



Institute of Space Technology, Islamabad offers workshop

Advanced Composites Manufacturing and Processing

17-19 Oct, 2017 at IST Video Conference Room

Overview:

From the fabrication of tennis rackets to human prosthetics and from automobiles to aircrafts, composite materials have emerged to be principle structural materials due to their maximum specific strength and stiffness. The consumption of composites in aircraft industries alone exceeds 100 million pounds – an impressive 12% compound annual growth rate. As composites with superior physical and mechanical properties are being developed, optimization of their manufacturing processes are eagerly being sought to achieve desired physical and mechanical properties. The selection of correct manufacturing process not only leads to superior quality products but also makes them cost effective. This workshop will cover the material and process selection methodologies of composites manufacturing to stay competitive globally.

Primary Topics:

- Basic concepts, composition, role, advantages and properties of composite materials
- Characterization and architecture of high performance fibers.
- Characterization of polymers, metals and ceramic matrices.
- Thermoset and thermoplastic composites manufacturing.
- Manufacturing of sandwich structures.
- Tool Development for Composite Manufacturing
- Secondary Processing, bonded/ bolted joints
- NASA TRLs for composite product development
- Damage, NDT and repairs of Composites
- Composites storage, disposal, waste and recycling issues.
- The economics, safety and environmental issues.



Principle Speaker:

Professor Zaffar M. Khan has obtained his Postdoc, PhD, MS in aerospace engineering focusing on Composite Materials and Smart Structure in collaboration with British Aerospace, Aerospatiale and NASA and has held academic/ research positions at Winona/ Iowa State University, Salford University, NUST, NESCOM (AERO). He is presently Professor and Director General (Research, Innovation and Commercialization) at Institute of Space Technology, www.ist.edu.pk/cacss.

Who should attend?

Engineers, scientists and managers involved in composites manufacturing, processing, NDT/Repairs/Q.A.

Workshop fees/ registration (Rs15,000/ person and Rs10,000 for students).

Name _____ Contact _____ email _____

Sponsoring organization /Address: _____

Registration fee: _____ Payment mode: Cross Cheque/Cash/ Bank A/C : _____

Contact: Tel: 051-9075663, 03450518641, Fax: (051) 9273310, muhammad.arshad@mail.ist.edu.pk

Nominations may please be forwarded by 13th October, 2017