



# AICTE SPONSORED

Short Term Training Programme on  
“Nanotechnology and Functional Materials”

**14<sup>th</sup> to 19<sup>th</sup> September 2020**  
(Through Online Mode – Phase III)

Organized by

**Department of  
Mechanical Engineering**



**S V COLLEGE OF ENGINEERING**



Opp: LIC Training Centre,  
Karakambadi Road,  
Tirupati-517507.



[www.svce.edu.in](http://www.svce.edu.in)

## ABOUT THE COLLEGE:

Sri Venkateswara College of Engineering (SVCE) is a part of the SV Colleges group established in the year 2007 with a vision to become a leader in providing quality educational services. College is affiliated to JNTUA & Approved by AICTE, Recognized under sections 2(f) & 12(B) of UGC act 1956, Accredited by NAAC with 'A' Grade. Three B.Tech Programmes CSE, ECE & EEE are accredited by NBA, New Delhi. The College offers UG Courses (ME, CE, CSE, ECE, EEE & IT), PG Courses (AMS, ES, CSE, PS, MCA & MBA). The campus is equipped with state of art laboratories and center of excellence through advanced tools and technologies. The central library has a large collection of books, journals and online resources for the benefit of students and faculty.

## ABOUT THE DEPARTMENT:

The Department has highly qualified and rich experienced faculty with an aim of providing quality educational service. The Department has good infrastructural facilities and is equipped with full-fledged laboratories and audio-visual systems. The department focuses research on Heat Transfer Enhancement, Alternative Fuels, Composite Materials etc.,

## VISION OF THE DEPARTMENT:

To impart knowledge with global perspectives in pursuit of excellence in Mechanical Engineering Education, Entrepreneurship and Innovation.

## MISSION OF THE DEPARTMENT:

- To inculcate students with leadership skills with high level of integrity & ethical values for team building and team work.
- To mould the young dynamic potential minds into full-fledged future professionals through effective teaching-learning techniques & industry – institute collaboration.
- To serve the society through innovation and excellence in teaching and research.

## ABOUT THE STTP:

Advanced functional materials continue to attract huge scientific interest by feature of its potential to provide path breaking innovations. The exchange of knowledge and information in this field is thus very important for researchers, academicians and entrepreneurs to develop new materials and technologies for future applications. The course aims to bring together national experts from R&D organizations, academic institutions, and industries in the field of materials science and endeavors to facilitate interactions and discussions on the recent trends in functional material area.

## OBJECTIVES:

The objective of this STTP is to provide an opportunity for faculty to interact with leading researchers in nanotechnology. The STTP includes invited talks from experts in related areas from reputed institutions.

## KEY FEATURES OF COURSE:

- ❑ Introduction to Nanotechnology
- ❑ Types of Nano-materials and their synthesis Techniques.
- ❑ Characterization of Nano-materials.
- ❑ Nanostructure materials & fabrication methods
- ❑ Nano composites: Preparation and Characterizations.
- ❑ Applications of Nano-materials and Nano composites.
- ❑ Functional Materials: General Concepts, Processing Technologies, Applications and Future Trends.
- ❑ Functional Materials for Energy and Environment.
- ❑ Functional Materials in Nanotechnology.
- ❑ Functional Polymeric Composite Materials.

## ELIGIBILITY:

- ❖ Scientists from R&D
- ❖ Faculty Members
- ❖ Research Scholars
- ❖ Post-Graduate Engineering & Science students

## RESOURCE PERSONS:

Resource Persons will be from Renowned Institutions such as IIT's/NIT's, Industry and host Institution.

## IMPORTANT DATES :

*Last Date of Registration : 11<sup>th</sup> September 2020*

*Notification of Acceptance : 12<sup>th</sup> September 2020*

## REGISTRATION FEE :

- Nil -

## REGISTRATION LINK:

<https://forms.gle/8EYipqmEja6ScC669>



## CERTIFICATION:

e - Certificates will be provided to those participants who attend all the sessions of the program and also appear for the online test as per the norms of AICTE.

## Organizing Committee

### CHIEF PATRONS:

**Sri. A. Gangi Reddy, Chairman**  
**Sri. Prakash Ambavaram, Vice-Chairman**

### PATRONS:

**Dr. N. Sudhakar Reddy, Principal, SVCE**  
**Dr. T. Kalpalatha Reddy, Principal, SVEC**

### Convenor:

**Dr. M. Chandra Sekhara Reddy,**  
**Professor & HOD.**

### Co-Convenor:

**Mr. G. Guru Mahesh,**  
**Cell: 8919522452**  
**Dr. N. Rajesh,**  
**Cell: 9985289928**

### Co-ordinators:

**Mr. V. Ajay,**  
**Cell: 9492516658**  
**Mr. P. Charan Theja,**  
**Cell: 9985851430**

## ADVISORY COMMITTEE:

Dr. D. Srinivasulu Reddy, Professor, HOD, Dept. of ECE.  
Dr. K. Sekar, Professor, HOD, Dept. of MCA.  
Dr. P.E.S.N. Krishna Prasad, Professor, HOD, Dept. of CSE  
Dr. M. Raghurama Reddy, Professor, HOD, Dept. of MBA.  
Dr. S. Murali Krishna, Professor, HOD, Dept. of IT.  
Dr. K. Sudheer, Professor, HOD, Dept. of EEE.  
Dr. M. Chittaranjan, Professor, HOD, Dept. of CE.  
Dr. N. Manohar Reddy, Professor, HOD, Dept. of S&H.  
Dr. K. Latha, Professor, HOD, Dept. of English.  
Dr. M. Vamsi Krishna, Associate Professor, Dept. of ME.  
Dr. K. Madhivanan, Associate Professor, Dept. of ME.  
Dr. E. Venkata Kondaiah, Associate Professor, Dept. of ME.  
Dr. K. Lokesh Krishna, Professor, Dept. of ECE.  
Dr. T. Chandra Sekhar Rao, Professor, Dept. of ECE.  
Dr. G. Padma Priya, Associate Professor, Dept. of ECE.  
Dr. K. Sai Venu Pratap, Assistant Professor, Dept. of ECE.  
Dr. V. Lakshmi Devi, Associate Professor, Dept. of EEE.  
Dr. K. Kumar, Associate Professor, Dept. of EEE.  
Dr. K. Rama Krishna Reddy, Associate Professor, Dept. of EEE.  
Dr. P. Dileep Kumar Reddy, Associate Professor, Dept. of CSE.  
Dr. R. Swathi, Associate Professor, Dept. of CSE.  
Dr. K. Srikanth, Associate Professor, Dept. of IT.

### ORGANIZING COMMITTEE:

All Faculty and Staff members of Mechanical Engineering Department.





**AICTE Sponsored One Week Short Term Training Programme**  
on  
**Nanotechnology and Functional Materials (14<sup>th</sup> to 19<sup>th</sup> September 2020)**  
**Distinguished Speakers**



14-09-2020

**Dr. Manoj Gupta**  
NUS – Singapore

Sustainable and Eco-friendly Magnesium Based Nanocomposites for Engineering and Biomedical Applications



14-09-2020

**Dr. G. Mohan Rao**  
Indian Institute of Science  
Bangalore

Carbon Nanostructures for Energy and Environmental Applications



15-09-2020

**Dr. Mamilla Ravi Sankar**  
IIT – Tirupati

Bio Ceramic Functionally Graded Nano Coatings for Orthopedic Applications



15-09-2020

**Dr. Sajan Kapil**  
IIT – Guwahati

Micro - Additive Manufacturing of Metallic Objects



16-09-2020

**Dr. S. Anand Kumar**  
IIT – Jammu

Role of Surface Nanostructured Materials and their Prospective Engineering Applications



16-09-2020

**Dr. S. Kumaran**  
NIT – Trichy

Nano Structured Material Synthesis



17-09-2020

**Dr. Sudarsan Ghosh**  
IIT – Delhi

Use of Nano fluids in Machining and Grinding



17-09-2020

**Dr. Kaushik Pal**  
IIT – Roorkee

Recent Advancements in Nano Materials



18-09-2020

**Dr. Ajay M. Sidpara**  
IIT – Kharagpur

Characterization of Surfaces at Micro/ Nano Scale



18-09-2020

**Dr. J. Ramkumar**  
IIT – Kanpur

Laser Micro/Nano Polishing



19-09-2020

**Dr. Arun K Sikder**  
Staff Scientist, SABIC R&T  
India Pvt Ltd – Bengaluru

Nano-Mechanical Characterization of Surface and Interface using Nano-Indenter and AFM



19-09-2020

**Dr Saurav Goel**  
Cranfield University – UK

Ultra-Precision Engineering: 21<sup>st</sup> Century Enabler of Nanotechnology

**Chief Patrons**

Shri. A. Gangi Reddy, Chairman  
Shri. Prakash Ambavaram, Vice-Chairman

**Patrons**

Dr N. Sudhakar Reddy, Principal, SVCE  
Dr T. Kalpalatha Reddy, Principal, SVCE

**Convenor**

Dr M. Chandra Sekhara Reddy, Professor

**Co-Convenors**

Dr N. Rajesh, Associate Professor  
Mr G. Guru Mahesh, Assistant Professor  
Department of Mechanical Engineering, SVCE, TPT.