Industry Academia Conclave 2020

IIT PALAKKAD

Index

Overview

The second edition of Industry Academia Conclave was conducted on August 14th, 2020. Due to the COVID19 pandemic of 2020, this year's IAC was conducted completely in a virtual mode, surely a new experience for both the speakers and the audience.

With multiple events including two keynotes, a panel discussion and interactions with delegates for each branch, IAC 2020 was held in two sessions: a morning session and an afternoon session. All sessions saw great participation, both from the student and faculty side.

Presidential Address

After the welcome address was delivered by Ms. Soumya G Rajan, Assistant Registrar, the event kicked off with the presidential address by the Director, Prof. P.B. Sunil Kumar, providing an overview of the developments of IIT Palakkad and how the institute has grown from the time the first IAC was conducted. After sharing the statistics of the placements and internships offered to the students of IIT Palakkad, the Director also announced the introduction of several new programmes that will be starting this year, namely M.Tech programmes in Data Science, System-on Chip Design, Computing and Mathematics, Power System and Power Electronics and also M.Sc in Mathematics. He asserted that the institute will be striving towards developing its Research and Incubation Initiatives, and Facilities. A new Technology Incubation Hub on intelligent collaborative systems is being set up in collaboration with IIT Bombay and IIT Kanpur and a Startup and Technology Incubation Centre is going to be set up to facilitate incubation and startup initiatives. Central research facilities, like CIF-CMFF, CFMM are currently functioning and in addition, the institute is nucleating research centres and laboratories, like the Advanced VLSI and System Architecture Laboratory, Centre for Computational Imaging and the Physical and Chemical Biology Laboratory, which will join along with the already established Centre for Research and Education in Data Science (CREDS), which aims to expand in the future.

The Director was also happy to inform about the active response by the institute community towards tackling COVID-19, and in collaboration with multiple other organisations including Sree Chithra Institute for Medical Sciences and Technology, Trivandrum and Kooper Medical Technology Pvt. Ltd. Palakkad. (A brief report on the same has been prepared in our Special Edition and can be accessed at this link)

The address concluded with the reminder that the IAC is very important, not only for the core branches, but also to highlight the importance of interdisciplinary aspects in engineering.

The day was split into two sessions (morning and afternoon), conducted branch wise. The first session was common for both the Electrical and Computer Science and Engineering departments. Each session started with a keynote address. In the afternoon session, this was followed by a panel discussion, where entrepreneurship was the focus.

Keynote Speech

Morning session

The first keynote speaker was Dr. K Subramanian, Executive director, R&D department, Powergear Limited. An alumni of IIT Madras and with experience working at companies such as McKinsey & Co and General Electric in the USA, he holds over 50 patents and has won many awards. The primary focus of the speech was on 'Performing research of relevance to the real world in educational institutions'. He explained what industrial research and development is through 'mantras', hoping to bridge the gap between academic research and finding solutions for the problems that exist. His 'mantras' included "thinking in reverse", "multidisciplinary thinking", "product oriented innovation" and finally "making a business out of an innovation".

Dr. Subramanian also gave a brief description about the technology ecosystem and how the educational institutions, government R&D organizations and industries join hands to perform research. This is done by having incubation centres, startups, through contract research and sectors that benefit from the industrial R&D. He pointed out that there are major gaps between academia and the industrial R&D and how these gaps can be bridged by promoting collaborative research between the academic institutions and industries with proper mentoring.

Afternoon session

The afternoon session started with the second keynote address of this year's event by Mr. Nagaraja Prakasam, Founder Chairman of Native Lead. He is a versatile and passionate leader, who has been successful in all his ventures as an entrepreneur, investor and motivational speaker.

Starting his talk by addressing the current crises the world is undergoing, Mr. Nagaraja talked about an entrepreneur's ability to turn a crisis into an opportunity, by using hindrances as a pivot. He emphasized on the current needs of the world: healthcare, essentials and improving skilled labour.

The need for repurposing traditional concepts and ideas according to changing times was mentioned, especially with respect to healthcare. He gave examples of various entrepreneurs who repurposed existing systems to reap profit in their respective areas. The session was open to questions which enabled it to become more engaging and interesting. He told a truly inspirational story about how an IIT-M startup rose to the level of competing with tech giants including Google. Following a brief interaction with the audience, Mr. Nagaraja exposed the bitter truth, which is that we lose our sensitivity and curiosity as we grow up. He stressed upon turning a problem into an opportunity, which requires the best use of our senses and curiosity. Mr. Nagaraja then went on to talk about applying technology and expertise from various domains so as to ensure scalability of ventures. He provided the audience with innovative and intriguing concepts in various sectors and gave real life examples to motivate them.

Mr. Nagaraja Prakasam delivering his keynote speech in the afternoon session.

Dr. K Subramanian delivering his keynote speech in the morning session.

Panel Discussion

After a wonderful keynote address by Mr. Nagaraja Prakasam on startups, we headed into a panel discussion moderated by Dr. Anand TNC and Dr. Vijay Muralidharan.

The panel consisted of :

- Mr. Vimal Kumar - *Juspay*
- Prof. Tom V Mathew - *IIT Pkd*
- Dr. Shanthanu Chakravarthy - *Mimyk*
- Dr. Ganesh Natarajan - *IIT Pkd*
- Dr. Bhargav Dave - *VisiLean Oy*
- Dr. Piyush P Kurur - *IIT Pkd*
- Mr. Rajeev Chandrasekharan - *Featherdyn*
- Dr. Arvind Ajoy - *IIT Pkd*

The discussion kicked off with a poll seeking the viewers' opinion on - " Does India need more entrepreneurs? ". There was an overwhelming response in favour of it. We briefly mention the takeaways from the discussions following.

- The need for startups to innovate is the key aspect that connects academia and startups. Thus, it is necessary for reputed educational institutions like the IITs to set up a culture of innovation and deep problem solving in India which at present is not prevalent. This ideology that grows in students gets its seeds planted during the bachelors and if not during bachelors, it would germinate in the future in students raised in such an environment.
- The success stories from other sister institutes like IITM Center for Innovation stand as a testimony and motivation for us (Hyperverge, Planys, Ather Energy). At present IIT Palakkad lacks a critical mass of students and trailblazers that set the tone for this. But with all the facilities available here at IIT Palakkad, it shouldn't be that far off. Additionally, the universities that are displaying much success have had hundreds of years of experience behind them and the whole process takes time to gain momentum.

- **Few other important personal opinions which were discussed were: 1) One must get fully immersed devoting all their skills, not just for the superficial name of a startup. 2) The whole process can be likened to a war. Gone are the days where companies were localized. In the case of internet startups, companies are forced to go global to stay relevant. Thus, there is a lot of pressure to make it big! 3) This necessitates genuine problem solving, and half-assed work will not cut it at global stages. 4) The whole process is about discovering one's potential and startups are much like jumping into the deeper side of the pool to learn to swim.**

- **Also, the fact that most engineers try to invent an application for their product and not invent a product for a particular well established application is a major reason for failures of startups. To an extent this can be solved by cultivating the habit to pick out the needs or the demands in society, understanding the requirements of the end users and building a product which is tuned to it.**

Soon, the discussion shifted gears from abstract to content specific conceptualization: What are the necessary ingredients for having an ecosystem of innovation, entrepreneurship and startup within IIT Palakkad?

- **An example of a model from IITB that allowed students to defer placements upto 2 years if they opt for a startup, proved to be successful. In a case study, around 40 odd students were granted this opportunity and none of them returned to avail the offer. This statement is an example that although startups are risky there are students who are interested in it and that youngsters are enthralled by these risks that are involved. There should be clear incentives or policies for faculty too to pursue a startup in their prime (presently faculty growth is mostly oriented around research->papers).**

- **Startups are interdisciplinary by nature. Working towards this, IIT Palakkad has started the OELP - Open Ended Lab/Project Course and C^2 (a center for innovation at IIT Palakkad). With well equipped facilities coming together, we are showing progress in the right direction. We also are planning to start a STIC (Startup and Technology Incubation center).**

A fruitful hour of Panel Discussion came to an end with the final set of discussions started with a second poll to the students : Do you aspire to be an entrepreneur in the future? and a good majority answered "yes". Here the discussion was centered around the topic employee vs employer (entrepreneur). Again the brief takeaways of the discussion following are mentioned below.

- The major difference in the life career of an entrepreneur and an employee in a company is that for an entrepreneur it revolves around making the top level decisions yourself without having people to validate it and being responsible for it. Thus, it is always important to see the bigger picture.

- A successful startup mostly has a founder in the two aspects: A technical founder and a business founder. In such a scenario, the respective founders can work independently in their areas of expertise.

- An important skill set for an entrepreneur could be broadly spoken of as the ability to look at products holistically, look at problems with a bigger picture and find the ability to monetize it, the basic skill of building or developing - hacking a prototype, being a team player (getting the team together and gelling them) are few important ones we should be looking at.
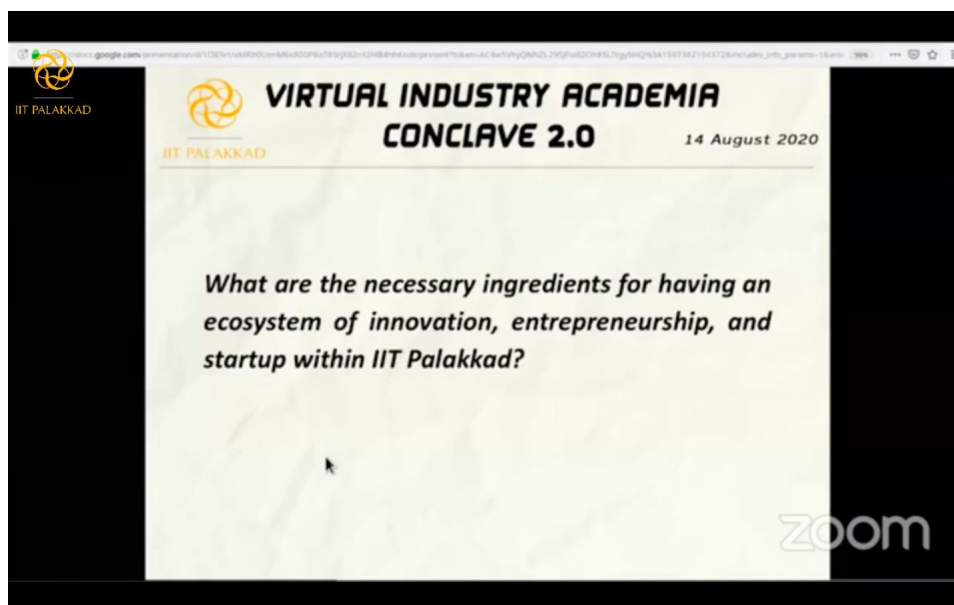
Interaction Session

Joint (CSE and EE)

The joint morning session, common for the CSE and EE departments, was kicked off by the speakers from LinkedIn, which was then followed by the speakers from Microsoft, NUS-Singtel Joint Cyber Security R&D lab, NEC Laboratories, A*STAR and TCS Innovations Lab. The speakers gave valuable insights into industry settings and research areas in the modern era.

Ms. Vrishti Gulati from LinkedIn gave a brief introduction to a few projects that were being undertaken there. Speaking from her own experiences as a data scientist, she discussed how to derive key insights in analysing data, and deciding the importance of some parameters over others in an example of how LinkedIn takes a look at post activity.

We then moved to the next session by *Mr. Radhakrishnan Srinivasan* from Microsoft, who was looking into applications of IoT in the power industry. He presented data from the survey conducted regarding IoT which helped emphasize on the challenges faced by IoT.

Mr. Dinil Mon Divakaran, NUS-Singtel joint cyber security Research & Development (R&D) lab, was the third speaker for this joint session. He addressed opportunities for R&D in the security domain and gave an overview of the research topics that his lab at NUS was currently working on and opportunities on working as interns on the same.

NEC Laboratories Europe then continued the session, where the speaker, *Mr. Bhushan Kotnis*, introduced the audience to graph theory applications and especially graph structured data, and text sequence generation. He also gave a brief overview of the activities of NEC and its research collaborations.

A*Star

Mr. Saurabh Aggarwal, representing A*STAR Singapore, was the next speaker and his talk gave an introduction about the company and his area of interest at IHPC (Institute of High Performance Computing). He focused on the use of past knowledge in future applications.

TCS

This session finally concluded with a presentation from TCS Innovations Lab by *Dr. Hemant Rath*, wherein he talked about the journey towards 5G and in the process, shed some light on the plethora of smart devices around us and about the world getting "smart" and addressing the issues to be tackled in the case of the Indian market.

Computer Science And Engineering Department

AMD

The CSE department had a separate session in the afternoon. *Ms. Anasua Bhowmik*, industry delegate from AMD India, talked about the recent developments in the company including one of the company's major products, ZEN CPU, the challenges faced in improving processor manufacturing and the future challenges which are in store for the upcoming generation of developers.

NEC

The next talk was a joint talk conducted by two speakers, *Mr. Bin Cheng* and *Mr. Naveen Singh Bisht*, from NEC laboratories, wherein the audience was given an overview about the background of IoT and the advancements that have been pursued in the development of an edge computing framing IoT named FogFlow System, developed by their team at NEC.

Fraunhofer IIS

Mr. Deepth Pilakeezhu, Scientific Researcher at and representing Fraunhofer IIS, presented next. Beginning with a brief history of the digital music industry, he went on to explain the impact of Fraunhofer IIS in the industry since its inception and various developments in current projects like music identification. He also discussed research fields and intern opportunities at Fraunhofer.

Flipkart

Dr. Shourya Roy, Senior Research Director at Flipkart, talked about data science at Flipkart and the company's evolution since its launch in 2007 to become India's biggest e-commerce platform. He talked about daily uses of data science methods at the company focusing on the company's search and recommender systems.

IBM

The audience was then addressed by *Dr. Ramasuri Narayanam* from IBM research, who gave a brief introduction of social network analysis and focused on the different centrality measures for ranking nodes in a social network. He then talked about limitations of centrality measures and how Game theory based centrality designs are better.

Peritus.ai

Dr. Goutham Tholpadi, from Peritus.ai, talked about data science from the industry perspective. His talk delivered an idea of what to expect from a career in data science and the key differences in working on data science as an employee compared to an academic researcher.

Juspay

Mr. Vimal Kumar, CEO of Juspay, threw light on his interesting understanding of how software is eating the world and its implications. He addressed the problems that have been rising in maintaining legacy software and how it hinders further newer development. In this context, he emphasised on the usefulness of functional programming methodologies that have been at the core of product development at JusPay and which helped in scaling the company to strive to become the AWS (Amazon Web Services) of Online payments.

Hasura

The last talk of the day was delivered by *Mr. Shahidh Muhammed*, a returning delegate from last year. A Senior Platform Engineer at Hasura who has been part of the company since its startup days, talked about how Hasura started out and its growth over the years. The talk was enlightening in how the company was able to function while maintaining its product completely open source and built in Haskell, being one of the earliest adopters in the software world for the same.

Electrical Engineering Department

National Instruments

The separate session for the Electrical Department started with a talk by *Dr. Ajay Gupta* and Mr. Abhishek, from National Instruments. Dr. Ajay Gupta worked as designer and developer of electronic systems and transmitters/receivers. The talk was about how our world is moving toward 5G and Over-The-Air testing of 5G NR and LiDAR Testing, which they are undertaking at National Instruments. Dr. Ajay Gupta talked about how the 5G NR will be tested On-The-Air and the manner in which all the components are connected. A video was presented to the audience to understand and visualize in a better manner. Mr. Abhishek Sharma, a Senior Advanced Software Engineer at National Instruments, presented the usage of LIDAR in autonomous vehicles. He discussed basic principles of usage of LIDAR and has shown various levels of autonomous vehicles. Both of the speakers shared their valuable opinions on how students should pursue their career based on their interests.

GE Digital

Following him, *Mr. Vipin Soni* from GE Digital presented the importance of grid software in various fields such as Energy Management, Wide Market Management, etc. He has vast experience in Project Delivery and Solution Engineering. He discussed various solutions to modernize the grid and the importance of making it more useful to the society. He emphasised on how a student should keep himself/herself open to industrial experience. He shared how objective oriented programming languages will be useful to students, especially for industrial applications.

CE+T Power

The next speaker, *Mr. Rathnakumar Devaraj* is an Industrial and Systems Engineer at CE+T power. Mr. Rathnakumar has great experience in R&D, Engineering Product-Project Management. He gave a brief introduction about the company and discussed the projects they are undertaking. He mentioned points of how their company makes customer friendly products and various uses of them. He also described the working procedure of power modules which are manufactured in their company. He described the SIERRA power module and its working. Many students interacted with Mr. Rathnakumar Devaraj and understood the different requirements of working the right way.

Ford Motor Company

The session was concluded by an interdisciplinary talk for the Mechanical Department and the Electrical Department. The speaker *Dr. Gaurav Pandey*, from Ford Motor Company, presented a talk about autonomous vehicles and the sensors used in them. He specializes in developing autonomous vehicles by algorithms, controllers and sensors which help humans to drive safely in harsh environments. He explained the working of sensors in different conditions and environments. He also explained velodyne laser sensors and how the data points are collected in the autonomous navigation systems. Using this system, the vehicle itself is able to identify the obstacles and he mentioned different cases where accidents can be avoided with the help of autonomous navigation systems. The talks were made very interactive by having Q&A segments at the end of each one.

Civil Engineering Department

Robert Bosch

For the Civil engineering department, the talks from the industry representatives began with *Dr. Caleb Ronald M*, Research lead at Robert Bosch. His research areas include Smart Mobility Systems (SMS) and Intelligent Transportation Systems (ITS) for Smart Cities. he discussed various next-gen IP Multimedia Systems (IMS), showcased different data generation platforms like Traffic simulation, and highlighted how AVs could learn from humans using imitation learning-based approaches.

L&T

Mr. Balasubramanian R, a senior consultant at Larsen & Toubro(L&T) explained what engineering is, what to expect, and the essential qualities of an engineer. He analyzed the evolution of employees from past to future and spoke about the disruption that the Construction Industry might undergo post-COVID. His talk also included an explanation about the BIM environment and the benefits of BIM.

ACT

The next talk was given by *Mr. Mohan Ramanathan*, Managing Director at Advanced Construction Technologies (ACT) Pvt Ltd, one of the Volvo Construction Equipment dealers in India. He primarily spoke about entrepreneurship and the challenges in the outside world for an entrepreneur, which includes managing cash flows, finding a business consultant within the budget, identifying vendors, and

customers in new segments. He also spoke about new business ideas that are being explored like Helical screw pile technology, the use of C&D waste by recycling, etc. Followed by Mr. Mohan, *Dr. Bhargav Dave* began his presentation. He is the CEO of VisiLean Oy, specializing in process improvement and lean implementation projects with expertise in Lean Construction and BIM. He focused on the construction process and the issues that we will face in the construction process. He also explained how lean can be implemented in construction and the issues that are faced.

Hindustan Colas

Mr. T K Subaash, Technical Head at Hindustan Colas Pvt. Ltd., talked about Bitumen and explained how the Bitumen industry will shape up in the future (Bitumen is used in road construction, as it is easy to produce, reusable, non-toxic, and a strong binder). He also explained the challenges we will have in engineering and how to approach those challenges.

L&T

The next talk was by *Dr. Aniket Kataware*. He is an engineering manager of the R&D department at L&T. He specializes in the fields of Construction Materials, Traffic Engineering, Transportation Engineering, and Highways. He gave an overview of the Transportation Industry. He then explained how the construction industry is working and how changes happened in terms of Digital Initiatives. He ended his presentation with an explanation about the smart approach and how a sustainable approach and smart approach can complement each other. With that, the morning session came to a close.

ITS

The afternoon session started with a talk by *Dr. Rajesh Krishnan*, CEO of ITS Planners and Engineers. He shed light on some ongoing and recently completed projects, done by IITPKD alumni and summer interns working there, and how they help ITS to grow. One of the projects was regarding how to identify/detect bus bunching and to prepare a bus schedule to minimize it. He instructed us (especially those who are in the pre-final year) to learn the basics of AI and ML and make our basics of traffic engineering strong if we are willing to work with ITS planners.

Ultratech

Dr. Ramachandra V was the next to present. He is the head of technical services at Ultra Tech Cement. He started by talking about Ultratech, as one of the biggest cement manufacturers and later explained how Ultratech is not just limited to cement manufacturing but the manufacture of a wide range of civil engineering materials and products as well. He also briefly discussed the recent changes in the manufacturing process, considering environmental sustainability, and threw light on the modification in the design of the kiln to reuse the heat that is produced in the initial phases of production. He also mentioned some qualities that a civil engineer should develop.

KEC Int.

Er. Hariharan, General manager at KEC International Ltd., started by explaining about Tendering and explained the Assumptions and risks in Project Tendering. There are 2 processes involved in Tendering--Estimation and identification (risks involved in a project), along with the cost of the project. He then gave an overview of KEC international limited and spoke about "risk management" & "Assumptions & risks" and concluded his talk with an explanation about the best practices followed in various areas of Industry like "Hedging" for "Currency risk", "Scope matrix" for "Project scope clarity".

RITES

The next person to present was *Mr. Arunkumar G*, Sr. Dy. General Manager in RITES Ltd, Ministry of Railways, India. He started by showing the railway bridges that his firm designed. He had also demonstrated a pedestrian walkway that was inspired by one of its kind in China. Finally, he emphasized the need for and importance of good civil engineering researchers to work on projects that involve new challenges.

Ports & Harbours

Mr. Rakesh Kadarkarai J. gave the final talk. He is currently working as Senior Engineering Manager of the Ports & Harbours, Heavy civil Infrastructure division at L&T. He narrated his journey to L&T and his contribution in the initial years of his work and mentioned the challenges that are involved in marine construction and some of the possible ways in which they managed to solve the issues in time. He also talked about qualities that one must develop to solve such problems in-situ and how one's approach should be.

Mechanical Engineering Department

Eaton

The series of talks for the Mechanical Engineering branch was kickstarted by *Dr. Vinaya Manvatkar*, Eaton. The topic of this talk was Additive Manufacturing and its types. Dr. Vinaya elaborated on metal additive manufacturing and its types. A brief description about the processes involved in metal printing was discussed. She laid emphasis on understanding the value chain of the metal additive manufacturing; how the industry complies to the standards set by the International Standards Organization (ISO) when choosing the materials used in the manufacturing of products. Dr. Vinaya also put to rest some myths about 3D printing. The talk ended with a note on how this industry plans to expand its applications by using new technologies and research on new methods to improve the manufacturing processes.

Ansys India

The next speaker was *Mr. Santhosh M*, Lead Technology Specialist, Ansys India, Bangalore. The talk was on the 'Role of numerical simulation in accelerating innovative product development and future trends'. Mr. Santhosh started the talk by explaining how industries need to focus on keeping up with the recent technological advances and cannot afford to not reduce the margin of error. He explained how the companies are driven to use simulation tools to check the reliability and performance of their products. Mr. Santhosh then talked about the different applications of simulation tools and then used the example of the digital prototype of the insulin pump to explain how the system is designed using Ansys(a simulation tool). The talk ended with a description about the well known companies/organizations that make use of Ansys for simulation.

Featherdyn

Following him was *Mr. Rajeev Chandrasekharan*, an aerospace engineer and a member of the aeronautical society of india. He is the co-founder and current CEO of Featherdyn. Mr. Rajeev started the talk with the idea behind Featherdyn. The company focuses on producing Unmanned Aerial Vehicles (UAV). He talked about the application of UAVs and how it could bring down costs as well as response for maritime deliveries, offshore maintenance operations and rescue operations by comparing it with the existing -

methods in industries. Some pointers on the different stages a start-up goes through such as Caution, Validation, Funding, Prototyping, proof of concept, pivot etc. were given. He also explained how Featherdyn tackled each stage and emerged as a successful start up. Mr. Rajeev also gave a brief description of the flight test of a UAV, conducted by Featherdyn at the IIT Palakkad campus. He ended the talk by giving details of Featherdyn's investors, advisors and sponsors and also the various awards and recognition that the company received.

TVS Motor Company

Following Mr. Rajeev, *Dr. Manish Garg*, senior Lead Engineer, Member R&D at TVS Motor Company, began his presentation. The talk revolved around the aerodynamic development of the TVS Apache RR310. Dr. Manish started the talk by introducing the various aspects of motorcycle aerodynamics and explained why aerodynamics is important in designing motorcycles. He explained the various stages of the aerodynamic development process and also the aerodynamic development tools such as wind tunnels, Computational Fluid Dynamics(CFD) analysis etc. He gave an overview of aerodynamic target setting and the CFD model setup of the TVS Apache RR310. He ended the talk by discussing how the final verification of the bike's performance is done in a wind tunnel and on roads.

BharatForge

Dr. Sanjeet Kumar, BharatForge Ltd, started the next talk by explaining the research opportunities available in the area of nanotechnology. He gave a brief overview of the development of different Nanocomposites and their applications, followed by a description of some light weight alloys and composites, their properties and the scope of lightweight composites in the aerospace, automotive and space defense industries There was also a brief description about the use of alloys in healthcare. The talk ended with a discussion about the various types of coatings, the methodologies and techniques used in coatings, morphologies of coated surfaces and the bioevaluation of coatings by providing some examples.

Swaaha

The next speaker, *Mr. Jwalant Shah*, Co-founder and Director of Swaaha, explained how his team helped the municipal corporation of Indore to manage waste in the city of Indore and how they offer their services to educational institutions and organizations to manage waste. He gave a description about how they modified vehicles by installing equipment that helps to compost the waste material.

The smart system in their mobile composting van was indigenously developed. So this way, the corporation doesn't need to collect garbage from homes and bring it to the common place for disposal. The vehicles themselves act as mobile disposal units.

Mimyk

Afternoon session started with *Dr. Shantanu Chakravarthy*, co-founder of Mimyk. He talked about Medical simulation especially in GI Endoscopy which is a new aspect to the Mechanical engineering field. His works are based on helping clinicians during endoscopy using a robotic VR simulator which is a state of the art technology. He mentioned that the motivation for this startup came from reading some books like Zero to One, shoe dog and Hard thing about hard things.

VSL Marine Tech.

The next speaker, *Dr. Pinaac Makwana*, M.I.Mar.E.S.T, Technical Director of VSL Marine Technology Pvt limited,started by giving some ideas about working in the marine environment and its future scopes. He explained about the infrastructure of ships such as hull structure, outfitting and machinery space. He then discussed main objectives like reduction of Carbon dioxide emission and continuous reduction of Daily Running Cost(DRC), and also addressed current innovations like air lubrication, hull shape optimization and efficiency improving appendages by some simulation techniques.

Ford

The series of talks for the Mechanical Engineering department concluded with a joined interactive session for both EE and ME presented by *Dr. Gaurav Pandey* from Ford. (Description in EE section)

Quips

IAC was very helpful because it informed us about the different opportunities available. It gave us a glimpse of the technologies being used in various leading industries and research labs. We were also able to get a clear overview of the technological needs of the future through interactions with various experts in different fields.
- *Raswanth Murugan, CSE, 3rd Year UG.*

There was a lot to gain from all of these sessions. All of the talks were interesting but i feel like the speakers had to rush through their presentations and the questions they were asked because of the tight schedule and I feel like giving them a little more time would've made the talks more fruitful and beneficial. Great experience overall still.
- *Shaurya Verma, EE, 3rd Year UG.*

Organising a virtual Industry Academia Conclave was very challenging because it is very very hard to get the attention of students because of not having it in person. Still I would say it went very well. We had very good participation. All the talks went smoothly but one thing which I felt lagged was the time constraint, everything seemed to be in a hurry. Like I personally was asking a question to an AMD executive and it was cut short due to time. Another thing I felt is that it is very hard to get a very powerful interaction virtually as compared to what we see in person. But overall I think that each and every student did a good job. IAC 2.0 was a hit. 😊
- *Vaibhav Jindal, CSE, 4th Year UG.*

The experienced and innovative minds of the delegates coupled with their willingness to impart us the knowledge made it a great experience for us. I especially enjoyed hearing about the journey of many startups. An important catch for me was that an engineer should also be able to identify the real world problems which could possibly have engineering solutions.
- *Abraham Aby, ME, 3rd Year UG.*

It was very informative and I personally got some information on what industries expect from a fresh graduate and why there is a difficulty in connecting the industry and academic experiences. Few speakers had talked about the projects that were developed which is very motivating for us, enabling us to think of solutions that are outside the box.
-*Putluri Yogitha Reddy, CE, 3rd Year UG.*

The Conclave was an eye opener and I came to know about many interesting innovations and research areas in the Construction and Transport Industries. I understood what the Industry expects from a Civil Engineering graduate and what changes I must make within myself.
-*Ajay S, CE, 3rd year UG.*

It was so interesting and helpful. We gained knowledge about the things that we are supposed to do after graduation. I acknowledge the opportunities, challenges and much more. I have come to the conclusion that IAC is a great platform where the industry delegates interact with the students and share their experiences in their fields.
-*Addula Nikhila Reddy, CE, 3rd Year UG.*

IAC 2.0 was a great experience and also a wonderful opportunity to get to know about the industries and their current ongoing works/projects etc. The whole event was conducted very professionally and smoothly. Sessions were very interesting and insightful . I felt like some speakers wanted to share more with us, so extending the time for shorter sessions next time would be great, it will be like adding a cherry on the top of the cake.
-*Pandravisam Shiva Santhosh, CSE, 4th Year UG.*

Summary

The event as a whole has been beneficial in exposing the students to the trending and upcoming areas in research and industry. The talks were made interactive through the question answer sessions at the end of each session. With a wide range of companies and research labs, and experts in their own areas representing these institutions, IAC 2.0 was truly exciting and engaging. The talks opened the doors to niche areas and covered different career paths that can be taken. The exposure provided to the students was great considering this is an event which is just in its second edition and was conducted virtually. We hope that future editions of IAC turn out to be even more successful, making it a distinctive feature of IIT Palakkad.

IAC Convener

Dr. Santha Kumar Mohan

IAC Organizers

Dr. Sovan Lal Das
Dr. Soumya G Rajan
Mr. Santhosh Kumar R
Mr. Samuel S
Dr. Anil Kumar M V
Mrs. Anuradha Shankar
Mr. Biju K V
Dr. Jobin Francis
Dr. Lakshmi Narasimhan Theagarajan
Dr. Mula V S Subrahmanyam
Dr. Samarjeet Chanda
Dr. Satyajit Das
Dr. Subhasis Mitra
Dr. Vivek Chaturvedi
Mr. K Murali Nair

Report Credits

We would like to thank Dr. Santha Kumar Mohan and Dr. Sovan Lal Das for valuable comments and suggestions for the report.

Content

Donald Rahul

Gregory Paul T

Gudi Ram Charan Deep

Irene Casmir

Madhav Ramesh

Milind Kasar

Navaneeth M Nambiar

Ruchi Rinkil

Shreya M P

Syed Umer Ali

Teena Roy

Design

Design Lead

Priyankka G R

Cover Page

https://www.freepik.com/vectors/brochure

The Fleet Street