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PRESS-RELEASE

IIT (ISM) Hosts Distinguished Lecture by Prof. Raman Singh on Graphene Coatings for Corrosion Resistance

The Indian Institute of Technology (Indian School of Mines), Dhanbad, was honored to host Prof. Raman Singh, a distinguished academic from Monash University, Australia, for an insightful lecture on “Graphene Coatings: A Disruptive Approach to Corrosion Resistance.” The lecture took place at the Seminar Room of the Department of Mechanical Engineering as part of the institute’s Centenary Lecture Series.

Prof. Singh, a senior faculty member at Monash University’s Department of Mechanical & Aerospace Engineering and Department of Chemical & Biological Engineering, delivered a comprehensive talk on the revolutionary applications of graphene coatings in corrosion resistance. He elaborated on how graphene coatings provide similar levels of corrosion resistance, regardless of the aggressiveness of the environment. Furthermore, he addressed the challenges in Chemical Vapor Deposition (CVD) and explored how graphene coatings on steel can serve as a disruptive and durable approach to combating corrosion.

With an illustrious academic and research career, Prof. Singh holds several professional distinctions. He has been a Guest Professor at ETH Zurich, an Editor of a seminal book on Cracking of Welds (CRC Press), the Lead Editor of a book on Non-destructive Evaluation of Corrosion (Wiley), and Editor-in-Chief of journals published by Elsevier and MDPI. His contributions to academia include leading numerous international conferences, delivering plenary and keynote lectures, and authoring over 285 peer-reviewed journal articles and 15 book chapters. His research has been extensively funded through competitive grants, including four Discovery, seven Linkage, and one Industrial Transformation Research Hub (ITRH) grant from the Australian Research Council.

Prof. Singh has supervised 61 PhD scholars, leading a diverse and multidisciplinary research team at Monash University, with members from Mechanical, Chemical, Materials, and Mining Engineering backgrounds. His group also represents a global mix of researchers from Australia, the Middle East, China, Malaysia, India, Africa, North America, and Israel. His primary research areas encompass the relationship between nano-/microstructure and environment-assisted degradation of metallic and composite materials, as well as the application of nanotechnology for advanced corrosion mitigation strategies.

The event commenced with a welcome address by Prof. Somnath Chattopadhyaya, Head of the Department of Mechanical Engineering, IIT (ISM), in the presence of Prof. Alok Das, Dean of Innovation, Incubation, and Entrepreneurship.

The lecture provided students, researchers, and faculty members with valuable insights into cutting-edge advancements in corrosion resistance, fostering a stimulating academic discussion at IIT (ISM). The institute remains committed to facilitating such knowledge-sharing events that contribute to academic excellence and innovation in engineering and technology.

Rajni Singh
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