



# ALAGAPPA UNIVERSITY

(A State University Established in 1985)  
Karaikudi - 630 003, Tamil Nadu, India.



## Department of Bioelectronics and Biosensors

organizes

### Two-day Regional Workshop on

# Nanomaterials Driven Advances in Chemical and Biosensors (NANOSE-2024)

Date : 4<sup>th</sup> & 5<sup>th</sup> April 2024

Venue : Science Campus, Alagappa University

#### ORGANIZING COMMITTEE

**Chief Patron**

**Prof. G. Ravi,**

Vice-Chancellor, Alagappa University

**Co - Patron**

**Prof. A. Senthilrajan,**

Registrar, Alagappa University

**Convener**

**Prof. C. Sekar,** Alagappa University

**Organizing Secretaries**

**Dr. V. Dharuman & Dr. J. Wilson,**

Dept. of Bioelectronics and Biosensors

Alagappa University

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**Prof. R. Illangovan,** University of Madras

**Prof. R. Jayavel,** Dean, ACTECH, Anna University

**Prof. J. Jeyakanthan,** Alagappa University

**Prof. J. Kumar,** VC, Madurai Kamaraj University

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**Prof. K. Sethupathi,** IIT- Madras

**Dr. R. Thangamuthu,** CSIR-CECRI, Karaikudi

**Prof. V. S. Vasantha,** Madurai Kamaraj University

**Dr. S. Vasudevan,** CSIR-CECRI, Karaikudi

#### REGISTRATION

The maximum number of participants for this workshop is limited to 50 only. **Hence, interested Students / Research Scholars / PDFs are encouraged to register on or before 28<sup>th</sup> March 2024.**

A nominal amount of Rs. 250/- per participant shall be charged to meet out the cost of refreshment and lunch. The payment can be made directly at the registration desk on 4<sup>th</sup> April 2024 between 9-10 am.

#### ACCOMMODATION

Accommodation will be arranged in the guest house/hotels upon request on payment basis.

All correspondence should be addressed to

**Prof. C. Sekar**

**Convener (NANOSE - 2024)**

**Department of Bioelectronics and Biosensors  
Alagappa University**

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#### Alagappa University

The University has emerged from the galaxy of institutions initially founded by the great philanthropist and educationist Dr. RM. Alagappa Chettiar in the year 1985 at Karaikudi. The University is accredited with 'A+' Grade by NAAC. New innovative courses of scientific and social relevance are being offered through regular, distance and online modes. The University has obtained Category "I" status by the MHRD and occupies 2nd place out of the 12 State Universities. It has secured 30th position among Universities in National Institutional Ranking Framework (NIRF) 2023 ranking. Adding to its glory, the University has reached global recognition with the coveted TIMES World Universities Rankings 2023 in the bandwidth of 400-500.

#### Department of Bioelectronics and Biosensors

Department of Bioelectronics and Biosensors was established in the year 2008 with the objectives to promote interdisciplinary research and innovation in the chemo-bio-sensing processes and devices for the fast, selective and sensitive evaluation of molecules for applications in the fields of clinical, medical, environmental and food industries. The Department offers a PG programme in M.Sc. in Materials Science and Ph.D. programmes in the fields of Materials science, Bioelectronics and Biosensors.

#### Theme of the workshop

The quest for novel functional materials and their tailored modifications for sensor applications in biomedical, agricultural, automobile, food and environmental monitoring is swiftly gaining traction within the scientific and engineering communities. This surge is driven by the imperative to innovate, comparing and contrasting with existing sensor technologies, and pioneering novel solutions hitherto unexplored. In recent years, the spotlight has increasingly turned towards nanomaterials-based chemo-biosensors lauded for their simplicity, enhanced sensitivity, cost-effectiveness, and portability. This proposed workshop endeavours to furnish a dynamic forum wherein researchers, professionals, and entrepreneurs can convene to glean insights into the latest advancements in nanomaterials and sensor technologies, thereby fostering collaborative actions towards impactful innovations.

#### LIST OF SPEAKERS



**Prof. R. Jayavel,**  
Dean, ACTECH, Anna University  
*Two Dimensional Functional  
Nanostructures for Sensor Applications*



**Prof. R. Ilangovan**  
University of Madras  
*Exploring rGO-Based Nanocomposites  
for Enhanced Electrochemical Biosensor*



**Prof. V. S. Vasantha**  
Madurai Kamaraj University  
*Role of nanomaterials in the  
development of electrochemical  
Biosensors*



**Dr. J. Mathiyarasu**  
CECRI, Karaikudi  
*Recent advancements in  
electrochemical sensing strategies.*



**Dr. V. Ganesh**  
CECRI, Karaikudi  
*Multidisciplinary Approach for  
Healthcare Diagnostics: "Nano" at Play*



**Dr. A. Pandikumar**  
CSIR-CECRI, Karaikudi  
*Photoelectrochemical sensors  
for heavy metal detection*



**Dr. S. M. Senthil Kumar**  
CSIR-CECRI, Karaikudi  
*Porous Carbon-based  
material for sensing applications.*



**Dr. S. Senthil Kumar**  
CSIR-CECRI, Karaikudi  
*Wireless electrochemiluminescence:  
Fundamental and its application  
towards clinical analysis*



**Prof. R. T. Rajendra Kumar**  
Bharathiar University  
*MO/MS Heterojunction based room  
temperature chemical sensors*



**Dr. V. Murugan**  
CSIR-CECRI, Karaikudi  
*Role of Electrochemical (Bio)sensors  
in precision diagnostics*



**Prof. C. Sekar**  
Alagappa University  
*Metal oxide based electrochemical  
sensors for food quality assessment*



**Dr. V. Dharuman**  
Alagappa University  
*Detection of DNA biomolecules  
at modified electrode*



**Dr. J. Wilson**  
Alagappa University  
*Polymer Composites for Biosensors  
and Environmental Monitoring*