Centenary Lecture Series-5

Prof. Uday Shanker Dixit Highlights Advances in Process Modelling at IIT (ISM) Dhanbad's Centenary Lecture Series – 5

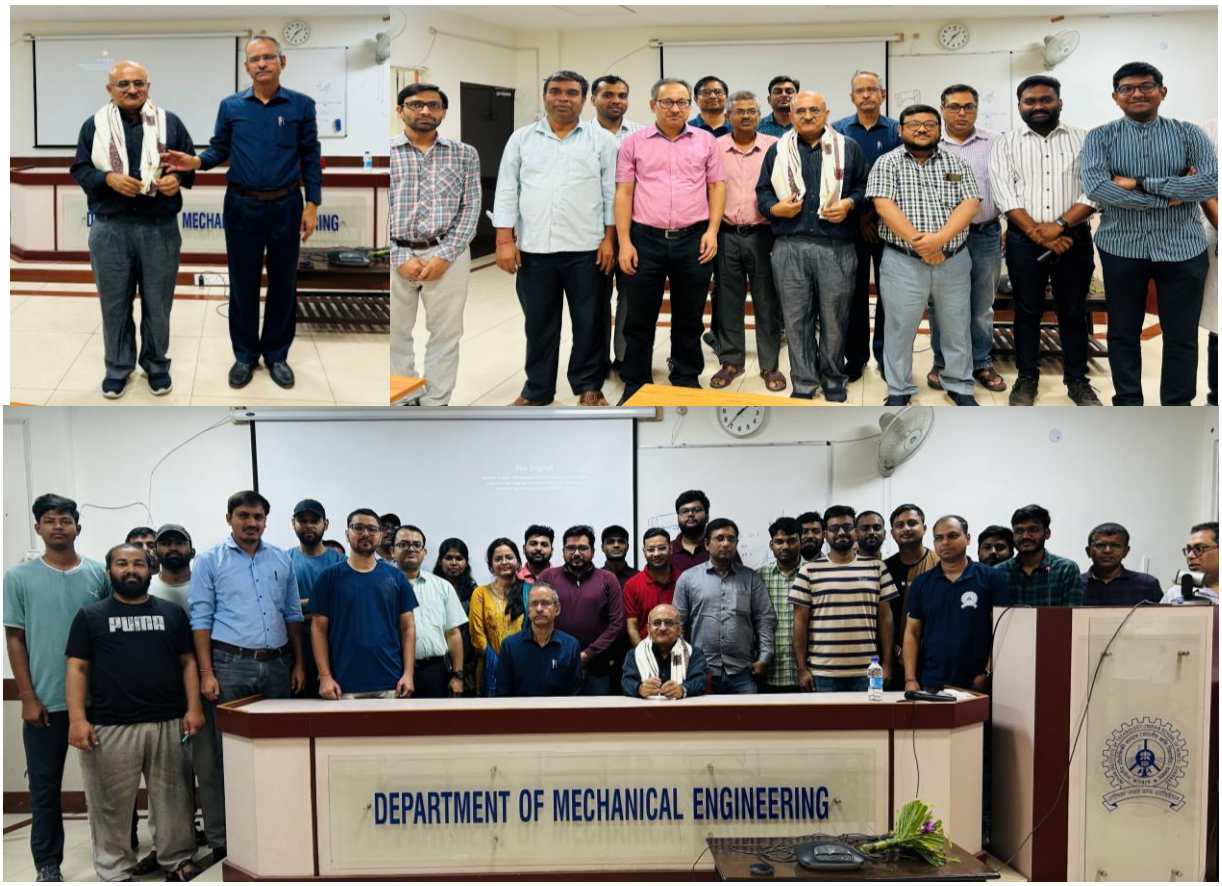
Continuing its celebration of 100 years of academic distinction, the Department of Mechanical Engineering, IIT (ISM) Dhanbad, hosted **Prof. Uday Shanker Dixit**, Professor, Department of Mechanical Engineering, IIT Guwahati, as the distinguished speaker for **Centenary Lecture Series – 5**.

Prof. Dixit delivered a compelling lecture on **"Modelling and Simulation of Manufacturing Processes"**, emphasizing the critical role of computational modelling in enhancing manufacturing efficiency, precision, and sustainability. His talk covered analytical and numerical simulation techniques, highlighting real-world applications in metal forming, machining, and additive manufacturing. With clarity and depth, Prof. Dixit demonstrated how modelling frameworks are instrumental in optimizing design decisions, reducing prototyping costs, and accelerating innovation across industrial sectors.

The session was attended by **Prof. N.K. Singh and Prof. Sanjoy K Ghoshal**, along with senior faculty members. The lecture attracted a large audience of undergraduate and postgraduate students, research scholars, and faculty members, who actively engaged in the Q&A session that followed.

The event was coordinated by Prof. Abhijeet Sethi, Coordinator, Centenary Lecture Series, Department of Mechanical Engineering.

Through such thought-provoking lectures, the Centenary Lecture Series continues to bring leading academicians and researchers to IIT (ISM) Dhanbad, fostering innovation, interdisciplinary collaboration, and a culture of research-driven learning.



About Prof. Uday Shanker Dixit

Dr. Uday Shanker Dixit is presently Professor in the Department of Mechanical Engineering and Head of Center for Indian Knowledge System at Indian Institute of Technology Guwahati. He received B.E. degree in Mechanical Engineering from erstwhile University of Roorkee (now Indian Institute of Technology Roorkee) in 1987, M.Tech. degree in Mechanical Engineering from Indian Institute of Technology Kanpur in 1993, and Ph.D. in Mechanical Engineering from IIT Kanpur in 1998. He has worked in two industries—HMT, Pinjore and INDOMAG Steel Technology, New Delhi, where his main responsibility was designing various machines. Dr. Dixit joined the Department of Mechanical Engineering, Indian Institute of Technology Guwahati, in 1998, where he is currently a Professor. He was also the Officiating Director of Central Institute of Technology, Kokrajhar from February 2014 to May 2015.

Dr. Dixit is actively engaged in the research in various areas of design and manufacturing since last three decades. Most of his research work is focused on Modelling of Manufacturing Processes and involves finite element analysis and soft computing. He has also contributed in design optimization. He has extensively used finite element and soft computing tools for the design and manufacture of mechatronic systems. He has authored/co-authored 165 journal papers, 161 conference papers, 48 book chapters and 8 books in mechanical engineering. He has also co-edited 11 books and several conference proceedings.