LABORATORY OF ORGANIC CHEMISTRY

## SEMINARS OF SCHOOL OF CHEMISTRY ARISTOTLE UNIVERSITY OF THESSALONIKI

We invite you to attend the online event

"Chemical Chartographisis in Catalytic and Biochemistry related examples"

Dr. George E. Kostakis

Department of Chemistry, School of Life Sciences, University of Sussex,

Brighton BN1 9QJ, UK

E-mail: G.Kostakis@sussex.ac.uk

## THURSDAY / July 21, 2022 / 11:00

To attend the lecture please Join Zoom Meeting, or visit us in room 309 old building,

 $\underline{https://authgr.zoom.us/j/95676095260?pwd=bjl4Yk1sTlFmZFV6cW1ZbWRSYzMwQT09}$ 

Meeting ID: 956 7609 5260 Passcode: 242433

## **ABSRTACT**

Chemical Chartographisis is a complementary synthetic approach exploiting compositional parameters and correlating topology (structure) and property relationships. This work presents examples of Chemical Chartographisis in Catalysis and Biochemistry. Specifically, we will describe

- a) sustainable Copper-based methodologies that yield organic scaffolds of high pharmaceutical importance, including propargylamines and dihydropyridines,
- b) the rational design of a tunable Cu(II) chelating scaffold which prevents the formation of reactive oxygen species; an essential aspect for diseases such as Alzheimer's, Prion, Wilson
- c) the use of complexes to ease sense amines and amino acids.