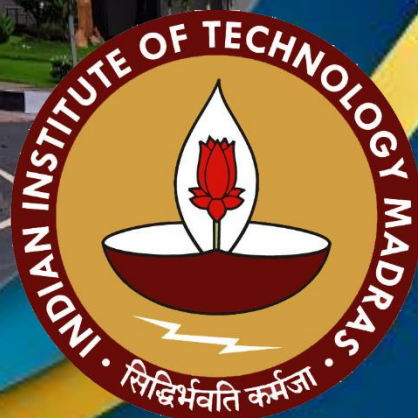


# YOUNG FACULTY RECOGNITION AWARD REPORT 2025



Awards & Honors

OFFICE OF ALUMNI & CORPORATE RELATIONS

IITM

## DIRECTOR'S MESSAGE



**Prof. Kamakoti Veezhinathan**  
Director, IIT Madras

Greetings from IIT Madras!

Excellence. Innovation. Entrepreneurship. These words have been the cornerstones of IIT Madras' journey over the past years. The staunch support of our 55000+ alumni community and our 350+ corporate partners has been pivotal in this success, enabling us to drive impactful initiatives, foster innovation, and create meaningful change across diverse domains.

IIT Madras has proudly retained the No. 1 position in the NIRF rankings in the "overall" category (seventh time in a row) and in "engineering" category (tenth time in a row). This is a testament to the strong bond that our alumni and corporate partners have passionately nurtured with the Institute, its faculty members and students.

With a vision to augment research in emerging and disruptive technologies, the Institute's Centres of Excellence are well positioned to be global leaders in their respective domains over the next five years. The establishment of newer departments such as the Department of Data Science and AI (housed in the Wadhvani School of Data Science and AI) and the Department of Medical Sciences and Technology marks a significant step forward in advancing interdisciplinary research and skillsets.

With the generous support of our alumni and industry partners, these departments and centres are making groundbreaking advancements and developing futuristic technology solutions in their fields of expertise. Turning research into real world impact, the thriving startup ecosystem at IIT Madras is an epitome of pioneering innovation that drives societal progress. These startups work in domains such as manufacturing, robotics, data science, space tech, IoT, mobility, energy, water, healthcare, biotech and agri-tech. The work of every startup is a beacon of hope towards a brighter future for our nation.

Alongside research and innovation, several key Institute initiatives have also been propelled forward by the steadfast support of our alumni community and corporate partners. Be it the various Merit-cum-Means scholarships and endowments or the WLI (Women Leading IITM) program or the newly initiated Student Mess Fund, you have been instrumental in transforming IIT Madras into a place where every student thrives, research flourishes and innovation is second nature.

While much has been achieved, IIT Madras still has bigger and greater milestones that we aspire to achieve. We hope to get there through your unwavering support and commitment to creating a positive impact.

Wishing you the best in your career and life.





## DEAN'S MESSAGE



**Prof. Ashwin Mahalingam,**  
Dean, Alumni and Corporate Relations, IITM

Greetings from the Office of Alumni and Corporate Relations!

I want to extend my deepest gratitude for your incredible generosity and continuous support towards IIT Madras. An act of giving is much more than making a donation. It is the manifestation of kindness, compassion, and deep-rooted empathy within each of us. It is the very essence of being human. And as one of our esteemed donors, you are no exception to this.

Strong academic institutions play a critical role in today's world - training minds young and old, and contribution to research and innovation. Your contributions have had a truly transformative impact, not only on the institute but also on our students, faculty and the broader community.

This Awards & Prizes report stands as a testament to the profound impact your contributions have had on the lives of our current students, the advancement of innovation in research, and the infrastructure of the institute.

At IIT Madras, we take great pride in the strong relationships we have fostered over the years. It is through your consistent engagement with us that we've been able to push the boundaries of innovative research, improve our infrastructure, and provide scholarships that have empowered students from diverse backgrounds. These efforts have created life-changing opportunities, ignited new ideas, and elevated IIT Madras to the forefront of global education and research.

Your commitment, as part of our esteemed benefactor network, has strengthened our institute's global reach. It has opened doors to new partnerships, fostered collaborations, and helped us nurture the leaders of tomorrow.

We are profoundly grateful for your belief in IIT Madras. Your continued support not only upholds the values and traditions of the institute but also helps us chart a bold and visionary path forward. Together, we are building a legacy of lasting excellence.

Once again, thank you for your dedicated engagement with IIT Madras.

Stay Connected with us, +91 44-2257-8390

Email: [deanacr@iitm.ac.in](mailto:deanacr@iitm.ac.in)

Website: <https://acr.iitm.ac.in/>



# YOUNG FACULTY RECOGNITION AWARD

**Donor: Dr. Parasuram Balasubramanian & Mr. Manohar Anand P**

**Criteria:** The Young Faculty Recognition Award was instituted in the year 2007. The award consists of a Cash prize of Rs.50,000/- and a citation presented to outstanding young faculty members to acknowledge and felicitate their achievements in their respective academic and pedagogic fields on Teachers' Day.



**Dr. Himanshu Goyal**

Assistant Professor

*Department of Chemical Engineering*

*Website Link: <https://www.goyalresearch.com/>*

## **Awardee Brief Bio**

Dr Himanshu Goyal is an Assistant Professor in the Department of Chemical Engineering at the IIT Madras. He received his BTech in Chemical Engineering from IIT Guwahati and PhD from Cornell University, followed by postdoctoral research at the University of Delaware. Dr Goyal's research focuses on computational modelling of conventional and emerging clean chemical processes and energy systems. These systems include multiphase and multiphysics reactors, such as fixed beds, fluidized beds, monoliths, electrochemical cells, and microwave and Joule heated reactors. A specific focus is on developing first principles models that are simple and quick to use for real-world reactors. To this end, his group employs advanced Computational Fluid Dynamics (CFD), Multiphysics simulations, and ML/AI tools. Some of the applications of his work include biomass conversion and carbon dioxide capture.

## **Voice of the Awardee**

I am grateful for receiving this prestigious award instituted through the generous contribution of Dr. P. Balasubramanian. This award provided a boost to my efforts toward teaching and research at IITM. I am sure this award will continue to enhance the morale of new faculties doing excellent work at IITM.



**Dr. Nikhil Bugalia**

Assistant Professor

*Department of Civil Engineering*

*Website Link: <https://tlc2.iitm.ac.in/people/dr-nikhil-bugalia/>*

### **Awardee Brief Bio**

Dr. Nikhil Bugalia is currently working as an Assistant Professor in the Construction Management group at IIT Madras. His primary research areas focus on understanding the interactions between Technical, Human, and Organizational issues in Safety Management for the construction sector. More broadly, Dr. Nikhil's work focuses on the application of systems thinking on various complex issues facing the construction industry. Dr. Nikhil obtained his Ph.D. degree from the University of Tokyo, Japan, where he worked on the Safety Management of the Japanese High-Speed Railway. He also obtained his bachelor's degree in Civil Engineering from IIT Kanpur. He serves as secretary for the Special Interest Group on High-Speed Railways at the World Conference of the Transport Research Society.

### **Voice of the Awardee**

I am deeply humbled to receive the prestigious Young Faculty Recognition Award and greatly thankful to the generous and sustained support of Dr. P. Balasubramanian for this award. Preparing for this award was instrumental in helping me reflect on my journey at IIT Madras and clarify my focus areas for continued work. Receiving the award was a great reinforcement to keep working on challenging but important societal problems.





**Dr. Rajesh Singh**  
Assistant Professor  
*Department of Physics*  
Website Link: <https://rajeshrinet.github.io/>

### Awardee Brief Bio

Rajesh Singh is a faculty member in the Department of Physics at the Indian Institute of Technology (IIT) Madras. His research interests are in the field of theoretical soft condensed matter physics. With this principal theme, his group uses tools from statistical mechanics, fluid mechanics, computational physics, and machine learning to study the physics of soft, active, and living materials.

Dr. Singh completed his Ph.D. at the Institute of Mathematical Sciences, Chennai, in 2018. Following his graduation, he was awarded a Newton International Fellowship, which enabled him to conduct his postdoctoral research at the University of Cambridge. In 2021, Dr. Singh joined the Department of Physics at IIT Madras.

### Voice of the Awardee

I extend my deepest gratitude to Dr. P. Balasubramanian for initiating the Young Faculty Recognition Award. This initiative is vital for recognizing and encouraging the efforts of young faculty members. In addition, the self-reflection inherent in the application process proved to be an invaluable exercise, offering me the clarity to (i) formally evaluate my past achievements, (ii) organize my accomplishments for review, and (iii) refine the strategic direction of my future research.

# Thank you

for your generous donations!



For more information, please contact:  
Office of Alumni and Corporate Relations, 2<sup>nd</sup> Floor, IC & SR Building,  
Indian Institute of Technology Madras, Chennai – 600036  
T: +91-44-2257 8390 | <https://acr.iitm.ac.in/>

Stay Connected...

