

TECHNICAL SESSION - V

Building VET Excellence through Partnership and Networking



▶ **Technical Session- V : Presentation- III**
**Transforming Indian TVET
Programmes for Industry- 4.0**

▶ **Speaker**
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ABSTRACT

Virtually every Indian industry is impacted by the disruptive power of digital technology which has been quietly ushering in the fourth industrial revolution across the globe. Industry 4.0 considers the current trend of automation and data exchange in manufacturing technologies. This demands well trained TVET graduates not only in skill development but also in cognitive computing. Industry 4.0 includes Cyber-Physical Systems, Internet of Things (IoT), Cloud Computing and Cognitive Computing. The advantages of Industry 4.0 are fast, flexible, high quality and efficient production system. Industry 4.0 is being driven by four disruptions, viz, the rise of data volumes, the emergence of analytics, new forms of human-machine interactions and the improvements in transferring digital instructions. Indian TVET trainers, administrators and leaders have to focus on the changes as they look for ways to develop new technical, avocational, educational and training programs to take advantage of the opportunities that arise from Industry 4.0. After globalization of Indian economy multinational companies have established state of art production facilities both for national needs and export. Now, it is very important to modernize the TVET programs and update the abilities of the faculty members. The Education National Policy 2019 suggests needed changes in TVET system. This research focuses on the current problems and the needed planning to meet the industry demands due to Industry 4.0. The manufacturing industry is poised for dynamic growth.

BRIEF CV

Dr. Thanikachalam Vedhathiri is a Ph.D. in Filter Design from Madras University and M.S. from Inst. Sys. Tech., Indiana Univ. USA. Dr. Vedhathiri served as Professor and HOD for Center for International Affairs at National Institute of Technical Teachers Training and Research, Chennai, Nodal Of cer for World Bank Assisted Projects in Technician Education; and Program executive for other development projects under IDAs. He is also a Former Senior Researcher under Fullbright Scheme of the USA, Founder Professor of M.Tech. (HRD), M.E.Ed, Cert. Course in T.T., Cert. Course in E.T., Advanced Certi cate Courses in Curriculum Design and Instructional Materials Development for Diverse Global Faculty Members, Environmental Protection and Management, Human Resource Development, and Developing Technical Education Programs for Developing Countries. He is one of the selected members of Pi Lambda Theta (Honors Society in Education, USA). Academically, he guided 18 Ph.D. scholars in the interdisciplinary degree in Engineering Education and authored Textbooks, Drawing Manuals, and Laboratory Manuals and more than 200 research papers and project reports. He has been part of many development projects under Asian Development Bank, GIZ, SIDA, UNDP, UNESCO, USAID and World Bank.