



PROJECT NOTIFICATION

Reference No.: 215

Date of Issue	18 January 2024
Project Code	23-IP-12-GE-TRC-A
Title	Training Course on Advanced Technologies in Manufacturing Industries
Timing	26 February 2024–29 February 2024
Hosting Country(ies)	Turkiye
Venue City(ies)	Not Applicable
Modality	Online
Implementing Organization(s)	Ministry of Industry and Technology, Turkiye and APO Secretariat
Participating Country(ies)	All Member Countries
Overseas Participants	38
Local Participants	12
Closing Date	16 February 2024
Remarks	Not Applicable

Objectives	Deepen participants' understanding of smart manufacturing, focusing on the theoretical and conceptual frameworks; explore various technologies and techniques that enhance productivity in the manufacturing industry; and learn how these advanced technologies are transforming the industry.
Rationale	The APO is actively promoting digital transformation in the manufacturing sector among its members, harnessing the power of Industry 4.0 technologies. A significant step was the creation of the Center of Excellence (COE) on Smart Manufacturing. This initiative is a testament to the APO's dedication to upgrading industry practices among its members, identifying optimal smart technology and automation solutions, and enhancing overall production efficiency.
Background	<p>Industry 4.0 and digitalization are transforming manufacturing through new technologies and business models, enhancing productivity and value propositions. Smart manufacturing involves integrating advanced technologies and data analytics to optimize production. However, challenges arise in transitioning to Industry 4.0, especially for SMEs. The APO's 2021 Digital Innovation Process Guide Handbook for Manufacturing SMEs stated that a lack of understanding by management and employees of digitalization was one of the main challenges. It suggested that SMEs collaborate with experienced specialists to facilitate skill development and change organizational culture to embrace horizontal, agile management.</p> <p>The APO, recognizing the need for more skilled professionals and expertise in this area, is focusing on capacity building for productivity specialists who will be able to provide advice to the industry on digitalization and the integration of advanced technology.</p>
Topics	Overview of Industry 4.0 and smart manufacturing; Automation for manufacturing systems and IoT concepts; Leveraging AI and machine learning for smart manufacturing; and Manufacturing digitalization such as modeling and simulation.
Outcome	Enhanced understanding of advanced technologies and implementation strategies in industry; and trained participants will promote advanced technologies in the manufacturing sector and guide SMEs in developing plans for digital transformation.
Qualifications	Productivity specialists, senior professionals from manufacturing industries, executives of industrial/manufacturers' associations, academics, consultants, government officials, and policymakers.

Please refer to the implementation procedures circulated with this document for further details.



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