### **Organizing Committee: Chief Patron:**

Dr. N B.R Prasad Chairman, ANITS

#### Patron:

Dr. T V.Hanumnatha Rao Principal, ANITS.

### **Chairman and Co-ordinator:**

Dr.B.Naga Raju Professor & HOD Department of Mechanical Engineering ANITS.

Cell: +91 9849820049 Office:08933-225083

Email: hodmech@anits.edu.in

# **Registration Details:**

Registration is free for all participants. Send the scanned copy of the duly filled registration form to: hodmech@anits.edu.in by 20<sup>th</sup> December, 2019.The confirmation of the registration will be sent by 25th December, 2019.

### Travel and Accommodation:

Outstation participants are eligible for TA by shortest route as per AICTE norms. Free accommodation will be provided for outstation participants on prior request.

# **Transport:**

Participants can avail college bus facility during college timings. ANITS can also be reached by RTC buses starting from RTC Complex by Bus No.s.222, 211. Alternatively large number of autos will ply at frequent intervals from RTC complex to ANITS.

#### **About ANITS:**

Anil Neerukonda Institute of Technology & Sciences (ANITS) was established by the Anil Neerukonda Educational Society (ANES), which was founded by Dr. N.B.R. Prasad, an NRI philanthropist from USA. This institute was started in the year 2001 and is affiliated to Andhra University. The instituion offers seven undergraduate programs and five Masters "Advanced Joining Techniques programs. It is just 30 minute drive from Visakhapatnam to reach the campus, which spreads over 14 acres of land.

# **About the Department:**

The department of Mechanical Engineering is established in the year 2005 with the state of art laboratories and research facilities which are being upgraded continuously every year. The department was accredited by NBA in the year 2012 and reaccredited in the year 2016. Presently it has an intake of 240 at UG level and 18 at PG level. The department has faculty strength of 44 with ten Doctorates. The department promotes research activity vigorously which has fructified in the publication of more than 240 papers since inception in National/International Journals/Conferences, The department received grants from Centrally sponsored organizations like AICTE, UGC, DST, ISTE totaling to an amount of Rs. 37,00,000/- for MODROBS and organizing induction programme, seminars.



A Two Day National Seminar

of Dissimilar Materials for Engineering Applications"

3<sup>rd</sup> & 4<sup>th</sup> January, 2020



Sponsored by Science and Engineering Research Board



Co-ordinator Dr.B.Naga Raju, Professor & HOD **Department of Mechanical Engineering** 

Organized by Department of Mechanical Engineering Anil Neerukonda Institute of Technology & Sciences UGC Autonomous, Accredited by NBA & NAAC with 'A' Grade Sangivalasa - 531 162, Bheemunipatnam Visakhapatnam Dist. AP, India.

website.: mechanical.anits.edu.in

# **Objective of Seminar**

Techniques for joining dissimilar materials, particularly metals and polymers, are becoming increasingly important in the manufacturing of hybrid structures and components for various engineering applications.

The recent drive towards lightweight construction in the aerospace and automotive industries has led to increased exploitation of lightweight metallic and non-metallic materials. Hence, suitable joining methods are being identified in order to join these dissimilar materials and to integrate them in engineering structures.

Understanding of the various joining technologies that exist for multi-material, metal-to-metal, polymer to polymer, and metal-to-polymer hybrid structures is consequently important. Hence this programme intends to invoke the latest innovations and developments in joining techniques.

It is also intended to understand the intricacies of joining methods, testing of joints and specific problems involved.

The thrust areas of research in the field of joining dissimilar materials will also be exemplified for the benefit of researchers.

### **Resource Persons**

- Dr. D.Ravikumar, Professor, IIT-Delhi
- Dr. N. Ramanaiah, Professor, AUCE(A), Vizag.
- Dr. Ch. Ramadas, Scientist 'F', Composites Research Center, DRDO, Pune.
- Dr. K. S. N. Suman, Assoc. Professor, AUCE(A), Vizag.
- Dr. P. Pavan Kumar, Prof., BITS-Pilani, Hyd campus.
- Dr. S. Madhusudan, Professor, URCE, Vijayawada.
- Dr. B. NagaRaju, Professor, ANITS, Vizag

#### **Contents**

- Advanced joining technologies with specific thrust on dissimilar materials.
- Mechanical and structural characterization of joints.
- Design rules & joining procedures.
- Specific problems in advanced materials joining.
- Latest techniques for Quality testing of joints.
- ©Environmental effects on joints
- ♥Thrust areas of research.

# **Instructions to the participants:**

- Faculty members from AICTE recognized institutions, research scholars and personnel from Industry & Research organization.
- Selection criteria for the participants are first -come-first-serve-basis.
- Participants should follow the formal dress code and adhere to the session timings.

#### **Important Dates:**

Last date of registration: 20-12-2019

Intimation of Selection: 30-12-2019

Programme dates: 3<sup>rd</sup> & 4<sup>th</sup> January, 2020

#### **REGISTRATION FORM**

A Two Day National Seminar on "Advanced Joining Techniques of Dissimilar Materials for Engineering Applications"

3<sup>rd</sup> & 4<sup>th</sup> January, 2020

Full Name:
Qualification:
Designation:
Experience (No. of Years):
Teaching:
Research/Industry:
Address:
Tel(O):(R)
Fax: Cell
E-mail:
PLACE:
DATE:

Signature and Seal of

Head of the Institution

Participant's

Signature