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PRESS-RELEASE

IIT (ISM) Introduces Cutting-Edge Course with Global Expert Prof. Biswajeet Pradhan

The Indian Institute of Technology (Indian School of Mines) Dhanbad, proudly announces the launch of a groundbreaking new course aimed at equipping students with advanced knowledge and skills in emerging technological domains. This initiative is further elevated by the esteemed presence of globally renowned academician and researcher, Prof. Biswajeet Pradhan, whose expertise will bring unparalleled insights to the program.

Designed to integrate theoretical foundations with practical applications, the course will delve into critical areas such as geospatial technology, artificial intelligence, and data analytics. With industries increasingly relying on these advanced tools for decision-making and problem-solving, IIT (ISM) aims to bridge the gap between academia and industry by preparing students with future-ready capabilities.

The course curriculum includes a comprehensive range of topics such as 3D flood modeling, dam break analysis, subsidence mapping, disaster-prone area identification, terrain analysis, and watershed delineation. Prof. SR Samadder, Associate Dean (R&D) and Local Coordinator, stressed the significance of geospatial intelligence in decision-making processes and disaster mitigation strategies.

Prof. Pradhan, a distinguished scholar recognized internationally for his pioneering work in geoinformatics and remote sensing, will play a pivotal role in shaping the curriculum and mentoring students. His vast research experience and collaborations with global institutions will provide learners with a unique perspective on cutting-edge advancements and industry applications.

Addressing the participants, Prof. Pradhan emphasized the relevance of geospatial technologies in today's rapidly changing climate. "Geospatial technologies are fundamentally about data collection, but the key is to ensure that the data collected is intelligent and meaningful for predictive analysis, particularly in mitigating natural disasters," he remarked. With expertise spanning hazard risk assessment and explainable AI, Prof. Pradhan underscored the importance of integrating spatial modelling with machine learning techniques to enhance disaster preparedness and resource management.

Prof. Dheeraj Kumar, Deputy Director, IIT (ISM), highlighted the crucial role of geospatial intelligence in the exploration and sustainable management of natural resources. He also emphasized IIT (ISM)'s significant contributions and expertise in geospatial engineering, noting that the institute's experts are at the forefront of this field..

Prof. Srinivas Pasupuleti, Head of the Civil Engineering Department and Course Coordinator, outlined the structure of the GIAN course, which includes 40 sessions over 10 days, combining classroom lectures and laboratory training. Participants include engineers, faculty members, professionals, research scholars, and students from across India.

Prof. VGK Villuri, Co-Coordinator of the course, extended a vote of thanks, acknowledging the privilege of hosting Prof. Biswajeet Pradhan, who has been recognized as a Highly Cited Researcher by Clarivate Analytics for five consecutive years (2016–2020). With over 880 journal publications, 76,000 citations, and an h-index of 137, Prof. Pradhan is a leading authority in integrating spatial modelling with advanced AI techniques for predicting hydrometeorological extreme events, including landslides, floods, forest fires, and droughts.

The course is expected to provide significant insights into geospatial intelligence applications, equipping participants with the skills to tackle contemporary challenges in resource management and disaster preparedness.

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