

Prof. R Kumar Award
for
Innovative Modelling in Chemical Engineering - 2025



Prof. R. Kumar (1934-2022)

The Department of Chemical Engineering at the Indian Institute of Science (IISc), Bangalore invites applications for the Prof. R. Kumar Award for Innovative Modelling in Chemical Engineering - 2025.

The award is instituted in honour of Padma Bhushan Prof. R. Kumar, an outstanding chemical engineer and a visionary leader, whose exemplary research contributions brought international recognition to IISc's Department of Chemical Engineering, where he served as a faculty member his entire career, and placed it on its path of long-standing excellence in research and teaching. At the heart of his contributions was modelling. Built on remarkable physical insight and highly imaginative thinking, his models displayed rare novelty and not only helped solve difficult challenges of the time but also synthesize vast bodies of seemingly disparate knowledge. A glimpse of his contributions can be found in the article by Dr. RA Mashelkar and Prof. KS Gandhi written after his passing away in Feb 2022: <https://www.currentscience.ac.in/Volumes/122/07/0858.pdf>

The award is instituted with the generous contributions made by well-wishers and admirers of Prof. Kumar and those who have benefited from his association, with the intention of celebrating and furthering his legacy. Details of these contributions can be found here: <https://odaa.iisc.ac.in/prof-r-kumar-fund/>

The award carries a cash prize of Rs. 1 Lakh and will be given for the most innovative modelling work carried out by a faculty-student team in any domain of chemical engineering or its allied disciplines. The work should be done primarily, if not exclusively, in India.

The application should be filed by the corresponding Principal Investigator (PI), who should be the lead faculty member or scientist involved, on behalf of the team. The corresponding PI should have a current affiliation with an Indian institute/organization, government or private, and the work should have been published within the last 5 years of the year of the award, either from the same or similar institute/organization.

The application should consist of:

- (i) 1-2 key research papers to highlight the modelling work, published within 5 years of the year of the award

- (ii) a write-up of up to 2 pages stating (a) the novelty of the research finding, highlighting the role of the model in it, (b) the impact of the work, either in the growth of the field, or in a specific application, involving a process or product development, etc., (c) the specific contributions of the corresponding PI, the other PIs, and the students involved, (d) any external measures like citation count, popular or news media reports on the work, or any documented references/acknowledgements of the work. If the work has been recognized by another award, it should be mentioned.
- (iii) CV of the corresponding PI

The applications will be screened by a distinguished panel of experts, who may request additional inputs from the corresponding PIs, if necessary.

The award will be given annually at a ceremony in IISc, typically in September, where the corresponding PI will be invited to deliver an award lecture. Certificates will be provided to all members of the winning team.

Once awarded, the corresponding PI will not be considered for the award for 5 years. There is no age bar for the applicant.

The previous awardees and details of their award winning works can be found here: <https://chemeng.iisc.ac.in/prof-r-kumar/#RKumarAwards>

Please send your application in a single pdf file containing items (i), (ii) (a)-(d) and (iii) as above, in that sequence, by email to Chair, Department of Chemical Engineering, IISc, by **23rd June, 2025** (chair.ce@iisc.ac.in).