

# **Department of Physics**

organizes

# Two Day National Virtual Conference on ADVANCED FUNCTIONAL COMPOSITE MATERIALS AND APPLICATIONS

28<sup>th</sup> & 29<sup>th</sup> June 2021



# Academy of Maritime Education and Training (AMET)

(Deemed to be University) #135, East Coast Road, Kanathur, Chennai - 603 112 Tamil Nadu, India Website : www.ametuniv.ac.in

# ABOUT THE UNIVERSITY

AMET is India's first Deemed to be University in Maritime Education which is ranked as 3rd among Maritime Universities of the World in the PIMET Performance Indicators in Maritime Education and Training) Ranking of International Association of Maritime universities (IAMU). Established during 1993, AMET's uncompromising strides of excellence in the field of maritime education and training laced with its capacity to feed the global shipping industry with an un rival led maritime human resource secured it to have many national and international recognitions, accreditations and rankings such as NAAC, NIRF, ARIIA, DGS-CIP, PIMET, etc. AMET University serves as an ocean of knowledge for over 4000 students pursuing courses ranging from B.Sc., to Doctoral through 4 schools and 2 intensive research and training centers for marine and marine related activities. The University is equipped with an excellent infrastructure for research and development, co-curricular and extracurricular activities. AMET secured its compliance certificate for ISO 9001:2015 QMS standards from the prestigious and globally renowned DET NORSKE VERITAS, Norway. For over two decades AMET is remaining as the favorite destination for campus interviews by many shipping giants such as AP MOLLER MAERSK, GOODWOOD, NYK, SONANGOL, VSHIPS, WALLEMS, SHELL, CHEVRON, STENA and so goes a list of over 100 companies. Besides positions onboard, AMET Business school graduates have secured lucrative jobs in commercial shipping sectors such as chartering and ship broking.

#### Vision :

To sustain identity as a World Class Leader in Maritime Education and empower learners with wholesome knowledge through progressive innovation in training, research and development which will render students a unique learning experience and a transformation impact on the Global Society.

### Mission :

AMET will strive continuously to

- Impart value-based higher education and technical knowledge with uncompromising strides of an outstanding quality.
- Emerge as a Centre of Excellence inculcating skill development in recent technologies in accordance with industrial trends.
- Create World class research capabilities on par with the finest in the world and broaden student's horizons beyond classroom education.
- Nurture talent and entrepreneurship to enable all round personality development among students.
- Empower students across socio economic strata.
- Make a positive difference to society through technical education.

# ABOUT THE DEPARTMENT

The Department of Physics, AMET was established in the academic year 2001-02. Physics being an integral part of every scientific innovation, teaching the principles of physics to engineers is to lay a strong foundation for future technology. The Department offers Physics as allied subject to various branches of B.Sc., and B.E., courses. The curriculum is enriched to expose the students to various theoretical and practical aspects of basic Physics. Students who are to sail and work in the offshore environments are benefited by the knowledge gained. We strive and make them competent in understanding and applying physics in their respective fields. Presently the department has a team of ten faculty members. The faculty members are well experienced and have an academically sound background with several projects and publications.

# SCOPE OF THE CONFERENCE

The conference will have an over-arching discussion on topics like high performance light weight composites, bio / nano composites, different processing and characterization techniques, research avenues. With technological enhancement in various disciplines, the demand for the new sustainable material is booming which can replace the conventional materials. Fiber reinforced composite, semiconductor nanohybrid, nano composite and plasmonics research are in roar nowadays due to its significant characteristics likeless weight to strength ratio, enhanced optical, electrical, thermal &sustainable properties. Innovative research in material, processes and product design which is vital for meeting the needs of cost-efficient manufacturing for being competitive in the global environment. Thus, the main objective of this conference is to bridge the gap between the academic knowledge and ongoing technological advancement for the functional composite materials in terms of its scope and challenges. The expert sessions will help the researchers to understand the key issues related to the composite manufacturing, machining and sustainability for various applications.

### Area of Focus & Call for Abstracts

- NanomaterialsBiomaterials
- Crystal Growth
- Ceramics
- e High pressure
- Magnetic materials
- Nonlinear optical materials

### **Registration details**

Polymers

- Shock wave
- Sensors / Biosensors
- Super capacitor
- Solar cell devices
- Thin film technology

Registration is open for students, research scholars, faculty & members of research institutions and industries.

### **Registration Fees**

Registration is free for all the participants. Certificate will be issued only to the participants who have attended all the sessions and submitted feedback.

Registration Link: https://forms.gle/dYKBCus1v38pZgdd7

Google meet Link: https://meet.google.com/cnf-gqzj-oek?hs=224

### **Abstract Submission**

Abstract\* should be submitted in the prescribed format. <u>Click here</u> for Abstract format.

Abstract should be submitted to physicsamet2021@gmail.com

Mode of presentation (Oral or E- Poster) will be intimated later.

\*Accepted Abstracts will be published in the conference proceedings with ISBN

# **AWARDS FOR ORAL & E-POSTER PRESENTATION**

Abstracts related to the conference topics are only invited and the best two Oral & E-Poster presentations will be awarded a merit certificates. The selection will be based on the performance and the decision of the panel experts.

### **Important Dates**

Last date of Abstract Submission	: 22.06.2021
Notification of Acceptance	: 24.06.2021
Last date of Registration	: 27.06.2021
Last date of E-Poster Submission	: 27.06.2021

# **INVITED SPEAKERS**



**Dr. R.Jayavel** Director, Centre for Nanoscience and Technology, Anna University, India.



**Dr. R.Jayakrishnan** Associate Professor, Department of Physics, Kerala University, India.



**Dr. C.Vijayan** Professor, Department Of Physics, IIT, Madras, India.



**Dr. R.Jayakumar** Professor, Centre for Nanosciences and Molecular Medicine (ACNSMM), Amrita Vishwa Vidyapeetham, Kochi-682041, India.

# **SESSION CHAIRS**



**Dr. G.Anbalagan** Professor, Department of Nuclear Physics, University of Madras, Chennai, India.



**Dr. R. Mohankumar** Associate Professor, Department of Physics, Presidency College, Chennai, India.

All the correspondences should be addressed to Dr. K. Gayathri, Convenor & Assistant Professor, Department of Physics, AMET, Chennai – 603 112. Mobile: +91-9789933245, +91-9940156552, +91-9884810428, +91-9176432161 E-mail: physicsamet2021@gmail.com

#### **Chief Patrons :**

Dr. J. Ramachandran, Chancellor, AMET Dr. Rajesh Ramachandran, Pro-Chancellor, AMET

#### Patrons:

**Col. Dr. G. Thiruvasagam**, Vice-Chancellor, AMET **Dr. N. Manoharan**, Pro Vice-Chancellor, AMET

#### **Organizing Committee :**

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#### **Conveners**:

**Dr. Anita R. Warrier**, Associate Professor, Department of Physics, AMET **Dr. K. Gayathri**, Assistant Professor, Department of Physics, AMET

### Advisory Committee :

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Dr. N.Vijayan, National Physical Laboratory, New Delhi.
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Prof. Dr. S. Balakumar, University of Madras, India.
Prof. Dr. S.Moorthy Babu, Crystal Growth Centre, Anna University, India.
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Dr. M.Gulam Mohammed, New College, Chennai.
Dr. R.Mohankumar, Presidency College, Chennai.
Dr. J.Jayachandra Bingi, IIITDM, Chennai.

### **Organizing Secretaries :**

Dr. K. Anandan, Assistant Professor, Department of Physics, AMET Dr. K. Rajesh, Assistant Professor, Department of Physics, AMET

### **Faculty Co-ordinators:**

Dr. A. Mohamed Haroon Basha, Associate Professor, Department of Physics, AMET Dr. S. Rafi Ahamed, Associate Professor, Department of Physics, AMET Dr. S. Kalpana, Associate Professor, Department of Physics, AMET Dr. N. Maheswari, Assistant Professor, Department of Physics, AMET

# ADMISSIONS FOR THE YEAR 2021-2022 ARE OPEN

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