



HINDUSTAN

INSTITUTE OF TECHNOLOGY & SCIENCE
(DEEMED TO BE UNIVERSITY)



Six Days Online Short Term Training Programme (STTP)

Sponsored by AICTE

on

Structural Performance and Damage prediction of Nanocomposite materials in Aerospace applications

Organised by

School of Aeronautical Sciences

Phase-I

23 -28th November 2020

Phase-II

14 -19th December 2020

Coordinators

Dr. P.S. Venkatanarayanan

Dr. C. Ganesan

About Hindustan Institute of Technology and Science

Hindustan College of Engineering, started in the year 1985, was conferred the "University Status" by University Grants Commission (UGC), Government of India, Under Section 3 of UGC Act 1956 from the academic year 2008-09 and under the name HITS (Hindustan Institute of Technology and Science). Today, Hindustan Institute of Technology and Science is one of the most sought after engineering Institutions in Tamil Nadu, reputed for its highly qualified and experienced faculty and excellent infrastructural facilities for curricular and extracurricular activities, the University has maintained an enviable academic excellence right from its inception. The student community comprises of students from all over India and Overseas. We have students hailing from Afghanistan, Bangladesh, Bhutan, China, Egypt, Ethiopia, France, Indonesia, Kenya, Korea, Liberia, Libya, Mauritius, Nigeria, Oman, Rwanda, Singapore, South Africa, South Korea, Sudan, U.A.E, Thailand, Vietnam, Tanzania, USA, etc.

About the Department

School of Aeronautical Sciences is a pioneering department thereby established in 1996 to provide quality technical education in the field of Aeronautics and thereby produce the maximum Aeronautical and Aerospace engineers in the country. The B.Tech programme offered by School of Aeronautical Sciences is accredited by the National Board of Accreditation (NBA). The School has acquired an exemplary reputation in providing quality education in under graduate and post graduate programmes by a blend of experienced faculty in Aircraft Design, Aerodynamics, Aircraft Structures, Aircraft Propulsion, Aircraft Systems and Avionics. The school is endowed with various Types of aircraft, laboratory facilities, flight simulators for flight training. This field deals with the development of new technology in the field of aviation, space exploration and defence system. Endowed with various types of aircraft, flight simulators for flights training and laboratory facilities, the School applies latest technology to study the advancement in the field of aviation, space exploration and defence system.

For Registration

<https://forms.gle/dQjzvQLbi8Dm1B7a6>

Scan



About the STTP

The current development of Aerospace technology is increasing the usage of nanocomposite materials for potential applications. These advanced materials account for a small percentage inclusion of nanomaterials like carbon, organic and inorganic base. The polymer matrix FR nanocomposite have been extensively used nowadays since they exhibit high strength to weight and modulus to weight ratios compared with conventional composite materials. The background of the polymer nanocomposites, and their potential structural performance such as Fatigue life, Residual strength, Damage tolerance, High speed impact performance, Vibrational characteristics, Modelling and analysis of composite structures will be provided briefly during the training. A few case studies on high temperature applications of the nanocomposites will also be given for the participants.

Objectives of the STTP

- ❖ To provide clarity about the structural performance of the advanced nanomaterials in aerospace structures.
- ❖ To enhance the domain knowledge in the field of Fabrication and Testing of advanced composites and nanocomposites.

Resource Persons

Experts from IITs, IIITDM, Anna University, other premium institutions and industries will be the resource persons.

Eligibility

Research scholars, Faculty members of AICTE approved Institutions and Industry professionals all over the country.

Registration

Registration will be purely on the basis of first come first serve criteria. No registration fee will be charged for the participants. Participation e-certificate will be provided to those participants who attend all the sessions of the training program and clear the online test conducted as per the norms of AICTE.

How to apply

The interested participants can apply at

<https://forms.gle/dQjzvQLbi8Dm1B7a6>

Last Date to apply : 19.11.2020 (Phase-I)

10.12.2020(Phase-II)

Chief Patron

Dr. Mrs. Elizabeth Verghese, Chancellor, HITS

Patron

Dr. Anand Jacob Verghese, Pro Chancellor, HITS

Dr. Aby Sam, Director, HITS

Mr. Ashok Verghese, Director, HITS

Advisory Committee

Dr. Alexander Jesudasan, Pro Vice Chancellor, HITS

Dr. Pon Ramalingam, Registrar, HITS

Dr. N. Vasudevan, Dean (E&T), HITS

Dr. R. Asokan, HoD, Aero, HITS

Dr. K. Ramajeyathilagam, Sr. Professor, Aero, HITS

Dr. Dilip A Shah, Sr. Professor, Aero, HITS

Dr. Dalbir Singh, Professor, Aero, HITS

Dr. R. Santhanakrishnan, Professor, Aero, HITS

Dr. P. VasanthaKumar, Professor, Aero, HITS

Coordinators

Dr. P.S. Venkatanarayanan, Professor, Aero, HITS

Dr. C.Ganesan, Assistant Professor, Aero, HITS

Organizing Committee

Dr. M. S. Nisha, Asst. Professor, Aero, HITS

Dr. S. Subha, Asst. Professor, Aero, HITS

Dr. M. Chandrasekar, Asst. Professor, Aero, HITS

Mr. Elumalai, Asst. Professor, Aero, HITS

Mr. Jensin Joshua, Asst. Professor, Aero, HITS

Ms. Krishnaveni, Asst. Professor, Aero, HITS

Mr. Sarath kumar, Asst. Professor, Aero, HITS

Mr. Dominic Xavier, Asst. Professor, Aero, HITS

Address for Communication

Dr. C. Ganesan, Asst. Professor

Mr. Elumalai, Asst. Professor

School of Aeronautical Sciences

Hindustan Institute of Technology and Science

#1, IT Express Highway, Padur, Kelambakkam, Chennai – 603 103

Mobile: 9840944980 / 9791015832



Scan to register

SCHOOL OF AERONAUTICAL SCIENCES
AICTE Sponsored 6 Days Short Term Training Program

on

“Structural Performance and Damage prediction of Nanocomposite materials in Aerospace applications”

PHASE I: 23.11.2020 to 28.11.2020

List of Speakers

1	<p>Chief Guest Dr. M.K. Padmanaban Director, Virginia Tech India Research & Education, UCAL, Chennai.</p>	<p>Dr. M.K. Padmanaban is a Technocrat with more than 35 years of experience in domains that span Enterprise creation and Management, Education and Applied Research, Governance and Policy implementation. Presently, from 2016, he is the Director of Virginia Tech India Center for Research and Education, a Not for Profit entity duly Registered under Indian Companies Act.</p>
2	<p>Guest of Honour Mr. Iyengar Parthasarathy Manager – Advance Materials Division, Airbus, Bristol, UK.</p>	<p>Mr. Iyengar Parthasarathy is currently working as Manager in Advance Materials Division, Airbus, United Kingdom. His research areas are metallic materials, composite materials and Material Characterization. He has published several articles in reputed international journals.</p>
3	<p>Dr. Deepak Kumar Maiti Professor, Department of Aerospace Engineering, IIT Kharagpur</p>	<p>Dr. Deepak Kumar Maiti is currently working as professor in IIT Kharagpur. His research areas are Structural Health Monitoring, FE analysis of Smart Multidirectional Composites, Non-linear Analysis of Smart Composite Plates and Shells Reliability Analysis of Composite Wing Subjected to various Loads. He has published several articles in various international journals and conferences.</p>
4	<p>Dr. M. Balasubramaniam Professor, IITM, Chennai</p>	<p>Dr. M. Balasubramaniam is currently working as professor in IIT Madras. His research areas are Nanocomposites, Advanced Ceramic Processing, Material Characterization, Material Testing. He has published several articles in reputed international journals.</p>

5	Dr. R. Velmurugan Senior Professor (HAG), IITM, Chennai	Dr. R. Velmurugan , is currently working as Senior professor in IIT Madras. His research areas are Impact Mechanics, Composite Materials, Nano-materials. He has authored several book chapters and published several articles in reputed international journals.
6	Dr. P. K. Jain Scientist "G" & Team Leader, Center for Carbon Materials, International Advanced Research Centre for Powder Metallurgy & New Materials (ARCI), Hyderabad.	Dr. P. K. Jain is currently working as Scientist "G" & Team Leader in the Center for Carbon Materials, International Advanced Research Centre for Powder Metallurgy & New Materials (ARCI), Hyderabad. His research areas include exfoliated Graphite & its Product, Synthesis, Characterization and Applications of Nanostructured Carbon Materials, Structural Nanocomposites, Nanofluids & Nano lubrications, Carbon Fiber Reinforced Composites. He has received many awards from various organizations. He has published several articles in reputed international journals.
7	Mr. Dinesh Kumar Manager (UAVs), Aerospace Division, UCAL, Chennai.	Mr. Dinesh Kumar is currently working as Manager (UAVs), Aerospace Division in UCAL, Chennai. His expertise includes Composite & Nano composite materials.
8	Dr. Muniappan DGM – Aircraft Design, TATA Aerospace and Defence, Bangalore- 64	Dr. Muniappan is currently working as DGM – Aircraft Design, TATA Aerospace and Defence. His research areas are Composite and Nano composite materials for turbine blades. He has rich of experience in large multinational organizations and proven ability to lead global multi-functional teams focused on quality, cost and delivery to meet the business goal. He has published several articles in reputed international journals and conferences.
9	Ms. Sirisha Shasikanth Autodesk Expert, Design Sangam Ltd. Hyderabad	Sirisha Shasikanth is an online Fusion 360 trainer and freelance product designer. She is an Autodesk Elite member and holds a Master's degree in Production Engineering from PSG college of Technology. Mechatheart.com is her website through which she teaches and promotes design tools to students and professionals who aspire to make things. Designsangam.com is a result of her belief that great inventions that do good to our whole ecosystem can happen through the seamless collaboration of all stakeholders in the product design community.
10	Dr. V. Arumugam Associate Professor Department of Aerospace Engineering MIT, Anna University, Chennai	Dr. V. Arumugam is currently working as Assoc. Professor in the Department of Aerospace Engineering, MIT, Anna University, Chennai. His expertise includes Composite & Nano composite materials, NDT, Flight Mechanics.
11	Dr. Karthick Narayanan MS, PhD from NTU, Singapore, Associate Professor,	Dr Karthick Narayanan R has a Masters and Ph.D both from Nanyang Technological University, Singapore. He is currently as Associate professor at Indian Institute of Information technology, design and manufacturing (IIITDM). He is also consulting

	<i>IIIT D & M, Chennai</i>	<i>broadly in the area of Industry 4.0 with manufacturing (automotive, composites) and process (coca cola etc..) companies</i>
12	Mr. Karthik <i>Scientist, DRDO Hyderabad</i>	Mr. Karthik is currently working as Scientist in DRDO Hyderabad. His research areas are Structural design, Finite Element analysis, testing, fabrication & certification of Metal and composite structures for airborne surveillance application.
13	Dr. S S. Subramanya Sastry <i>Stress Analyst, Director Projects, Info Tech India Pvt. Ltd. Bangalore.</i>	Dr. S S. Subramanya Sastry is currently working with Renprotech Solutions Pvt Limited as Director Projects. He has 37 publications in International/National Journals and conferences. He is a member of NAFEMS International Composite Working Group, Honorary Chairman for NAFEMS India Composite Working Group, member for NAFEMS India Council and Technical Expert Member at NAFEMS Panel on Certification for CAE professionals.
14	Dr. Santhanam <i>Senior Scientist in DRDO, Hyderabad.</i>	Dr. Santhanam is currently working as Senior Scientist in DRDO, Hyderabad. His research areas are Composite and Nano composite materials.
15	Mr. Devendran.T <i>CEO, ST Advanced Composites Pvt, LTD. Chennai.</i>	Mr. Devendran Thirunavukarasu is the founder of ST Advanced Composites (STAC) Chennai, India. With his wide knowledge and skills in the field of composites, he took up the position as technical director. He has a hands-on experience in composite manufacturing while studying in France and as a Composites engineer trainee in Italy. His skills include computer aided design, manufacturing technology, product development, composite testing and certifications.
16	Dr. N. Venkateswaran <i>Professor & Head, REC, Chennai.</i>	Dr. N. Venkateswaran is currently working as Professor in the REC Chennai. His research areas are Natural Composite and Nano composites. He has published several articles in reputed international journals and conferences