

WEBINAR in Solar Energy Conversion Group

Faculty of Physics, Adam Mickiewicz University

24th February 2023, 12:00-12.40

[link to Microsoft Teams](#)

Idaresit Mbakara

*Department of Photochemistry and Spectroscopy
Institute of Physical Chemistry, Polish Academy of Sciences, Warsaw*

Title: Spectroscopy, photophysics and photostability of 9-substituted porphycenes

Porphycene, the structural isomer of porphyrins has received tremendous attention in the past decades due to unique properties which make them advantageous as photosensitizers in photodynamic therapy (PDT). These properties, ranging from high molar absorptivity in the red region of the spectrum, low dark toxicity, high yield of triplet state formation and high quantum yield of singlet oxygen make a good photosensitizer. In addition, porphycenes are models for fundamental study of double hydrogen transfer in π -aromatic systems. Insight into the suitability of new series of 9-substituted porphycene derivatives in any of the stated applications has been evaluated using spectroscopic, photophysical, and photodegradation studies combined with quantum chemical calculations.

Chairman: Prof. G. Burdziński