#### **Workshop Details**

#### **WORKSHOP REGISTRATION FEES**

Indian companies or R & D industry : Rs. 4000 **Indian faculty Registration** : Rs 2000 Faculty of host institution Rs. 1500 Indian Research Scholar Rs. 1500 Rs.1000 Research Scholar of host Institution Indian student registration : Rs. 1000 International Faculty registration : \$1000 International student registration : \$500

#### **IMPORTANT DATES**

Last date for submission of Abstract : 31st August 2018
Abstract acceptance notification : 2nd September 2018
Early bird registration starts : 3nd September 2018
Deadline for full paper submission : 2nd September 2018

#### **ACCOMMODATION**

Accommodation will be arranged only for the out station participants on request at nearby hotels on payment basis. No TA / DA will be provided for the participants.

#### **BEST PAPER AWARD**

To recognize the outstanding contribution with a particular focus on the themes & sub-themes of the conference "Best Paper Award" will be awarded.

#### **BANK DETAILS**

The registration fee should be sent through a demand draft (DD) from any Nationalized bank drawn in favour of Academy of Maritime Education and Training (AMET) University Projects and Grants payable at Chennai

#### FOR ONLINE ACCOUNT TRANSFER

A/C Name : Academy of Maritime Education and

Training (AMET) University — Projects

and Grants.

A/C Number : 113500101006450.

IFSC Code: CORPO001135

Branch & Bank : Corporation Bank,

Sholiganallur Branch, Chennai -119.

# International Workshop on

Recent Advances in Nanotechnology and Applications

(RANA-2018)

7-8, September 2018

# **Registration Form**

Nulle
Institution:
Designation & Department:
Address:
E-mail:
Mobile:
Date: Signature

**Address for Correspondence** 

## **Dr.Suresh Sagadevan**

Centre for Nanotechnology, AMET, Chennai, India
Convener, IWRANA-2018
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Mobile: +91-9952896615



# organized by

Centre for Nanotechnology, Academy of Maritime Education and Training (AMET), Chennai, India

in association with





Nanotechnology and Catalysis Research Centre
University of Malaya



National Defence University of Malaysia, Malaysia

### Objective of the Workshop

Nanomaterials and related technologies are beginning to impact almost every aspect of modern life ranging from energy, food and drugs to electronics. aerospace, and infrastructure. The power of nanotechnology comes from unique properties of nano-scale solids such as ultra-high surface area, quantum confinement and interaction with living systems. While these properties provide unprecedented benefits, they also bring the risk of easy environmental proliferation and unintended toxicity. Therefore, an evidence-based approach of balancing R&D activities with health and environmental safety is necessary for sustainable development of nanotechnology. This talk will provide an overview of different facets of this field, and its vast possibilities in different industry sectors.

General overview will be followed by few specific examples from our laboratory. where we investigate design, fabrication, and processing-structure-propertyrelationships of hierarchical hybrid materials, where tailored arrays of nanotubes and nanoparticles are strongly bonded to larger solids. These architectures are inspired by biological surfaces such as microvilli and capillaries, where a large unifying scaffold supports progressively smaller and more specialized attachments to provide extremely high interaction area in very compact space. Such designs are not commonly used in engineered materials due to the complexities of bonding components of different sizes, shapes and compositions into one solid. However, as seen in the attached figure, recent advances in surface science have made it possible to design and fabricate these types of solids, which provide the functional benefits of nanomaterials while minimizing their environmental risks. Diverse engineering applications demonstrated to date include tissue regeneration. composite toughening, enhanced thermal exchange and rapid degradation of pollutants in water.

The theme emphasizes the significance of materials development, various characteristics and optimism regarding the potential applications of Nanotechnology. This would be a great platform for the interaction of students with reputed scientists and academicians. It also opens up vistas by disseminating the recent research for industrial applications. Further, it paves way for industrialists to innovate modern products, which ease the processing and help for the societal development.

#### Who should Attend

This workshop will be of interest to those who work in the field of Device design. Fabrication, Materials, Processes and Tools, as a Teacher, Scientist, Student, Entrepreneur, Policy Makers, and Stakeholders who care deeply about bringing creative, innovative and rigorous learning practices. This workshop will be of great interest to those who work in the greas of electronics, biomedical, physics, chemistry and various engineering disciplines including manufacturing.

#### Focused Areas

- Advanced Nanomaterials
- Semiconductor Nanostructures
   Nano Photonics
   Nanomechanics
- Nanoelectronics
- Nanocomposites
- Nanotoxicology
   Green Nanotechnology

Nano Coatinas

- - - Nanobiotechnology
- Nanomedicine
   Nano energy materials

#### About AMET

India's first Academy of Maritime Education and Training (AMET) University for Maritime-related education, training and research. The National Assessment and Accreditation Council (NAAC) an autonomous institution of the University Grants Commission has assessed AMET and accredited with B Grade during November 2015. With a consistent placement record AMET University has been recognized as a premier institution for marine and marine related jobs and has earned a position as a trustworthy consultant for research and development projects wherein the investments are worth to the tune of several crores of rupees. Adducing to these achievements are the awards and accolades garnered by AMET University for a range of activities in pursuit of excellence over the last two decades in maritime education, training, research and development.

#### **Call for Papers**

Research papers of new findings are invited for oral and poster presentations. The selected papers will be published in peer reviewed Journals such as Journal of Nano Research, Advanced Science, Engineering and Medicine and Materials Today Proceedings. Authors are requested to submit an abstract of their work in about 200 words typed in 1.5 space in Times New Roman font of 12 pt on A4 size paper with 2.5 cm margin on all sides. The abstract should carry the title of paper, names and affiliation with email and mobile number of the author(s). Name of the presenting author(s) should be underlined. The abstracts should be sent by e.mail (iwrana 2018@amail.com, drsurehphysics@amail.com)

#### Submission of Manuscript

The manuscript should pertain to original research carried out in topics/themes related to the workshop and should not have been published or submitted for publication elsewhere. The manuscripts can be of 10-20 pages length. Manuscripts can be submitted in MS word format. Results of works already published and papers resorting to plagiarisms or self plagiarism will be summarily rejected.

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