



SVCE | Sri Venkateswara
College of
Engineering



DEPARTMENT OF APPLIED PHYSICS

**CORDIALLY INVITES YOU ALL FOR AN
INTERNATIONAL SEMINAR**

ON

“RESEARCH TO REALIZATION”

Molecular level interaction to real-time monitoring electronic systems

Chief Guest



Prof. Roy Vellaisamy

*Professor of Intelligent Systems
James Watt School of Engineering,
University of Glasgow, United Kingdom*

Scheduled on 29th June, 2022 at 10.45 am

Venue: Function Hall, SVCE

Chief Patron

**Dr. M. Sivanandham,
Secretary, SVEHT**

Patron

**Dr. S. Ganesh Vaidyanathan,
Principal, SVCE**

Convener

Dr. A. Bhaskaran
Prof and Head
Department of Applied Physics

Organizer

Ms. G. Bharathy
Assistant Professor
Department of Applied Physics



**REPORT ON INTERNATIONAL SEMINAR ON
“RESEARCH TO REALIZATION”**

Date: 29.06.2022

Time: 10:30 am – 12:30 pm

Objectives:

The webinar focused on various self-assembly materials and simple solution process approach for device fabrication such as electronic sensors, flash memories, and THz spectroscopy.

About the programme:

An International Seminar on “**RESEARCH TO REALIZATION**” was organized by The Department of Applied Physics on 29th of June 2022. The Programme started with the Invocation, **Ms.G.Bharathy**, Assistant Professor, Department of Applied Physics, Co-ordinator of the Programme welcomed the honorable Chief Guest **Prof. Roy Vellaisamy, Professor in University of Glasgow** and the audience. Presidential address was given by Dr.A.Bhaskaran, **Professor** and Head department of Applied Physics, followed by introduction of chief guest and then the session was handed over to **Prof. Roy Vellaisamy, Professor in University of Glasgow**.

The speaker explained how the Growing industrialization and urbanization has put human beings and other living organisms at risk against new threats due to the contamination of food, water and air. These Contaminants endanger all the living organisms in this world, especially for human beings genetic disorders and unknown diseases become common nowadays. The WHO statistics show that more than 422 million people worldwide are suffering from contamination related illness. The growing prevalence of such disorders has been linked to exposure to chemicals in plastic, food and water. Although regulatory steps have been taken to minimize risk, cases of overexposure (2011 Taiwan food crisis, Flint and Hong Kong lead

contamination, etc.) still occur. Detection of these chemicals is done in testing labs using expensive and time consuming mass spectrometer systems that require specially trained users. In the regard, we demonstrate a real-time monitoring system for a rapid pre-screening test that could curtail cases of contamination. Over the years, how they have developed an electronic sensor platform based on molecular level interaction between the target and analyte to detect these toxins that would allow the user to quickly self-diagnose for problems such as myocardial ischemia and seek medical attention immediately. In this talk, he discussed the latest advancements sensor platform in terms of basic science to successful launch in the market as an example of “Research to Realization”.

Benefits:

The Seminar inculcated the innovative ideas on how molecular level interactions allow the user to self-diagnose any kind of problems and make research come to realization with their prototype models.

Programme at Glimpse:



Prepared By:

Ms.G.Bharathy,AP/APH
Programme Coordinator