

## SIR MVIT STUDENT SECTION





# ASME India Student Section Achievement Award

B. S. Abdur Rahman Crescent Institute of Science & Technology Government Engineering College KLS Gogte Institute of Technology

National Institute of Technology Netaji Subhas University of Technology Nirmala College of Engineering

Sir M. Visvesvaraya Institute of Technology

#### About ASME

The American Society of Mechanical Engineers (ASME) promotes the art, science & practice of multidisciplinary engineering and allied sciences around the globe. ASME is a not-for-profit membership organization that enables collaboration, knowledge sharing, career enrichment, and skill development across all engineering disciplines, toward a goal of helping the global engineering community develop solutions to benefit lives and livelihoods. Founded in 1880 by a small group of leading industrialists, ASME has grown through the decades to include more than 100,000 members in 140+ countries. Its headquarters is in New York, USA.

ASME is one of the oldest standards-developing organizations in America. ASME's standards are used in more than 100 countries and have been translated into numerous languages.

### **About ASME Sir MVIT Student Section**

ASME Student Section helps engineering students develop their professional identity and provides essential engagement opportunities by offering access to a wide range of activities and resources such as membership, competitions, scholarships, student sections and much more!. It gives chance for networking, relationship building and leadership development.

The student section of Sir M Visvesvaraya Institute of Technology was formed on 4<sup>th</sup> May 2020. The role of a student section is to organise and provide various activities of technical content, professional and personal value such as:

- Technical presentations.
- Skill development activities.
- Engineering and technical competitions.
- Volunteer and community services.
- Internship opportunities.
- Scholarship opportunities.
- Assisting in the transition from student to professional life.

### **ASME Student Section Advisor, Sir MVIT:**

### Dr K S Shanmukharadhya

Professor and Head
Department of Mechanical Engineering
Head - Student Affairs
Sir M. Visvesvaraya Institute of Technology
Bengaluru - 562157
ASME Membership Number - 000103201599

### Student Office Begrers 2023 - 2024

Position	Name	ASME	USN
		Membership No.	
Chair	Mr Srujan K	103695995	1MV20ME038
Vice Chair	Mr M S Praveen Sai	103696338	1MV20ME023
Secretary	Mr Rishikesh	103776819	1MV20ME033
Treasurer	Mr Rakesh N	103776814	1MV20ME032
Liaison	Mr Tejesh D	103776820	1MV21ME444

### Activities conducted during 2023 - 2024

### India Student Section Leadership – Online Meeting:

Mr Srujan K, Mr M S Praveen Sai, Mr Rishikesh, Mr Rakesh N and Mr Tejesh D attended the online meeting on 05.08.2023, from 5 pm – 6 pm. The topics discussed were membership drive, upcoming ASME programs, operating ASME student sections, ASME Honors.

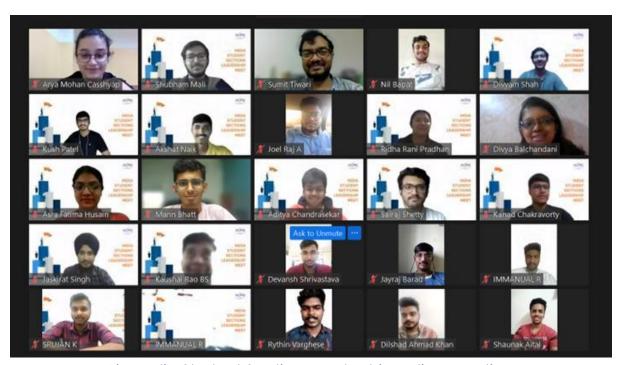


Fig. India Student Section Leadership online meeting

# Online Meeting with ASME Karnataka Section and ASME Sir MVIT Student Section on 20.06.2023

On 20.06.2023, an online meeting was conducted through Zoom platform. It was organized by ASME Karnataka Section. The purpose of the meeting was to foster collaboration, share knowledge, and explore opportunities for joint

initiatives between the student section and the professional section. The meeting was attended by Dr K S Shanmukharadhya, Student Section Advisor, Mr Srujan K, Chairman, Mr M. S. Praveen Sai, Vice Chairman, Mr Rishikesh, Secretary and Mr Tajesh D, Treasurer.

The office bearers of ASME Karnataka Section participated in the meeting were Mr Pralhad Kulkarni, Chairman, Mr Sundaresan Poovalingam, Vice Chairman, Ms Pranjali Joshi, Secretary, Mr Palaniyappan Kailasam, Treasurer, Mr Shino Ulahannan, Member-at-large, Dr D S Ramakrishna, Member-at-large and Dr Shubhashisa Sahoo, Member-at-large.

The meeting began with a warm welcome from both sections, expressing their enthusiasm for the collaboration. The importance of bridging the gap between academia and industry was highlighted, emphasizing the potential benefits for both parties.

### Presentation by ASME Karnataka Section:

A representative from the ASME Karnataka Section gave a presentation on the activities, initiatives, and achievements of the professional section. This included a brief overview of their technical events, conferences, and community outreach programs. The student section members actively participated in the presentation, asking questions and seeking guidance.

### Presentation by ASME Sir MVIT Student Section:

The ASME Sir MVIT Student Section presented their current projects, events, and activities. They shared information about the technical projects, workshops, and competitions organized by the student section. The professional section members provided valuable feedback and appreciated the students' efforts.



Discussion on Collaboration Opportunities: Both sections engaged in a fruitful discussion on potential areas of collaboration. The following opportunities were identified:

- a. **Knowledge Exchange**: Organizing joint workshops, seminars, and technical talks where professionals can share their expertise with the students and vice versa.
- b. **Mentorship Programs**: Establishing a mentorship program where professionals can guide and mentor students in their academic and career development.
- c. **Research Collaboration**: Exploring possibilities for joint research projects and encouraging interdisciplinary collaboration between students and professionals.
- d. **Joint Events**: Planning and executing collaborative events such as conferences, exhibitions, and competitions to promote innovation and knowledge sharing.

To move forward with the identified collaboration opportunities, both sections agreed to form a joint committee comprising representatives from each section. The meeting concluded with a positive outlook for future collaboration between the ASME Sir MVIT Student Section and the ASME Karnataka Section. Both parties expressed their commitment to fostering a strong relationship and working together to enhance the learning experience and professional development of students.

The meeting between ASME Sir MVIT Student Section and ASME Karnataka Section proved to be a successful platform for establishing connections, exchanging ideas, and fostering collaboration. By leveraging the expertise of the professional section and the enthusiasm of the student section, both groups can contribute to the growth and development of the engineering community while empowering future engineers.

### Student Office Bearers 2022 – 2023

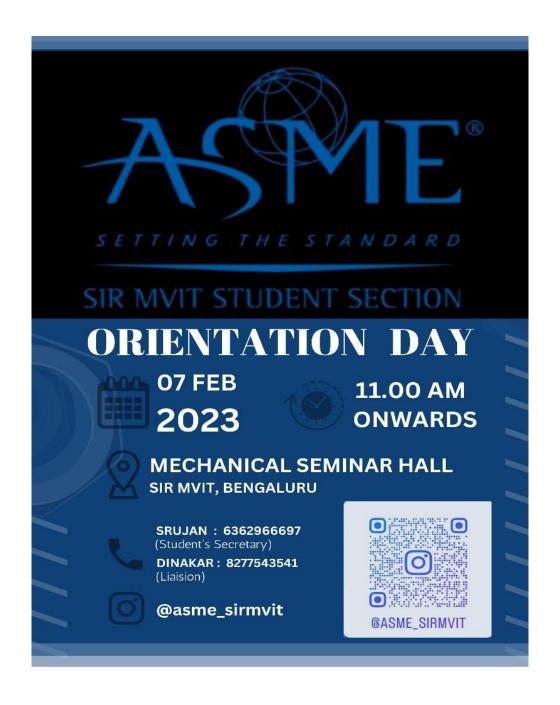
Position	Name	ASME Membership No.	USN
Chair	Mr Adnaan Tawheed Jameel	103605189	1MV19ME003
Vice Chair	Mr Arfan Tawheed Jameel	103605191	1MV19ME006
Secretary	Mr Srujan K	103695995	1MV20ME038
Treasurer	Mr B S Sri Sumukha	103695994	1MV19ME011
Liaison	Mr Dinakar M K	103696339	1MV19ME017

### Activities conducted during 2022 - 2023

**Orientation Day**: Organised orientation program on 07.02.2023. Dr K S Shanmukharadhya, ASME Student Section Advisor, Sir MVIT, addressed the gathering and highlighted the advantages of becoming ASME student member.



Fig. ASME Orientation program



# ASME GT India Chapter - Student Seminar | 14th October 2022 | SMVIT Bangalore

Organised a one day seminar on Gas Turbine Technologies - Fundamentals on 14.10.2022 under Student seminar Series by ASME GT India Group. Students and, faculty members from various institutions attended the seminar. The development of gas turbine technology and the present trends and research related aspects were highlighted in the seminar by all the experts. Certificates were issued to all the participants from ASME



### The following are the topics discussed by the experts in the seminar:

- Dr Shraman N Goswami: ASME GT India Overview, Gas Turbine engines
   & Their applications, Propelling Urban Mobility
- Dr Chetan Mistry: Axial Compressor Aerodynamics and Advancements, Axial Turbine Aerodynamics and Advancements

- > **Dr Kalicharan**: Aerothermal challenges of Gas Turbine
- > **Dr N Rao**: CFD application to Gas Turbine Engines
- Mr Hitesh Mistry: Industrial Internet & Digital Twin Followed by Students Q&A and Panel Discussion. The participants were students and faculty from Sir MVIT and other neighboring institutions.



### Student Office Begrers 2021 - 2022

Position	Name	ASME Membership No.	USN
Chair	Mr Dhanush N Reddy	103386297	1MV19ME016
Vice Chair	Mr Adnaan Tawheed Jameel	103605189	1MV19ME003
Treasurer	Mr Nikhil A J	103605405	1MV19ME038





Engineers are the most in-demand professionals in the world. The work of engineers has a significant impact on our lives, and they are responsible for some of the most important inventions that we use every day.

We'll be having a panel discussion where the participants will be presenting their ideas and solutions to overcome the day-to-day problems with the help of a PPT

Participation is compulsory for all the members of the student section

Date: 22nd Jan 2022

**Mode: Online** 

### Student Office Begrers 2020 - 2021

Position	Name	ASME Membership	USN
		No.	
Chair	Indraneel Das	000103234968	1MV17ME028
Vice Chair	Shreyas GK	000103234983	1MV17ME071
Secretary	Tarun R	000103235024	1MV17ME082
Treasurer	Rishi Kumar Pandey	000103235025	1MV17ME059
Liaison	Shivakumar H D	000103235068	1MV17ME066

### **Events Organised**

- 1) E-Conference on "Restart After the COVID-19 Crisis"
  - ➤ Date 31st May 2020
  - No. of Viewers 583
  - Platform YouTube



 The speakers had to present their ideas in the form of a short 15 minutes talk and be prepared for questions from the attendees.

- The idea behind this was to discuss ideas in order to accept and adapt to the "new normal" in the wake of the current COVID-19 crisis.
- The speakers addressed this issue from a medical, technical, social and economical standpoint. The speakers' registration was open to all students and faculty of Sir MVIT.

### **About Speakers:**

- Dhathresh M
  - 3rd Year, Mechanical
  - Topic: Tech in the Wake of COVID-19
- Shreetoma Chakraborty
  - 4<sup>th</sup> Year, Biotechnology
  - Topic: Medical Research post COVID-19
- Malladi Naga Subhash
  - 2nd Year, Electronics & Communication
  - Topic: Steps Towards the New Horizon
- Ashwathy Suresh
  - 3rd Year, Information Science and Engineering
  - Topic: Impact, Consequences and Aftermath of COVID-19
- 2) Webinar on "My Journey from 63 Rejections to Building India's First Company to Win a CES Best of Innovation Award"

By Kaushik Mudda, Co-founder & CEO of Ethereal Machines

- Date 20th June 2020
- ➤ No. of Registrations 262
- Platform Google Meet







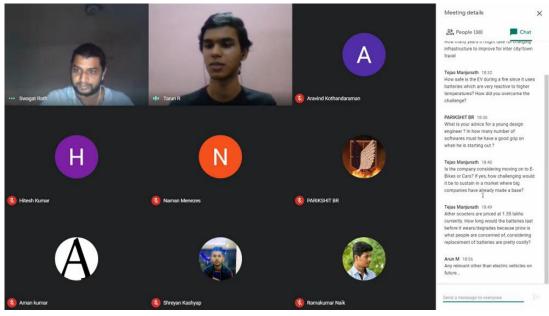
- The first half of the interaction consisted of a talk given by the speaker in which a basic insight was given about the company, what are the roles in the company, what products are manufactured.
- The next half was a conversation between a moderator from the section & the speaker. In this discussion, major questions about various aspects of the company like business, technical & entrepreneurial elements were addressed. This was a very informative discussion & the attendees gained a lot of knowledge on various factors on how to become an entrepreneur.
- This was followed by a question & answer session in which the attendees posed question & the speaker would provide his valuable opinion & insights.

# 3) Industry Interaction on "The Future is Electric" with Ather Energy Speaker – Swagat Rath, Design Manager – Ather Energy

- Date 11th July 2020
- No. of Registrations 129
- Platform Google Meet

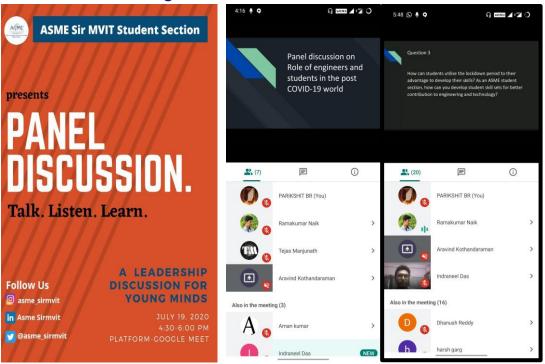
Ather Energy Pvt. Ltd. is an Indian electric vehicle company founded by Tarun Mehta and Swapnil Jain in 2013. It manufactures the electric scooter Ather 450 and the Ather 450X. It has also established an electric vehicle charging infrastructure Ather Grid.





### Important points discussed in the interaction:

- We discussed Swagat's journey & what a design manager does at Ather. We also discussed the transition from IC engine powered vehicles to electric vehicles.
- We also discussed what goes into design and development of an Ather vehicle and possibilities of setting up wireless charging in India.
- The specialities of scooter's BMS and motor controller, comparison of IC engine vehicles and electric vehicles in terms of power, torque.
- The tests that are run on the vehicle & the concept of fast charging & it's effective implementation.
- A deeper insight was given on the Ather Grid project. We also discussed what stands out in Ather compared to other electric scooter brands.
- The work environment in Ather and future of Ather.
- The effect of the pandemic on Ather and experience of working from home. The relations between different countries affecting abilities of manufacturing.
- 4) Panel Discussion on "Role of Engineers & Students in the Post COVID-19 World".
  - Date 19th & 20th July 2020
  - No. of Panelists 17
  - Platform Google Meet



- After the panel discussion collaboration with 7 other reputed ASME Student Sections across the country, ASME Sir MVIT had decided to have our own panel discussion.
- The motive behind this discussion was to provide a platform for section members to improve on their soft skills and also gain knowledge on topics that are the most relevant in today's world.
- A questionnaire was provided within the theme of the discussion and panelists had to address the topic based on the questionnaire in 3 minutes per question. The questions were:
  - How will the economy of India and other countries be affected by banning chinese products? How can Indian manufacturers be self dependent (Make in India and Aatmanirbhar) by designing and manufacturing globally competent products? As an ASME student section, how can you contribute towards self dependency of your country's manufacturing problem?
  - How has COVID-19 impacted backward sections of our society? What measures can be taken in order to improve their situation in the future?
  - How can students utilise the lockdown period to their advantage to develop their skills? As an ASME Student Section, how can you develop student skill sets for better contribution to engineering and technology?
  - What do you think could have been done better to prevent the rapid spread of the disease? How have other major countries fared during this pandemic?
    - a. The panelists raised hugely impressive and innovative points throughout the event and the event was a grand success.

#### The winners of the event were:

- 1) Best Panelist Sri Sai P Reddy (7<sup>th</sup> Sem Mechanical)
- 2) Most Innovative Panelist Mustafa Trumboo (5<sup>th</sup> Sem Mechanical)
- Honourable mentions Parikshit BR and Harsh Garg (5<sup>th</sup> Sem Mechanical)

5) DICE(Design In Constrained Environment) event on designing a practical work from home station within a space constraint.

> Date: 25th August - 30th August 2020

No. of teams: 12

> No. of participants: 18







- The motive behind this competition was to set up a work from home station with multiple functions and minimum space occupation.
- A brief idea was provided with what has to be equipped in the work from home station. They were:
  - 1. Storage space for papers, files and references.
  - 2. Fitted trash can.
  - 3. Adjustable elevation on the desk or in the chair for laptop use.
  - 4. Fitted adjustable table lamp.
  - 5. Integrated charging port.
  - 6. Glass and (or) holder slots.
  - 7. Integrated table and chair.
- Participants had to strictly follow the design criteria and space constraints(1100\*1000)
- All the teams had to prepare a comprehensive report which included a 100-word abstract that gives an overview of the product, Top, side, front and isometric views (Pictures) and the different features of the product along with justification in detail.
- The cash prizes were as follows:

1 st Prize: Cash prize of Rs 700/- and certificate of excellence.

2 nd Prize: Cash Prize of Rs 400/- and certificate of excellence.

3 rd Prize: Certificate of Merit.

All the teams came up with an outstanding design with all the constraints met which made the event a grand success with three winners:

Winner - Madan M N (Sir MVIT)
Runners-Mohammed Rahif(Bangalore Institute of Technology)
Merit-Santhosh N - BITS Pilani(Goa), Vinay J(BMSIT)
6) Treasurer Election on 4th October 2020

**Dhanush N Reddy** from ASME Student section was elected as Treasurer for the year 2020-2021.

Position	NAME	Membership ID	USN
Treasurer	Dhanush N Reddy	000103386297	1MV19ME016

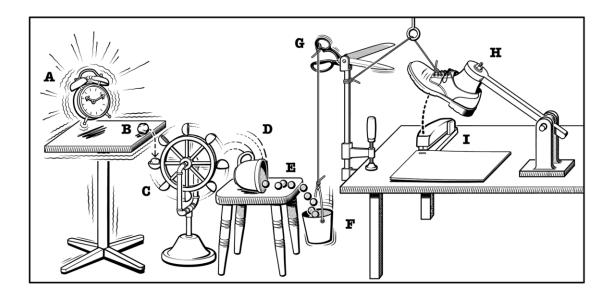
# 7) RUBE GOLDBERG (A week of endless creativity) an open event for enthusiastic participants from all the age groups

- > Date: 18th October 25th October 2020
- No. of teams:
- No. of Participants:



 ASME Sir MVIT and ASME UPES in collaboration with U&I (A reputed NGO who help the underprivileged students) proudly present their next event for a special cause towards making learning accessible to underprivileged students.

- A Rube Goldberg Machine, named after American cartoonist Rube
   Goldberg, is a machine intentionally designed to perform a simple task
   in a over complicated way
- The competition has been made open to all students of different age groups which enhances out-of-the-box problem fixing skills



- Participants will be given an option either to contribute by just donating for the cause or by just participating in the event.
- All the proceedings will be donated to U&I which will be used for providing educational facilities to underprivileged children.

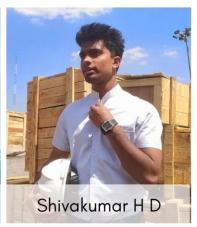
### 8) Student Leadership Training Conference 2020



### **ASME Sir MVIT Student Section**







## **CONGRATULATIONS!!**

For representing our section at the "ASME Student Leadership Training Conference 2020"

They have been selected from over 200 applicants globally to attend this leadership training conference.

Date: 31st October - 1st November 2020

Indraneel Das (Chair), Shreyas G K (Vice Chair) and Shivakumar H D(Liaoisn) were selected to represent the section at "**ASME Student Leadership Training Conference**" out of 200+ applications worldwide.