

All India Seminar on “Transforming Industry and Infrastructure: The Role of

Automation and AI” Date: 19.12.2024 & 20.12.2024

The two-day seminar on “**Transforming Industry and Infrastructure: The Role of Automation and AI**”, held on **19th and 20th December 2024**, was inaugurated with a welcome address by **Dr. J. Krishnamoorthi**, Chairman, IE(I), Coimbatore Local Centre. **Dr. B. Giriraj**, Principal, PSG Polytechnic College, delivered the felicitation address, followed by **Dr. V. Mohan Sivakumar**, Head of the Department of Mechanical Engineering, who provided an overview of the seminar and introduced the chief guest. The chief guest, **Dr. S. Vinodh**, Professor, NIT Tiruchirappalli, emphasized the importance of continuous learning and updating skills to meet industry demands. He highlighted the recent advancements in the manufacturing sector and the critical role of mechanical engineers. The inauguration concluded with a vote of thanks by **Dr. G. Madhan Mohan**, Honorary Secretary, IE(I), Coimbatore Local Centre.

The first day featured several technical sessions. **Dr. S. Vinodh** spoke on “**Future Ready Factories: Navigating Industry Transformation with Smart Manufacturing**”, exploring technologies like IoT, AI, robotics, and big data analytics that drive Industry 4.0. **Dr. D. Sivaraj**, Assistant Professor, PSG College of Technology, discussed “**Industrial IoT**” and its role in revolutionizing industrial processes through connectivity and automation. **Dr. S. Sangeetha**, Associate Professor, Kumaraguru College of Technology, delivered a session on “**AI Enhanced Robotic Technology**”, highlighting AI’s integration with robotics for creating adaptive and efficient systems. **Mr. K. Sivashanmugam**, Deputy General Manager, Janatics Global Solutions, provided insights into the “**Role of Hydraulics & Pneumatics in Automation**”, detailing their applications in automated systems.

On the second day, **Mr. R. Sasikumar**, Manager, TVS Training and Services, presented on “**Low Cost Automation**”, emphasizing its importance as a cost-effective solution for small and medium enterprises. **Mr. V. Rajendran**, Executive Engineer, Water Resources Department, discussed “**AI in Urban Planning & Smart Cities**”, focusing on AI’s role in creating sustainable urban environments. **Mr. S. Dinesh Babu**, Technical Engineer, Enthu Technology Solutions, spoke on “**Autonomous Systems in Infrastructure**”, highlighting their impact on safer and more sustainable infrastructure development. The final session by **Dr. S. Prabhakaran**, Assistant Professor, PSG College of Technology, was on “**Empowering**

Industry: Exploring the Role, Application, and Future of Industrial Robots in India”, where he emphasized industrial robots' potential in enhancing productivity and addressing labor challenges in the manufacturing sector.

The seminar provided participants with valuable insights into transformative technologies like AI, IoT, robotics, and smart manufacturing, highlighting their critical roles in shaping the future of industries and infrastructure. It served as an excellent platform for knowledge sharing, professional development, and understanding emerging trends in automation and AI, reinforcing PSG Polytechnic College's dedication to fostering technological advancements.













