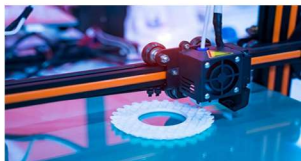
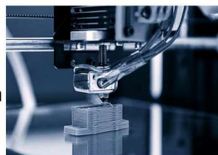


Abstract

Additive Manufacturing is in the tipping point of wider adoption in various industry sectors. Over the years the technology has been improved so much that manufacturing industry is getting disrupted in many aspects. The unique capabilities offered by additive manufacturing in terms of design freedom, weight reduction, shorter supply chain, on-demand manufacturing, are some of the key drivers that enable industries to embrace this technology. Despite the rapid R&D and innovation cycles, and the higher level of maturity in the technology, the adoption rate is relatively slow. This is primarily because of the lack of standards and regulations in this field that lead to lack of trust in the technology. Also, there is a lack of understanding in the standardization process exist within the AM community.

This workshop is intended to provide a broad overview on the current status of AM and the direction the technology is moving, how standardization process is happening in general at ASTM, the current status of additive manufacturing standard development at ASTM, ISO, and with other standard development organizations.



The workshop will be held in four sessions,
Morning sessions

Session 1 09:30 - 11:30

Additive Manufacturing Technology Overview: Background, current status, applications

Session 2 11:45 - 13:00

Overview of standard development process at ASTM and the need for AM standards

Afternoon sessions

Session 3 14:00 - 15:00

Additive manufacturing standards development landscape

Session 4 15:15 - 16:15

Guided tour to VIT 3D printing lab

Resource Person



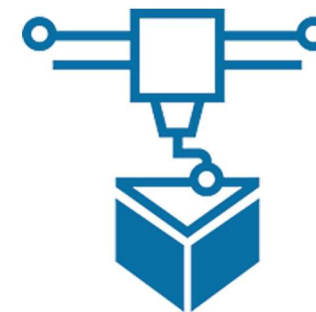
Khalid Rafi, Ph.D

Senior Lead – Additive Manufacturing Program Development
ASTM International, Singapore

Currently leading the Education and Work force development, and Standardization and Certification Programs at ASTM International. Prior to joining ASTM International, I was leading the AM initiatives at UL, a global testing and Certification Company. Experienced Additive Manufacturing professional and metallurgist with a comprehensive understanding on established additive manufacturing technologies and their adoption potential on applicable industry. Over 18 years of experience put together in research and development, project execution, training and professional development, standards development, and regulatory affairs. Established the activities of UL's Global Additive Manufacturing Center of Excellence in Singapore and the region by actively collaborating with industry, research institutes, partner labs, and institutes of higher learning.

Professional Services

- Member of SME's Certification Oversight and Appeals Committee
- Participating Member of ASTM International F42 sub-committee
- ASTM nominated member to ISO/ASTM JG 71 and ISO/ASTM JG 61
- Participating Member of ASME codes and standards committees, Y14.46 and V&V50
- Participating Member of Singapore Manufacturing Federation Standards Committee on AM
- Technical committee member at ARTC, Singapore
- Reviewer for International Journals such as Acta Materialia, Surface & Coatings Technology, Metallurgical and Materials Transactions A, Materials Chemistry and Physics, International Journal of Advanced Manufacturing Technology, International journal of Production Research, and SFF Symposium
- Invited lectures at different professional bodies and schools for graduate and undergraduate students on Additive manufacturing



Workshop on Standardization in ADDITIVE MANUFACTURING

8th January
2020

Jointly organised by School of Mechanical Engineering (SMEC) and SME-VIT as a part of the International Conference on Design Automation and Control (ICDAC) 2020



About VIT



GOVT. OF INDIA RECOGNIZES VIT AS AN
INSTITUTION OF EMINENCE (IOE)

Vellore Institute of Technology was founded in 1984 as Vellore Engineering College by the Chancellor Dr.G.Viswanathan. From its humble beginning, the institution has grown exponentially to that of having more than 33,000 students. Students from all the states of India and from more than 50 countries are studying at VIT University status was conferred in 2001 by MHRD Govt. of India in recognition of its excellence in academics, research and extracurricular initiatives. Currently, VIT has 4 campuses- in Vellore, Chennai, Amravati (AP) and Bhopal (MP). The National Institutional Ranking Framework (NIRF) of the MHRD, Government of India, has identified VIT as the best Private Engineering Institution in India in the year 2016 and 2017. VIT has gone for accreditation by NAAC [India], IET [UK] and ABET [USA] and follows world class academic processes. VIT is the first and only in India to get 4 star rating from QS, the world universities ranking organisation. The Industry consortium FICCI, has declared VIT as the "University of the Year 2016" in India. VIT has also been ranked in the top 201-250 in QS BRICS Ranking in 2016 and in the top 251-300 in Times Higher Education (THE), Asia ranking, VIT has introduced many innovation in academic processes which adds value to every student. FFCS (Fully Flexible Credit System) for better learning, fully digitized academic portals that assists students in equipping themselves for 2020 market place, Hackathons / Makethons as part of curriculum exercise which kindles the interest and the curiosity of students, which moulds them to be better problem solvers, 8Th module in every subject being handled by industry experts, making the students contextualize the concepts they study in the class room, are a few of the innovations that VIT has introduced.

VIT - A place to learn: A chance to grow

About CIMR

CIMR pursues excellence in research and industry interaction and lead the successful amalgamation of research in the areas of advanced manufacturing technologies such as additive manufacturing, machine tools technology, precision engineering, non-traditional material removal processes, sustainable manufacturing, condition monitoring of machine tools and advanced material processing. The faculty members of CIMR are actively involved in executing a number of R&D projects from government agencies including DST, AR&DB, ISRO, UGC, BNRS and various consultancy projects from industries. The centre has the strong collaboration with various foreign universities across the globe.

About ICDAC 2020

The International conference (ICDAC 2020) is recognized as the premier conference for Design, Automation and control. ICDAC offers outstanding opportunities for designers, researchers, industrialists, tool developers and vendors. Members are from a global community of more than 100 organisations and represented by Scientists, CAD Engineers, validation engineers, Senior managers and academicians from world ranking (QS) Universities. A highlight of ICDAC is its technical presentations, keynote sessions, Publications (Scopus and Web of science), research collaborations and exhibition from leading companies.

About SME

SME is a nonprofit association of professionals, educators and students committed to promoting and supporting the manufacturing industry. SME helps manufacturers innovate, grow and prosper by promoting manufacturing technology, developing a skilled workforce and connecting the manufacturing industry.

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Form link : <http://info.vit.ac.in/Events-VIT/Additive-Manufacturing/apply.asp>