

Capacity Building and Establishment of a Research Consortium

Higher Education and Research collaboration on Nanomaterials for Clean Energy Technologies (HRNCET) (2017-2021)



University of
Jaffna



Western Norway
University of
Applied Sciences

Funded by

Norwegian Partnership Programme for Global Academic Cooperation (NORPART)



Norwegian Centre for International Cooperation in Education SIU

Norwegian Embassy in Colombo

**In collaboration with the Physics and Chemical Societies
Faculty of Science, University of Jaffna**



8th Expert talk under HRNCET & CBERC Projects

Material Characterization Techniques

by

Professor Gamini Rajapakse

Senior Professor of Chemistry and Coordinator of the MSc Course in Nanoscience and Nanotechnology (PGIS), University of Peradeniya

Abstract of the talk: Applications of advanced Analytical Techniques is mandatory for Material Characterization in R&D activities pertinent to Materials Science and Nanotechnology. Researchers using these techniques should be mastered in theory of the technique, proper handling of the instrument, trouble shooting and interpretation of results obtained. This lecture is intended to cover analytical techniques including a Voyage through Microscopic Techniques: Optical Microscopy through Electron Microscopy, Surface Analytical Techniques such as X-Ray Photoelectron Spectroscopy and Auger Electron Spectroscopy, Power X-Ray Diffraction, Fourier Transformed Infrared Spectroscopy, UV-Visible Spectroscopy and Electro-analytical Techniques such as Linear Sweep and Cyclic Voltammetries, DC Conductivity Measurement and AC Impedance Spectroscopy.

Venue : Mini-Auditorium, Department of Physics

Date & Time : March 21, 2019 (Thursday), 15:00 – 17:00

Target group: Researchers and Final year students of the Faculty of Science

Brief profile of the speaker



Gamini Rajapakse is a Senior Professor of Chemistry with diverse research interests in Nanotechnology. He holds BSc Hons (Chemistry, Peradeniya), Ph.D. (Imperial College) and DIC, FNASSL. He has Teaching experience as Undergraduate and Postgraduate Teacher for more than 30 years. He supervised several PhD and master degree theses/dissertations. He has, to his credit, over 100 indexed publications and over 200 publications and communications, in total, and written several Textbooks for GCE Advanced Level and for BSc Degree Level Chemistry curricula. His academic and research activities have been rewarded by awarding 15 National Awards for Excellence in Research, including CVCD award for the most Outstanding Senior Researcher in the field of Physical Sciences. He is a pioneer in establishing MSc Programme in Nanoscience and Nanotechnology and SLINTEC. He has also participated in the First Discussion on Establishing the Institute of (National) Fundamental Studies.

Capacity Building and Establishment of a Research Consortium

Higher Education and Research collaboration on Nanomaterials for Clean Energy Technologies (HRNCET) (2017-2021)



University of
Jaffna



Western Norway
University of
Applied Sciences

Funded by

Norwegian Partnership Programme for Global Academic Cooperation (NORPART)



SIU
NORWEGIAN CENTRE FOR
INTERNATIONAL COOPERATION
IN HIGHER EDUCATION

Norwegian Centre for International Cooperation in Education SIU

Norwegian Embassy in Colombo

**In collaboration with the Physics and Chemical Societies
Faculty of Science, University of Jaffna**



9th Expert talk under HRNCET & CBERC Projects

How to write a scientific article?

by

Professor Gamini Rajapakse

Senior Professor of Chemistry and Coordinator of the MSc Course in Nanoscience and Nanotechnology (PGIS), University of Peradeniya

Abstract of the talk: Conducting scientific and clinical research is only the beginning of the scholarship of discovery. In order for the results of research to be accessible to other professionals and to have a potential effect on the greater scientific community, results obtained must be written and published. Scientific reports must be error-free, concise yet sufficiently descriptive and adhered to the format required for publication. Reviewers consider the following five criteria to be the most important in decision making: 1) the importance, timeliness, relevance, and prevalence of the problem addressed; 2) the quality of the writing style (i.e., that it is well-written, clear, straightforward, easy to follow, and logical); 3) the study design applied (i.e., that the design was appropriate, rigorous, and comprehensive); 4) the degree to which the literature review was thoughtful, focused, and up-to-date; and 5) the use of a sufficiently large sample in case of associated statistical analysis. Journal articles usually have a common structure comprising of Title, Author Details, Abstracts, Keywords, Introduction, Materials and Methods (Experimental), Results and Discussion, Conclusions, References and Associated Conflict of Interest Statement and Acknowledgement for Financial Support. A comprehensive literature survey and understanding the research question are to be done at the beginning. This could follow data analyses and when possible presenting in the form of clear and attractive figures and tables. Abstract should be a condensed form of the manuscript adhered to required word limit which can be written after completing other sections. It is always advisable to put reference DOI within the manuscript so that standard referencing system can be easily used. Conclusions should not be the summary of the article but clear conclusions that can be drawn from the results described in the manuscript. Required form of referencing is also mandatory.

Venue : Mini-Auditorium, Department of Physics

Date & Time : March 22, 2019 (Friday), 11:00 – 13:00

Target group : Academics, Research students and Final year students