

ABOUT THE INSTITUTION

The Kammavari Sangham, a multi-activity non-profit-oriented voluntary service organization, was established in the year 1952 with the sole objective of providing charitable service to the community and society. The Sangham has diversified its activities since its establishment over five decades ago. With a firm belief that quality and meaningful education only can lay the strong foundation for bringing about economic and social changes to the lives of thousand, the Sangham went about establishing educational institutions, starting with K.S. Polytechnic in 1992.

Enthused with the success of its foray into technical education, the Sangham moved forward by starting the K.S. School of Engineering and Management (KSSEM) in the year 2010.

The campus of K S School of Engineering and Management, nestled in a quiet location off the Kanakapura Main Road, provides good facilities that are required for quality technical education. KSSEM's strength lies in its good vision; dedicated, experienced and well-qualified teaching staff; the establishment of recent equipment in the laboratories and the interactive relationship that it has forged with the industry; all with the active support of an eminent Management.

KSSEM is offering six Under Graduate courses namely, Civil Engineering, Computer Science and Engineering, Electronics and Communication Engineering, Artificial Intelligence and Data Science, Computer Science & Business System and Mechanical Engineering. It is also offering M. Tech course in Structural Engineering and a Masters in Business Administration.

CHIEF PATRONS

Sri. R Rajagopal Naidu

President, Kammavari Sangham

Sri. R Leela Shankar Rao

Hon. Secretary, Kammavari Sangham

Sri. T. Neerajakshulu Naidu

Treasurer, Kammavari Sangham

ACADEMIC ADVISORY BOARD

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Dr. K N Balasubramanya Murthy

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Dr. Y N Srikanth

Member, KSGI

Dr. Shyam Vasudeva Rao

Member, KSGI

Dr. K.V.A Balaji

CEO & Member Secretary, KSGI

ADVISORY COMMITTEE

Dr. K. Rama Narasimha

Principal, KSSEM

Dr. D.R. Swamy

Executive Director, KSRIF

CONVENERS

Prof. Pavithra J, HoD- Dept. of Physics

Prof. Keerthi A, Asst. Prof., Dept. of Physics

ORGANIZING COMMITTEE

Dr. Vaishali R Bote, Asst. Prof., Dept. of Physics

Prof. Nisha P G, Asst. Prof., Dept. of Physics

KAMMAVARI SANGHAM (R) 1952

K. S. GROUP OF INSTITUTIONS

**K. S. SCHOOL OF ENGINEERING AND
MANAGEMENT**

(Affiliated to VTU, Belagavi & Approved by AICTE, New Delhi, Accredited by NAAC)
No.15, Mallasandra off. Kanakapura Road,
Bengaluru-560109



**AICTE - ATAL SPONSORED SIX DAYS ONLINE
FACULTY DEVELOPMENT PROGRAM ON**

**"NANOMATERIAL & ENERGY
STORAGE-SUSTAINABLE
FUTURE"**

03rd TO 08th FEBRUARY 2025

Organized by

Department of Physics

In association with

**All India Council for Technical Education
(AICTE-ATAL Scheme)**

Government of India, New Delhi



ABOUT THE DEPARTMENT

The Physics Department was established in 2010 with the aim of providing world-class undergraduate education. It features a highly dedicated and experienced faculty, supported by strong research and teaching expertise. The department boasts state-of-the-art infrastructure and laboratory facilities, offering top-notch research resources that enhance the research capabilities of both students and faculty. The excellent facilities include spacious classrooms, comfortable seating arrangements, and a conducive teaching and learning environment equipped with modern technology such as online videos and presentations. Additionally, the department offers a unique library for quick and easy reference. Students are encouraged to participate in various extracurricular activities, including sports and cultural programs. There is also a dedicated mentoring system in place to support and guide students effectively.

RESOURCE PERSON

The session will be handled by experts from NIT, other Higher Technical Institutions, Research Organizations, Overseas Experts and Esteemed Industry Experts.

ABOUT THE FDP

The Faculty Development Program (FDP) on Nanomaterials and Energy Storage for a Sustainable Future focuses on equipping educators with the latest advancements in nanotechnology and energy solutions. This program aims to enhance participants' knowledge of innovative materials and their applications in energy storage, addressing pressing environmental challenges. Through a combination of lectures, hands-on workshops, and collaborative projects, faculty members will explore cutting-edge research and methodologies. The FDP emphasizes the importance of integrating sustainable practices into educational curricula, empowering educators to inspire the next generation of scientists and engineers committed to a sustainable future.

TOPICS COVERS IN THE FDP

- The role of nanomaterials for Energy storage devices
- Electrochemical energy storage devices
- Development of Lithium-ion Batteries
- Modeling, Simulation, energy management
- Battery Management System
- Road safety, Hydrogen, EV & Autonomous Mobility
- Clean Energy Conversion Technologies

SCHEDULE OF FDP

Day 1	Day 2,3 4 & 5	Day 6
6 pm-6.30 pm Inauguration	6.pm-7.30 pm Session 1	2.pm-3.30 pm Session 1
6.30 pm-8 pm Session 1	7.30 pm-9 pm Session 2	3.30 pm-5 pm Session 2
8 pm-9.30 pm Session 2		5 pm-7.30 pm Session 3
		6.30 pm-7.30 pm Test & Feedback
		7.30 pm-8 pm Valedictory

TARGET AUDIENCE

The Program is targeted towards Faculty, Research Scholars and PG Students from AICTE approved institutions, Industry Professionals, Consultants & Researchers.

IMPORTANT DATES

Last date for registration- 20/01/2025
Confirmation to participants- 28/01/2025

GUIDELINES

A test will be conducted by the coordinators at the end of the program. The certificates will be issued to those participants who have attended the program with a minimum of 80% attendance and scored a minimum of 70% marks in the test. Registration is online through the ATAL portal. A maximum of 200 participants will be enrolled.

SESSION EXPERT DETAILS



SESSION 1

Topic: The role of nanomaterials for sensor devices
Name of the Expert: **Dr. Navakanta Bhat**
Designation & Organization: Professor and senior scientist
Indian Institute of Science, Bengaluru
Years of Exp: 20 yrs



SESSION 2

Topic: Advances in materials for Energy Storage and Sustainability
Expert: **Dr. M.V. Reddy**
Designation & Organization: Professor and Scientist, National
University Singapore
Years of Exp: 15 yrs



SESSION 3

Topic: Sustainable Nanomaterials for Renewable Energy Storage
Devices
Name of the Expert: **Dr. Rajan Jose**
Designation & Organization: Professor & Ming Chi University of
Technology, New Taipei City, Taiwan
Years of Exp: 25 yrs



SESSION 4

Topic: High-Performance Computing for Innovation in Energy
Solutions and Technologies
Name of the Expert: **Mr. M. P. Ramesh**
Designation & Organization: President, Wind Resource and
technology, Vaayu Power Corp. Ltd.
Years of Exp: 30 yrs



SESSION 5

Topic: Energy storage & Smart grid
Name of the Expert: **Mr. M N Murthy**
Designation & Organization: Principal /Director & National power
Institute New Delhi
Years of Exp: 30 yr



SESSION 6

Topic: Biomass for Sustainable Development
Name of the Expert: **Ms. Tilottama Shrinivasa**
Designation & Organization: Director, peach-eng.com
Years of Exp: 20 yrs



SESSION 7

Topic: Modeling, Simulation, Energy Management
Name of the Expert: **Dr. Somnath Sengupta**
Designation & Organization: Advanced Technology Development
Centre, IIT Kharagpur, India
Years of Exp: 10 yrs



SESSION 8

Topic: Sustainable Technology for Electrical Vehicles
Name of the Expert: **Dr. R. Thirumaleswara Naik**
Designation & Organization: Principal, Research Scientist,
IISc, Bengaluru
Years of Exp: 15 yrs



SESSION 9

Topic: Battery Management System
Name of the Expert: **Dr. Arijit Guha**
Designation & Organization: Assistant Professor, NIT
Rourkela, Sundargarh,
Years of Exp: 10 yrs



SESSION 10

Topic: Electric Vehicles and Smart Grid Technologies
Name of the Expert: **Dr. D V Siva Krishna Rao K**
Designation & Organization: NIT, Tiruchirappalli
Years of Exp: 10 yrs



SESSION 11

Topic: Clean Energy Conversion Technologies
Name of the Expert: **Dr. Eswarmoorthy Muthusamy**
Designation & Organization: Professor & Shri Mata
Vaishno Devi University Katra, Jammu and Kashmir
Years of Exp: 15 yrs



SESSION 12

Topic: Road safety, Hydrogen, EV & Autonomous
Mobility
Name of the Expert: **Dr. K C Vora**
Designation & Organization: Professor & Former Sr. Dy
Director at ARAI
Years of Exp: 20yrs



SESSION 13

Topic: Multi-Phase Flow, Micro and Nano Heat Transfer
Name of the Expert: **Dr. Prasenjit Dey**
Designation & Organization:
Assistant Professor, NIT, GOA Years of Exp: 10 yrs

COORDINATOR DETAILS



Prof. Pavithra J

Assistant Professor and Head Dept. of Physics
K S School of Engineering & Management
Bengaluru-560109
Years of Exp: 16yrs



Prof. Keerthi A

Assistant Professor, Dept. of Physics
K S School of Engineering & Management
Bengaluru-560109
Years of Exp: 8yrs

REGISTRATION PROCEDURE AND FEE REGISTRATION LINK



REGISTRATION FREE OF COST

Participants are requested to register by Scanning the above QR code
Select the FDP Thrust Area: "Energy, Sustainability & Climate Change"
Sub-Thrust Area: Energy Storage
FDP Title

"Nanomaterial & Energy Storage-Sustainable Future"

For further information, please email to

pavithra.j@kssem.edu.in

keerthi@kssem.edu.in

FOR FURTHER DETAILS

Prof. Pavithra J

Coordinator

9972182908

Prof. Keerthi A

Co-Coordinator

9019579125

MANAGEMENT COMMITTEE

SRI. R. RAJAGOPAL NAIDU
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