

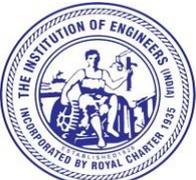


# International Conference on Advances in Materials, Mechanics, Mechatronics & Manufacturing (IC4M 2022)

## Associates



BIRMINGHAM CITY  
University, UK



Gwalior Local Chapter



Gwalior Local Chapter



## Organizers



## Invited Talks

Name of Expert/ Affiliation	Topic	Date	Time (IST)
<b>Prof. V. K. Jain</b> Professor (Retired), <b>Indian Institute of Technology Kanpur,</b> INDIA	Manufacturing: Vision for future	April 09, 2022	10:15am -11:15 am
<b>Prof. Farrokh Mistree</b> <b>Prof. Janet K Allen</b> Professor, <b>University of Oklahoma in Norman,</b> Oklahoma, USA	Design Engineering 4.0	April 09, 2022	4:30 pm - 5:30 pm
<b>Prof. D. Scott Sink</b> Senior Advisor, <b>Poirier Group in</b> <b>Toronto, Canada</b>	Achieving operational excellence: perspectives, points of view and strategies	April 10, 2022	4:30 pm - 5:30 pm

## Bio-Sketch

### Prof. Vijay Kumar Jain

Prof. V.K..Jain did his B.Tech. from MACT Bhopal (Vikram University, Ujjain), and M. Tech. and Ph.D. from University of Roorkee (now, IIT Roorkee). He has about 44 years of **teaching and research experience**. He has served as a visiting professor at university of California at Berkeley (USA) and university of Nebraska at Lincoln (USA). He retired as a **Professor from Indian Institute of Technology Kanpur** after serving for thirty three years. Dr. Jain has **won three gold medals, two silver medals and one best paper award** as recognition to his research work. He is editor-in-chief of three International journals and associate editor of Int J. Engineering Manufacture and J. Machining Science and Technology. In recognition to the research work of Dr. Jain, he has been opted as a member of the editorial board of more than ten *international journals*. He has also worked as a *guest-editor* for more than ten special issues on TQM, CAPP, advanced machining processes, micromanufacturing, and micro fabrication. He has more than **300** publications to his credit. He has written and edited eight books. He has guided fifteen Ph.D. Students and around one hundred M. Tech. / M. E. Students. Dr. Jain has various research areas of interest, viz. advanced machining techniques (ECM, EDM, AFM, MAF, MRAF, and others), machining of advanced engineering materials, shear strain acceleration phenomenon in metal cutting, computer aided manufacturing, and CAPP.

### Prof. Janet K. Allen and Prof. Farrokh Mistree

Janet k. Allen holds the John and Mary Moore chair in the school of industrial and systems engineering and Farrokh Mistree holds the I. A. Comp chair in the school of aerospace and mechanical engineering at the University of Oklahoma in Norman, Oklahoma. They have co-



# International Conference on Advances in Materials, Mechanics, Mechatronics & Manufacturing (IC4M 2022)

authored over 350 papers and four research monographs. Both are fellows of ASME. Janet and Farrokh co-direct the systems realization laboratory @ ou. The srl@ou is a multicultural, multidisciplinary academic family focused on educating the **next generation of Professors**. They provide an opportunity for every member to learn how to dream, rise to his/her full potential and contribute to the **scholarship** associated with the realization of complex engineered systems. Allen and Mistree hypothesize that

- All grand challenges can be modeled as cyber-physical-social (CPS) systems.
- Public policy is foundational for addressing any grand challenge.

Hence, their interest in evolving cps to support policy making. Their quest for answers to the key challenges associated with evolving cps systems are anchored in the following research thrusts:

*Platformization*: knowledge-based platform for decision support in the design of engineered systems

- Predictive analytics: simulation of future outcomes using limited data
- Knowledge-based management of computational complexity and risk
- Knowledge-based exploration of the solution space

*Disruptive innovation in the cyber-physical-social space*

- Rural development policy: evolving food-energy-water nexus for sustainable development
- Healthcare policy: evolving fail-safe healthcare networks
- Energy policy: dynamic management of connected communities to maximize comfort and minimize cost
- Education: contextual assessment of student learning through reflection on doing

The allen-mistree education focus is on creating and implementing courses aimed at educating strategic engineers—those who have developed the competencies to create value in digitally transforming enterprises through the realization of complex engineered systems.

## **Prof. D. Scott Sink**

Scott is a native of Findlay, Ohio, and a graduate of The Ohio State University (1973, '76, '78). He spent three years with Eastman Kodak as a Service Systems Engineer in Rochester, N.Y., after receiving his BS in Industrial and Systems Engineering. Scott returned to Ohio State as a graduate research assistant funded by an NSF grant, studying white collar productivity measurement. Upon completion of his Ph.D. in Interdisciplinary Studies (based in ISE), he joined the faculty at Oklahoma State University from 1978-1984. In the fall of 1984, Scott joined the ISE faculty at Virginia Tech and led the Virginia Quality and Productivity Center from 1984-1997.

D. Scott Sink (Ph.D., P.E.) is a Senior Advisor for the Poirier Group in Toronto, Canada. TPG is a boutique ISE consulting firm offering support for operational excellence. He is also an Adjunct Professor in ISE at Virginia Tech and, he serves as a volunteer for the Institute of Industrial and Systems Engineers.

He was a Professor in ISE at Oklahoma State, Virginia Tech and Ohio State University. He also has worked in the private sector in roles of VP of business process reengineering and improvement in global life sciences and value exchange optimization.

His specialties are in the areas of large scale organizational transformations, operational excellence and analytics, integrated lean sigma, and change leadership and management.