#### **NITK SURATHKAL**

Since its inception in 1960, the National Institute of Technology Karnataka (NITK), Surathkal has established itself as a premier Institution engaged in imparting quality technological education and providing support to research and development activities. NITK has conferred the status of an Institution of National Importance vide NIT Act No.29 of 2007 by Govt. of India and is consistently ranked as one of the top ten technical institutions in India. Presently, NITK offers 9 Bachelors, 28 Masters and Doctoral Degree programs. The institute is located 22 kilometers north of Mangalore City along the Kanyakumari-Mumbai National Highway-66, amid 300 acres of sylvan surrounding with the picturesque Western Ghats on the east and sun-kissed sands of the Arabian Sea to the west.

NITK is committed to enhancing the capabilities and potential of our human resources with the objective of transforming them into leaders in their chosen areas of interest. Our vision is to strive for excellence, be globally competitive in technical education and focus on knowledge assimilation, generation, and dissemination. The year-long activities during the occasion showcased the glorious contributions of NITK in various fields of its activities and projected new initiatives for the coming years.

## **DEPARTMENT OF MECHANICAL ENGINEERING**

The Department of Mechanical Engineering established in 1960 is the oldest and largest Department of NITK. The Department has traversed the path of knowledge dissemination and generation as well delivering the best Mechanical Engineering graduates to the nation. Over these glorious 60 years, it has carved a niche for itself in the key areas of teaching, research, consultancy, administration and community services.

The Department offers a program in Mechanical Engineering at B.Tech. level, Thermal Engineering, Manufacturing Engineering, Mechanical Design and Mechatronics Engineering at the M.Tech. level and M.Tech. (by Research), and PhD programme. The Department keeps itself up to date with the latest developments and trends in the field and with a dedicated faculty of highly qualified and experienced members in all streams of Mechanical Engineering. The Department has been active in carrying out funded R&D projects and many facilities for research are added in recent years.

#### ABOUT THE E-WORKSHOP

Manufacturing is the foremost cause of economic growth of a nation. Due to globalization, there is a stiff competition in the manufacturing industry for innovative design and manufacture of products with acceptable quality, at affordable costs and in minimal time. These requirements are sweeping the world of manufacturing. The advancements in materials and existing manufacturing technologies, and the advent of new technologies are offering manufacturers the new paths to design and manufacture innovative range of consumer products, save time, conserve energy, expand human horizons and compete across the global market. Further, the diversity in today's market widens as researchers are gaining knowledge of how to modify the materials and manufacture them, in order to take the advantage of various commercial applications.

leading to expedited design, development, and processing of advanced materials to products for various societal applications. This workshop will provide latest research achievements, exchange knowledge and ideas for innovative research and to identify future research priorities in the sectors of Design and Manufacturing of products.

Keeping in view of the above points, the current E-Workshop

aims to combine the materials and manufacturing innovation

# ATTENDING THE E-WORKSHOP WILL HELP THE PARTICIPANT TO

- Enrich knowledge about the advancements in existing manufacturing technologies, and arrival of new technologies
- Understand various advanced materials that are maturing
- Realize design and processing of advanced materials to products required for various applications
- Learn important aspects of advanced Materials characterization studies
- Identify latest technical challenges; know research updates, and prospective breakthroughs in Design and Manufacturing of advanced materials

## CONTENTS OF PROGRAMME

- Advancements in Additive Manufacturing
- Advanced Machining Processes

- Micro and Nano Manufacturing
- **Progress in Materials Technology**
- Trends in Engineering Design
- **Advanced Joining Processes**
- **Modeling and Simulation in Manufacturing**
- **Surface Engineering Automation and Smart Systems**
- Composite and Polymer Processing

Lectures will be delivered by Faculties & Scientists from IITs, NITs, Premier Research Laboratories and reputed Private Universities and Colleges.

#### **ELIGIBILITY AND SELECTION CRITERIA**

students of Engineering Colleges in the Department of Mechanical Engineering and related Engineering and Science disciplines. Filled-in registration form in PDF should reach

Programme is open to Faculties, Research Scholars and PG

selected participants will be informed via an email before 10<sup>th</sup> Feb, 2021. APPLICATION SHOULD BE SENT THROUGH ONLINE REGISTRATION.

dmam2021nitk@gmail.com on or before 8th Feb, 2021. The

# REGISTRATION

There is no registration fee for the programme. The Ecertificate will be provided through registered e-mail.

## **RESOURCE PERSONS**

- 1. Prof. S. K. Nath, IIT Roorkee
- 2. Prof. Somashekhar S. Hiremath, IIT Madras
- 3. Prof. Sushanta Kumar Panigrahi, IIT Madras
- 4. Prof. S.S. Mahapatra, NIT Rourkela
- 5. Prof. N. Siva Shanmugam, NIT Tiruchirappalli
- 6. **Prof. Krishnaraja G. Kodancha,** KLET University Hubbali
- 7. Prof. Anand R. Annigeri, JSS Academy Bengaluru
- 8. Dr. Durga Prasad C, RVITM Bengaluru
- 9. Dr. Vishwas Mahesh, SIT Tumkur
- 10. Dr. Dharmendra Singh, ABES Engg. College, UP

#### **REGISTRATION FORM**

National Institute of Technology Karnataka, Surathkal Srinivasnagar, Mangaluru 575025, India.

Five-day National E-Workshop on
Design and Manufacturing of Advanced Materials (DMAM-2021)

15th - 19th February, 2021

Name	
Designation:	
Organisation:	
Mailing Address:	
PIN:	Telephone:
Mobile:	. Email:

#### **DECLARATION BY THE PARTICIPANT**

The information furnished above is true to the best of my knowledge. I agree to abide by the rules and regulations governing the programme. If selected, I shall attend the programme for the entire duration. I also undertake the responsibility to inform the Coordinator(s) sufficiently in advance, in case I am unable to attend the programme.

Date:	Signature of Applican

#### LINK FOR REGISTRATION

LINK: <a href="https://forms.gle/JGWT833AfgEgTUuJ9/">https://forms.gle/JGWT833AfgEgTUuJ9/</a>

# Five-day National E-Workshop on Design and Manufacturing of Advanced Materials (DMAM-2021) 15<sup>th</sup> - 19<sup>th</sup> February, 2021 Sponsored by TEQIP PHASE-III



#### **Chief Patron**

Prof. Karanam Umamaheshwar Rao

Director

National Institute of Technology Karnataka, Surathkal

#### Patron

Prof. Shrikantha S Rao

Professor and Head,

Dept. of Mechanical Engineering
National Institute of Technology Karnataka, Surathkal



## Organized by

Department of Mechanical Engineering National Institute of Technology Karnataka Surathkal, Srinivasnagar P.O., Mangaluru-575 025 www.nitk.ac.in

#### **IMPORTANT DATES**

Last date for receipt of application: 8th Feb, 2021

Intimation of selection (via an e-mail): 10<sup>th</sup> Feb, 2021

#### **WORKSHOP VENUE**

E-Seminar: Microsoft Teams

#### **CONTACT INFORMATION OF CO-ORDINATORS**

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