

Digital conference on Rebooting the Economy through S&T discusses transformation of manufacturing companies in post COVID 19 pandemic

The session on **Advanced Manufacturing Technologies for Sustainable Future** at the digital conference on Rebooting the Economy through Science, Technology, and Research Translations' organised on the occasion of Technology Day on May 11 discussed how manufacturing companies were undergoing digital transformation due to the COVID 19 pandemic.

“Bringing the Digital and physical world together COVID has forced the Industries who were sitting on the fence to go for digital transformation, which has brought a tremendous change,” said Alok Nanda CEO GE India Technology Centre.

“We have to look for what is more relevant and near term and become productive using digital thread and computational technology,” he added.

Rajiv Bajaj Managing Director Stratasys India pointed out that the world is moving towards mass customization and mass specialization today, and technology like 3-D printing plays a major role in it. Traditional manufacturing has some constraints, but 3D printing gives design freedom by shifting the design content from single components to system.”

Dr. BB Ahuja Director, College of Engineering Pune, stressed that additive manufacturing can change the fundamentals of manufacturing, and hence we need to accelerate to adapt this technology in India.

Giving example of the Mechanical AMBU, a low-cost mechanical ventilator developed in his college under a cost of about 10,000-12,000 rupees, he added that creative technology ideas within the country can help solve the supply chain problem.

The day-long digital conference which brought together scientists, government officials, academia, and representatives of industry was organized by Technology Development Board, an autonomous organization of the Department of Science and Technology along with Confederation of Indian Industry.

Prof. Sarit Kumar Das, Director IIT Ropar, discussed the changes that COVID-19 time brings about in teaching and learning. “Collaboration and cooperation between industry and academia is most important in this period. COVID has shown us the way to connect to people who have been left out of the opportunity to go to premier institutes through digital learning,” he said.

“Premier institutions can have outreach programs to reach out to college students and retraining programmes of people already in industry to make them a talent pool and get the field people in manufacturing,” Prof. Sarit Das added.

Dr. Aravind Vijayaraghavan Founder and Scientific Advisor, Grafine Ltd., a spin-off company of The University of Manchester mentioned how his company is working not only in developing graphene products but also providing characterization and testing facilities to other industrial

collaborators through development of new materials, new technology and new methods for scale-up.

“As a nation, we need to move technology from periphery to the core. COVID-19 and other challenges like climate change have shown that if we can move technology to the core, it can help us to understand these phenomena faster & better,” Raghav Narsalay Managing Director, Accenture Research highlighted.

The panel agreed that in order to re-write manufacturing while addressing short term and long-term challenges, these advanced technologies would provide avenues to the industry to re-stimulate innovation, sustainability and employment.