

**DEPARTMENT OF  
BIOELECTRONICS AND BIOSENSOR**

**Three-day International Conference  
on Nanomaterials Driven Advances in  
Chemical and Biosensors**

A Three-day International Conference on Nanomaterials Driven Advances in Chemical and Biosensors (NanoSe 2019) (27-29th November 2019) was organized by the Department of Bioelectronics and Biosensors, Alagappa University, in association with the Biosensor Society of India (BSI) and Materials Research Society of India (MRSI), Trichy Chapter. The inaugural function was held on 27th November and was presided over by Vice Chancellor Prof. N Rajendran and it was inaugurated by Dr Sudeesh Kumar Vasudeva, Consultant, Defence Technologies, Office of the Principal Scientific Advisor to the Government of India, New Delhi.

In his presidential address, the Vice-Chancellor highlighted the need for interdisciplinary research for innovation and product development in the era of Industry 4.0. Moreover, Government of India's New Education Policy attaches much importance for multidisciplinary and trans-disciplinary approaches both in teaching and research in all areas of study. He added that Alagappa University has such innovative Departments as Biosensors which covers subjects such as physics, chemistry, biology, medicine, electronics engineering, agriculture and food technology, environmental monitoring, and defence technology. The Department has produced several sensors which could be scaled up and marketed in the near future. In order to promote device design and development, the Vice-Chancellor assured that the University is willing to support Start Ups and venture businesses both financially and logistically.



A compendium containing research articles was released by the Vice-Chancellor and the copies were received by the dignitaries.

In his inaugural speech, Dr Vasudeva emphasized the importance of biosensors for security applications in addition to several areas where sensors find an important place. As an expert in the area of explosive materials and devices, he pointed out that the nano-biosensors made of nanomaterials are more sensitive and selective that could surpass even the intelligent sniffer dogs. Miniaturized portable high performance biosensors are

essential in the areas of Artificial Intelligence and Machine Learning and Advanced Defence Technologies. He assured that the Office of the Principal Scientific Advisor (PSA) is willing to fund for the promotion of a National Centre of Excellence for Biosensors at Alagappa University, Karaikudi.

Prof. C. Raman Suri, Indian Institute of Technology, (IIT) Ropar, pointed out that there is a great demand for sensors in our day-to-day life. There are different types of sensors in our home, car, cell phones, bike, educational institutions, offices, hospitals, industries and everywhere. The best example is the smartphones and electronic gadgets that we are all using. It comprises more than 100 sensors inside such as accelerometer, gyroscope, ambient light sensor, proximity sensor, and temperature detector, to keep a track on parameters and provide a centralized system for automatic control. We need much more information about everything around us. We want to measure, detect, and quantify our air, water, food including our emotions as well. The Global sensor market will be growing at a compound annual growth rate (CAGR) of 9.5 % from 2018 to 2025. Prof. Suri, who was formerly working with the Institute of Microbial technology- (IMTECH) Chandigarh, pointed out that we have missed such a big business opportunity.

Prof. Giovanni Neri, University of Messina, Italy, offered felicitations. Prof. C. Sekar, Prof. & Head, Dept. of Bioelectronics & Biosensors, Alagappa University welcomed the gathering and presented the thematic address. Dr.V. Dharuman, Dept. of Bioelectronics & Biosensors, proposed a vote of thanks.