



Professor. A.P. de Silva

KEYNOTE SPEAKER- IRCITUM2022

"FROM CHEMISTRY TO MEDICAL
DIAGNOSTICS AND INFORMATION
PROCESSING"

Emeritus Professor, School of Chemistry and
Chemical Engineering Queen's University Belfast



Profile

Prasanna (AP) de Silva's influential work includes the invention of molecular logic gates and the construction of fluorescent sensory systems. He was a Postdoctoral researcher, Queen's University Belfast, 1980; lecturer, U. Colombo, 1980-1986; lecturer, Queen's U., Belfast, 1986-1991; reader, Queen's U., Belfast, 1991-1997; professor, Queen's U., Belfast, 1997-2022. He is an elected member of the Royal Irish Academy.



Education

1976

UNIVERSITY COLOMBO, COLOMBO

Bachelor of Science

1980

QUEEN'S UNIVERSITY, BELFAST

Doctor of Philosophy



Keynote speech



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<https://forms.gle/9uGzQ8Bvo9MeaNh28>

Date : 28th October 2022

**Time : 9.10 am- 10.15 am
Sri Lanka (GMT + 5.30)**

SYNOPSIS:

FROM CHEMISTRY TO MEDICAL DIAGNOSTICS AND INFORMATION PROCESSING

Photosynthesis in plants starts with photoinduced electron transfer (PET). One of the main principles underlying fluorescent sensors is based on PET, according to which a switching 'on' of fluorescence in response to chemical and biochemical analytes can be designed. Introduction of molecular logic gates, from Belfast, Northern Ireland, allows us to build more complex sensors and micro-object identification systems. More complex logic operations, and even human-scale computations, e.g. edge detection of objects and outline drawing, are now achieved by molecular systems. More than 1400 laboratories have contributed to this field so far.