12/2023 Page No. 91978
202341081275 Filed on 24/11/2023	Novel System, Design, Development and Analysis of 1U CubeSat Structure Suitable for LEO and Class Room Satelilles			The Patent Office Journal No. 51/2023 Dt 22/12/2023 Page No. 91975
202341081279 Filed on 24/11/2023	System, Design, Development and Analysis of 3D Printed 1U CubeSat Structure for Class Room Satellities			The Patent Office Journal No. 51/2023 Dt 22/12/2023 Page No. 91979







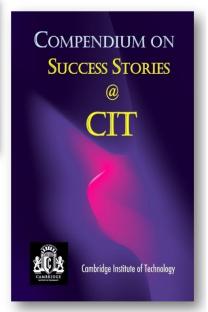












Unlimited Opprtunities to Explore with ISRO's Eminent Scientists... Indian Institue of Astrophysics/Space Tech Industries in India/Abroad



Interactions with SDSC-ISRO Scientist, Mr. Gokul at Sriharikota. He is also the State secretary, IEI, Tamil Nadu State Centre

National Space Day Celebrations at NIT Srinagar, Kashmir

National Space Day Celebrated at NIT Srinagar









Space Tech Events...

Greater Kashmir

NIT Srinagar commemorates first National Space Day

In his key message, Director NIT Srinagar, Prof A Ravinder Nath highlighted the a

















8th Bangalore Expo... Interactions with Roscosmos, Russia



Inauguration of UNISEC India Chapter & WCRC Chapter at Kalvi Group of Schools at Madurai



Space Tech Lab and Satellite Ground Station on Wheels





IIPE Chapters interested in Launching Their Own Satellites or to establish the UNISEC India Chapter at Their Institutions can contact: Dr. K. Gopalakrishnan, National Secretary, IIPE at profgoki@yahoo.com or M: 98451 73730

India-Israel Partnership

- Innovation, Robust Technology Base, Disruptive Technologies
- Academic Research to Products and Solutions
- Approach to Outreach Educational Programmes Industry & Institute
- Mastered in Space Technology
- Strong in Communication, Observation Science and EducationInternational Co-operation, Bilateral Agreements with India including Student
- Exchange Programmes and Joint Projects
- Funds Grants, Soft Loans etc

BENEFITS OF

How Institutions Can Engage

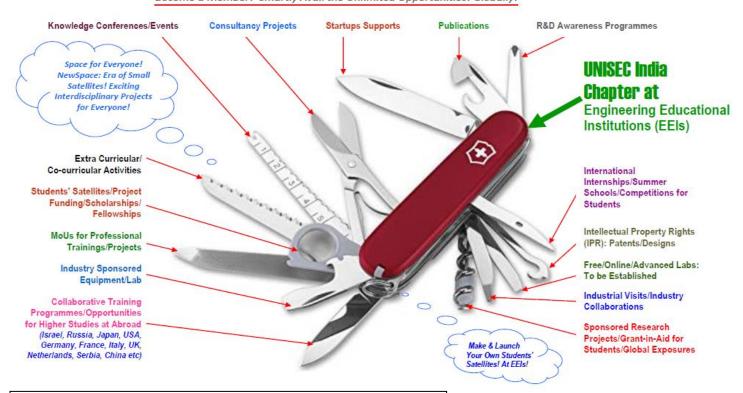
- Build Strong "Space Technology" Competencies
- Hands on Development Experience- Students and Faculty Members
- More Industry Interaction (Real Time)
- State-of-the-art Technology Interventions
- Create New Job, Start-ups and Incubation facilities
- Nurture Future Space Engineers/Scientists
- Technology Demonstration S&T Research
- Support Education Outreach
- Make Students Future Career Ready

UNISEC India: Secretariat @4th Floor,#3, First Main, BDA Layout, Kodihalli, HAL 2nd Stage, Bengaluru – 560008, Karnataka, India; Contact Info: +91 80 6559 2501, +91 80 4850 8380; Website: www.unisec-india.in



CHAPTER AT EELS

Become a Member! Smartly Avail the Unlimited Opportunities! Globally!



Printing and Published by: Indian Institution of Production Engineers, NHQ, # 117, 3rd Main, 3rd Cross, BEML Layout, Basaveswara Nagar, Bengaluru-560079