

JSS MAHAVIDYAPEETHA

JSS Mahavidyapeetha (MVP) was established in the year 1954 to impart quality education and to shape the young minds into good citizens. The core purpose of JSS MVP is to transform lives through the philosophy of "Education for All". JSS MVP with its high ideals has been serving remarkably in religious, social, educational and economic spheres in the state and across the country.

JSS SCIENCE AND TECHNOLOGY UNIVERSITY

In accordance with Government of Karnataka's Vision, JSS Science and Technology was established in the year 2016 under JSS MVP with a vision "To be an effective instrument in enhancement of knowledge in the society and thus the social transformation, through national focus, global reach and multidisciplinary approaches".

<http://jssstuniv.in/>

SRI JAYACHAMRAJENDRA COLLEGE OF ENGINEERING

Sri Jayachamarajendra College of Engineering, conceived in 1963, is the dream child of Jagadguru Dr. Sri Shivarathri Rajendra Mahaswamigalavaru, the 23rd pontiff of Sri Suttur Mutt. It comes under the aegis of JSS Mahavidyapeetha, one of the leading institutes in India. SJCE has been recognized under the Technical Education Quality Improvement Programme (TEQIP), which is a world bank associated scheme and has been granted a generous and sumptuous Rs.20 crores. The institution also has the reputation of academic, excellence in professionally oriented programs, and equal proficiency in extra-curricular activities, that makes it a lucrative option for students from all over the country.

ABOUT TEQIP

Technical Education Quality Improvement Programme TEQIP is the World Bank assisted project under Government of India for the improvement of technical education. The first phase was focused on Infrastructural and overall development of technical institutes and the

second phase focuses on Research, Innovation and scaling-up Post Graduate education. About 190 institutions including NITs all over the country are benefitted by the project.

SJCE has successfully completed World Bank assisted TEQIP-I scheme of Government of India as a lead institute in which the emphasis was on infrastructure and is part of TEQIP-II scheme in which priority is on post graduate education, research and innovation. SJCE has successfully implemented TEQIP-II till date, expenditures are incurred under all heads and almost all the project targets have been achieved till date

ABOUT THE PROGRAM

This workshop brings together state-of-the-art on emerging sensor technologies for biomedical, aeronautical, structural and low power electronics application. Field effect transistors (FET's) are next generation electronic devices which are built with carbon based nano-materials, because of their integration capabilities and electrical properties which are carried out through upcoming fabrication techniques. The effect of short channel in the fabrication of FET's are mainly due to transistor current and charge models, leakage current, power consumption, sub threshold conduction, threshold voltage variation, carrier mobility degradation are modeled in TCAD simulation. Aerospace industry requires repeatable properties of structures for their certifications. This is possible if the nanoparticle content is same throughout and the nanoparticles have uniform size, shape and chirality. Research is being focused on the development of processing techniques to enhance dispersion of fillers, reduce the agglomeration and increase the interface properties between the nano-filler and the matrix. To solve these problems, the use of simulation tools to study the enhancement of properties is beneficial. In addition, the development of low-cost biodegradable nanocomposites will significantly benefit life and environment.

This workshop will cover a variety of topics relevant to current cutting-edge research in sensor technologies with analytical and software simulation for the development of smart sensors in industrial applications.

OBJECTIVES

The primary objectives of the course are as follows:

- Exposing the participants to the concept of sensor development for various industrial applications.
- Imparting the knowledge on the sensor applications viz., biosensing, electronic sensing etc.
- Discussing the research opportunities in these fields.
- Training the students in the area of various simulation techniques to compare the results with experimental/analytical methods.

OUTCOME

- Participants will be able to comprehend the development of sensor technology using nanomaterials for various applications.
- Participants will be able to appreciate the need for sensors in recent technology development.
- Strengthening technical knowledge of each participants in the said domain which is helpful in teaching, research and practical applications.

WHO CAN ATTEND

- Executives, engineers and researchers interested in sensor technology from industry and government organizations, including R&D laboratories.
- Students at all levels (BSc/BTech/MSc/MTech/PhD) or Faculty from reputed academic institutions.

IMPORTANT DATES

Last date for receiving the applications: 30th January 2019

Intimation to participants: 1st February 2019 (By e-mail).

REGISTRATION FEE

Participants from industry, academic/research organizations, research scholars/M.Sc students: ₹750.00 + GST 18%, Total: ₹ 885.00. A demand draft in favour of "SJCE MYSURU TEQIP - III" Payable at Mysuru shall be enclosed with the registration form.

TRAVEL AND ACCOMMODATION

No TA/DA will be paid to the participants to reach Mysuru. On campus accommodation will not be provided. However, Hotel accommodation at Mysuru will be arranged/booked on payment of charges as applicable, if required.

PATRON

His holiness Jagadguru Sri Shivarathri Deshikendra Mahaswamigalavaru

ADVISORY COMMITTEE

Dr. B. G. Sangameshwara

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Dr. Ambika P

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Kristu Jayanthi
College, Bengaluru

ABOUT THE DEPARTMENT

Department of **Electronics and Communication** was pioneered in 1968. With the grant-in-aid status department has a high ranking in Karnataka state and has been accredited and rated highly by NBA with "A" ranking and is valid for five years of duration. Besides teaching the department is active in research and collaborative research projects. A good number of projects in collaboration with reputed organization from India and abroad are going on and a few more are in the pipeline. The overall academic track record of the department has been outstanding.

Organizing secretaries:

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DEVELOPMENT OF SMART SENSOR TECHNOLOGY TOWARDS ELECTRONIC APPLICATIONS

One week Faculty Development Program from
4th -8th February 2019 sponsored by

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME - III (TEQIP PHASE - III)

NPIU

National Project Implementation Unit

Organized by:

Department of Electronics and Communication
JSS Science and Technology University
(SJCE),
Mysuru-06, Karnataka



JSS
SCIENCE AND
TECHNOLOGY
UNIVERSITY
MYSURU



Venue:

EC Seminar Hall
Administrative Block
JSS Science and Technology University
(SJCE), Mysuru-06, Karnataka

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