



**Theoretical and Physical Chemistry Institute
National Hellenic Research Foundation
Vass. Constantinou 48, Athens**

ONLINE LECTURE

**“Advanced Materials for printable electrochemical
energy devices”**

Dr. Vassilios Binas

**Institute of Electronic Structure and Laser,
Foundation for Research and Technology – Hellas,
and
Department of Physics, University of Crete,
Heraklion, Crete
Greece**

Thursday, February 24, 2022, 12:00

Link: [Click here to join the lecture](#)

Passcode: 727028

Advanced Materials for printable electrochemical energy devices

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As fossil fuel reserves decrease, and the effect of CO₂-driven climate change become more evident, the need to shift from oil and coal to renewable energy resources becomes increasingly urgent. Full utilization of intermitted renewables requires continued development of electrochemical devices for energy storage and conversion such as fuel cells and supercapacitors. Such devices are currently present in almost all the fields of electronics, from phones to cars to space-stations. The performance and device integration improvements will be driven by innovation in materials and in fabrication techniques.

The seminar will focus on research activities related to advanced materials for printable electrochemical devices, targeting to the development of advanced materials, understanding the physicochemical properties and to the potential of additive manufacturing, in particular, inkjet printing to address modern performance and structural integration needs for electrochemical energy storage and conversion devices.