Two-Day Regional Workshop on Nanomaterials Driven Advances in Chemical and Biosensors - NanoSe 2024

4-5 April 2024



(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: 4th & 5th April 2024

Venue: Science Campus, Alagappa University

ORGANIZING COMMILITUEE

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Vice-Chancellor, Alagappa University Co - Patron

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Registrar, Alagappa University

Convener

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Prof. V. S. Vasantha, Madurai Kamaraj University

Dr. S. Vasudevan, CSIR-CECRI, Karaikudi

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 28th 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 4th April 2024 between 9-10 am

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

Prof. C. Sekar

Convener (NANOSE - 2024)

rtment of Bioelectronics and Biosensors Alagappa University Karaikudi-630 003. TAMILNADU : +91 94425 66363 / Phone: 04565 226385 Email : sensor2025@gmail.com

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



Prof. R. T. Rajendra Kumar

MO/MS Heterojunction based roon temperature chemical sensors

Dr. V. Murugan CSIR-CECRI, Karaikudi lole of Electrochemical (Bio)se 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 lymer Composites for Biosenso and Environmental Monitoring







International (Indo – Poland) Workshop on Functional Materials for Sensor and Energy Applications (FM-SEA) 10-11 November 2022







ALAGAPPA UNIVERSITY

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













International (Indo - Poland) Workshop on "Functional Materials for Sensor and Energy Applications (FM-SEA)"

Jointly organized by

Department of Bioelectronics & Biosensors, Alagappa University, Karaikudi & Materials Research Society of India (MRSI) - Trichy Chapter

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Prof. S.B. Krupanidhi,

President, MRS Co - Patron

Prof. S. Rajamohan.

Registrar-Incharge, Alagappa University

Convener(s)

Prof. C. Sekar, Alagappa University, Karaikudi

Prof. S. Arumugam, Secretary, MRSI-Trichy Chapter

cretaries

Dr. V. Dharuman & Dr. J. Wilson, Dept. of BEBS, Alagappa Universit

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LOCAL ORGANIZING COMMITTEE

Head, Dept. of Industrial Chemistry

Head, Dept. of Nanoscience and Technology

Head, Dept. of Physics

Head, Dept. of Energy Science

REGISTRATION

The maximum number of participants for this workshop is limited to 100 participants only. Hence, interested researchers are encouraged to register on or before 8th November 2022 through Email: nanose2022@gmail.com

REGISTRATION FEE

A nominal registration fee shall be charged to meet out the cost towards refreshment and lunch. The payment can be made directly at the registration desk on 10th November 2022 between 9-10 am

> Faculty and Scientists Research Scholars

Students

Rs. 400/-Rs. 250/-

ACCOMMODATION

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

on 10th & 11th November 2022 @ Science Campus, Alagappa University



Alagappa University

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Department of Bioelectronics and Biosensors
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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, nvironmental and food industries. The Department offers a PG programme in M.Sc. in Materials Science and Ph.D. programmes in the fields of Materials ence. Bioelectronics and Biose

Materials Research Society of India (MRSI)
Materials Research Society of India (MRSI) was established in the year
1989. Currently it is managed by the council headed by Dr. S. B. Krupanidhias
President and Dr. P.S. Anil Kumar as General Secretary. The MRSI is committed
to stimulate, integrate and facilitate research activities in the broad areas of
Materials Science for innovations in thrust areas of Materials Science and
Engineering in the country. The main objectives of the MRSI are promoting
advancements in Materials Science Community, sharing recent developments
and innovations, and establishing active interactions among scientists,
technologists, engineers and other researchers engaged in basic or applied
research from different fields of Materials Science and Engineering.
The MRSI - Tricty chapter was established on 12° November 2015 with
Prof. S. Arumugam of Bharathidasan University as its Secretary. There are 120
life members for now and the numbers keep growing.

Theme of the workshop

The search for new materials or modification of the existing materials for sensor and energy applications are gaining momentum among scientists and engineers to intuitively test and compare them to existing sensors of different kinds and to construct novel types of storage devices not available before. In recent years, nanomaterials-based chemo-biosensors and energy devices have attracted significant attention due to its simplicity, high sensitivity, low cost and portability. The proposed workshop will provide a platform for researchers, professionals and entrepreneurs to take stock of the latest developments in the areas of nanomaterials, sensor and energy applications.

Prof. C. Sekar / Prof. S. Arumugam (MRSI-Trichy) Convenors: FM - SEA 2022 Department of Bioelectronics and Biosensors Alagappa University

Karaikudi-630 003. TAMILNADU Mobile : +91 94425 63637 / Phone : 04565 226385 Email : nanose2022@gmail.com

LIST OF SPEAKERS



Prof. S. Anandan NIT Trichy Nanostructured Carbon as a promising Energy Storage Material



Dr. V. Dharuman Alagappa University, Karaikudi prication of Label free DNA sensors



Dr. Maciej J. Głowacki Poland
Fluorescent diamond particles for optical monitoring of interactions between biomolecules.



Dr. Mateusz Ficek Boron-doped carbon nanowalls for sensing application



Dr. Michal Rycewicz, Poland The effect of boron concentration and train on the electrical, morphological and train on the electrical, morphological and the electrical and the optical properties of boron-doped



Dr. V. Murugan CECRI, Karaikudi terlocking Redox System with Prec Bioreceptor for Next-Generation Electrochemical Biosensor



Dr. A. Pandikumar CECRI, Karaikudi Visible light active materials for photoelectrochemical water splitting



Prof. Robert Bogdanowicz Functional diamond-based biosensing latforms for rapid detection of pathogens



Energy storage devices - Supercapacitors



Prof. C. Sekar Alagappa University, Karaikudi Metal oxide-based Chemo-biosensors



Dr. Srinivasu Kunuku, Poland



Dr. Subrata Kundu
CECRI, Karaikudi
Size and Shape-selective Synthesis
of Nanomaterials for Catalysis,
Device and Energy related Applications



Dr. Susanta Sinha Roy



Dr. J. Wilson Alagappa University, Karaikudi mer based electrochemical sen









National Conference on NANOSE -2022 23rd & 25th March 2022



(A State University Established in 1985) Karaikudi - 630003. Tamil Nadu, India.





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Nanomaterials Driven Advances in Chemical and Biosensors

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Dr. V. S. Vasantha, MKU, Madurai

(NanoSe 2022)

23-25th March 2022 @ Science Campus

ABOUT THE UNIVERSITY AND DEPARTMENT

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ABOUT THE CONFERENCE

The search for new materials or modification of the existing materials for sensor applications are gaining momentum among scientists and engineers to intuitively test and compare them to existing sensors of different kinds or to construct novel types of devices not possible before. The preparation of nanomaterials with desired dimensions and properties are challenging by the chemical approach. However, such nanomaterials get immense attention because of its interesting physical, chemical and catalytic properties.

Emergence of nanoscience and technology led to the development of cost-effective and portable sensor devices with superior performances. In recent years, electrochemical biosensors have attracted significant attention due to its simplicity, high sensitivity, low cost, portability and superior performance. The proposed conference NANOSE 2022 will provide a platform for researchers, professionals and entrepreneurs to take stock of the latest developments in the area of nanomaterials, chemical and

ABOUT THE VENUE

The three-day conference will be held in the Science Campus of Alagappa University at Karaikudi, a municipal town located in the southern part of Tamil Nadu. It is part of Chettinad region that connects Trichy and Madurai airports within about 2 hours drive. The town is also well-known for the style of houses that is unique to the place. Tourists are attracted to this region because of the lip-smacking dishes that are part of the local cuisine of Karaikudi. For those who are interested in pilgrimage and water sports, Rameswaram is an ideal spot, which is about 150 km from Karaikudi.

Dr. C. Sekar Convenor - NanoSe 2022

Department of Bioelectronics and Biosensors Alagappa University

Email: nanose2022@gmail.com

Sponsored by: Alagappa University

TOPICS OF INTEREST

Nanomaterials Quantum dots

Carbon nanostructures

Natural and synthetic receptors

Biosensors Chemical and Gas Sensors

Electrochemical Sensors

Optical Sensors

Microfluidics **Device fabrication**

MODE OF PRESENTATION

There will be deliberations by experts in the form of plenary lectures, invited talks, oral and poster presentations by participants. One page abstract may be submitted via e-mail to Prof. C. Sekar (nanose2022@gmail.com). Abstracts will be accepted for the Final Programme only after registration of one of the authors.

MODE OF REGISTRATION

Registration should be done online before the initiated date and payment can be made on the spot.

IMPORTANT DATE

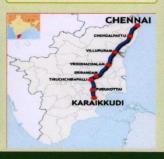
Last date for abstract submission: Last date for Registration:

REGISTRATION FEE

Faculty / PDF Rs 1500/-Rs 1000/-**Research Scholars**

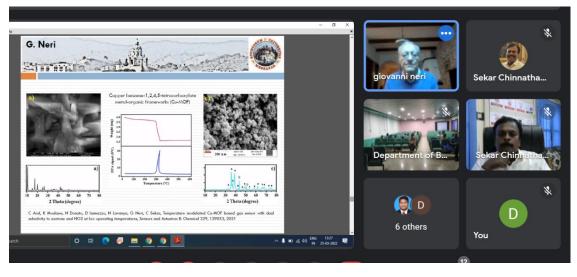
ACCOMMODATION

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International Conference on NANOSE 2019

27-29th November 2019



ALAGAPPA UNIVERSIT

(A State University Established in 1985) Karaikudi - 630003. Tamil Nadu, India.





DEPARTMENT OF BIOELECTRONICS & BIOSENSORS

Organizes

International Conference on

Nanomaterials Driven Advances in Chemical and BioSensors

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Co-Patron
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Alagappa University, Karaikudi

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Dr. J. WILSON Assistant Professors

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rof. K. Sankaranarayanan, Alagappa University

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Prof. C. Suri, Chandigarh

Prof. M. S. Thakur, University of Mysore

Dr. V. S. Vasantha, MKU, Madural

Dr. Zhang Jianjun, TPC, China

(NANDSE 2019)

27 - 29th November 2019

Venue: Science Campus, Alagappa University

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> All correspondence should be addressed to : Dr. C. Sekar Convenor -NANOSE-2019
> Department of Bioelectronics & Biosensors Alagappa University Karaikudi-630 003. Tamil Nadu

Phone: 04565 226385 | Mobile: 9442563637 E-mail: Nanose2019@gmail.com

SPONSORED BY: Alagappa University, DST, DST-PURSE, MHRD-RUSA 2.0, ICMR, UGC and TNSCST

TOPICS OF INTEREST

- Nanobiomaterials
- Carbon nanostructures Quantum dots
- Natural and synthetic receptors
- NanobiosensorsElectrochemical Biosensors Optical biosensors
- Enzyme-based biosensors
 Immunobiosensors
- Printed biosensors
- Microfludics

MODE OF PRESENTATION

There will be deliberations by experts in the form of plenary lectures, invited talks, and oral and poster presentations by participants.

The abstracts (maximum 1 page A4 including references, single spaced in Times New Roman 12pt.) may be submitted via e-mail to Prof. C. Sekar (N a n o s e 2 0 1 9 @ g m a i1. c o m; Sekar 2025@alagappauniversity.ac.in). You will be notified upon receipt of your abstract within a week from the date of submission. Abstracts will be accepted for the Final Programme only after registration of one of the authors.

IMPORTANT DATE

Last date for abstract submission :

Last date for Registration:

REGISTRATION FEE

Registration fee can be made through online mode Research Scholars : Rs 1000/ Faculty/Scientist Rs 2000 International Participants: US\$ 100/-Account details shall be sent through email for the bank transfer of registration fee.

ACCOMMODATION

Accommodation will be arranged in the hotels and student hostels on payment basis on request



POOCHARAM, KKDI. Cell: 98847 1209











Workshop on Nano-Bio-Sensors: Present Status and Future Perspectives (Nanose - 2018) 08-09th March 2018





