



**IUCEE Annual Student Forum** is an opportunity for engineering students from different parts of the country to assemble and apply engineering and technology to develop solutions to real world challenges in an intense 3 days long conference.

**Annual Student Forum 2023 Theme:** *Engineering & Technology for Sustainable Planet*

Held on 4th, 5th, & 6th Jan 2023 at Vidya vardhaka College of Engineering Mysore, Karnataka

Attended by 380 registered participants from 30+ Colleges representing 6+ states in India

**Student Experience at the IASF 2023:**

- CRITICAL THINKING
- (Scientific) INQUIRY BASED LEARNING
- CREATIVE THINKING
- Build a Sustainability Awareness Model
- TEAM BUILDING
- FIELD WORK
- Mysore City 5K Run/Walk for a Sustainable Planet

**Sustainability Inquiry conducted on the select 5 out of the 17 UN Sustainable Development Goals**

- **Goal 6: Clean Water and Sanitation - Ensure availability and sustainable management of water and sanitation for all**
- **Goal 7: Affordable and Clean Energy - Ensure access to affordable, reliable, sustainable and modern energy for all**
- **Goal 11: Sustainable Cities and Communities - Make cities and human settlements inclusive, safe, resilient and sustainable**
- **Goal 13: Climate Action - Take urgent action to combat climate change and its impacts**
- **Goal 15: Life on Land - Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss**

**IASF participation pre-requisite (recommended):**

**8 week online program on "Sustainability Inquiry: Investigation into UN SDGs(Sustainability Development Goals 6, 7, 11, 13, 15)"**

Sustainability Inquiry program was launched on 8<sup>th</sup> Oct 2022 to stimulate students to adopt scientific and data driven investigation to learn about select UN SDG. The students were coached to adopt inquiry to collect real time data from their surroundings and become aware of climate change impact.

The students opted to work on any one of the 5 UN SDGs listed above. They were given a leading question pertaining to the SDG to delve deeper in to the area of investigation. The

students were required to upload a short weekly assignment on Canvas as a result of their weekly investigations which was then graded and reviewed by the **program architect and coordinator (Ms. Sampada Pachaury, Director IUCEE Foundation)**

In addition there were weekly Mentor Sessions to sensitize students on the aspects of Sustainability. The Mentor sessions listed in the Table below were conducted by select experts and youth change makers recognized by the United Nations India who have represented the country at the COP26 and COP27 summit.

**Mentor Sessions (10 Weekly Online Sessions of 90 mins each)**

<b>Date</b>	<b>Title</b>	<b>Speaker</b>
8 <sup>th</sup> Oct 2022	<b>Workshop on “Inquiry Based Learning” Part 1</b>	Ms. Sampada Pachaury, Director IUCEE Foundation
15 <sup>th</sup> Oct 2022	<b>Session on “Managing finite natural resources empathetically”</b>	Mr. Niranjana Khatri, ex-ITC Group Executive, Founder i-Sambhav
29 <sup>th</sup> Oct 2022	<b>Workshop on “Inquiry Based Learning” Part 2</b>	Ms. Sampada Pachaury, Director IUCEE Foundation
2 <sup>nd</sup> Nov 2022	<b>Session on “Everyone doesn’t need to become an environmental activist to...”</b>	Mr. Karthik Ponnappa, Co-Founder Smarter Dharma
5 <sup>th</sup> Nov 2022	<b>Session on “Environment Education and Students a key element to achieve conservation”</b>	Ms. Sneha Shahi, Conservationist & UNEP Plastic Tide turner, Scholar at ATREE
12 <sup>th</sup> Nov	<b>Session on “Youth role in innovations for climate-resilient nation”</b>	Mr. Sanju Soman, CEO & Co-Founder, Sustera Foundation
19 <sup>th</sup> Nov	<b>Session on “Solutions Thinking and Design for Re-Aligning Natural Realities”</b>	Mr. Berjis Driver, National Youth Campaigner “We the Change” & Proj Research Associate, IIT Bombay
26 <sup>th</sup> Nov 2022	<b>Session on “Fashion with a Conscience”</b>	Ms. Vasanthi Velluri, Co-Founder PEOLI at Almora
3 <sup>rd</sup> Dec 2022	<b>Session on “Sustainability as a tool for Business”</b>	Ms. Medha Priya, Interaction Designer and Sustainability Enthusiast
10 <sup>th</sup> Dec 2022	<b>Session on “Youth Climate Movement &amp; Opportunities”</b>	Ms. Akhilesh Anilkumar, Co-Founder, Bring Back Green Foundation

**IASF 2023 Summary:**

The registered participants, students from engineering colleges across India conducted sustainability inquiry to develop Sustainability Awareness Model under close guidance and mentoring by five UN INDIA Youth Climate changemakers. In the 3 days the students learned evidence-based scientific understanding of Climate challenges with reference to the Indian eco-system with the intent to devise a creative solution in the form of simple, sustainable, and replicable practices for themselves and their peers.

The outcome of the program was a Sustainability Awareness (Practice & Preach) Model - an out of the box, simplified approach to take Sustainability awareness to more and more people. No Presentation or Powerpoint/PDF document was acceptable as an outcome

### **Program Mentor (Youth Climate Changemakers) profiles:**

1. Mr. Karthik Ponnappa, Co-Founder - Smarter Dharma <https://www.linkedin.com/in/karthikponnappa/>
2. Ms. Sneha Shahi, Conservationist & UNEP Plastic Tide Turner <https://www.linkedin.com/in/snehashahi277/>
3. Mr. Berjis Driver, Project Research Associate IIT Bombay, National Youth Campaigner “We the Change” <https://www.linkedin.com/in/berjisdriver01/>
4. Mr. Akhilesh Anil Kumar, UN India Youth Climate Leader | Director: Bring Back Green Foundation <https://www.linkedin.com/in/akhileshanil/>
5. Ms. Heeta Lakhani, Founder & Director ClimAct Foundation & Co-Founder Youth Negotiator’s Academy <https://www.linkedin.com/in/heeta-lakhani-9042b677/>

### **IASF 2023 Details**

The students selected their choice of SDG to work upon during registration to the event. 10 rooms equipped with Smartboards, Projectors, PCs, Printers, Wifi, Tech support and Faculty assistance were kept ready and assigned as the workspace for the participants for the 3 day event.

Rooms were marked corresponding to the 5 chosen SDG and a mentor was assigned to each SDG to coach and guide the students to conduct the inquiry.

The students dispersed into their respective SDG rooms and were grouped into teams of three preferably representing different colleges

Within each SDG, several areas of concerns were floated to the student teams to pick one area to investigate and develop the Sustainability Awareness model.

**The event started with a Panel discussion** by the 5 program mentors highlighting the ground level actions on Climate and environment within India. The mentors represented various aspects of the climate problem, diversified actions as well as an integrated outcome for the long term sustainability of the planet in a bottom’s up approach. The Panel discussion emphasised on introducing Climate and Sustainability in school and college education as the only way to resolve the global crisis.

**Problem Understanding and Statement:** The mentors presented various existing scenarios to the students and asked the students to apply bottom’s up approach into envisaging the larger view of the consequences to the planet. The students were involved in group discussions and critical thinking

**Sustainability Awareness Model:** The teams ideated in various ways to approach the problem as an engineer. They developed recommendations to initiate scalable changes.

**Mysore City Walkathon for Sustainable Planet:** A crowd of 500 students and several staff and faculty, and the leadership team of the college assembled in front of the Mysore Palace

at 4:30AM on 5<sup>th</sup> Jan to undertake an oath of being an engineer with sustainability as the focus of their professional work and walked 5.6 kms on the city roads of Mysore to spread the message of Sustainability to masses. The event was flagged by the Mysore City Commissioner.

**Exhibition:** The 3<sup>rd</sup> and the concluding day of the event saw an unprecedented unique exhibition of “thought process”. All student teams welcomed delegates from all over the world represented by the senior academicians and industry experts to explain to them what they had understood as the core of the areas of concerns corresponding to the respective SDG they indulged in. Their conversations reflected their intense experience and learning they underwent in the 48 hours preceding the exhibition.

The event concluded with a recognition of nearly 400 student and the 5 mentors who cemented the climate and environment perspective to the engineering learning and development of technologies of the future.