

3rd HELLENIC SYMPOSIUM
ORGANIC SYNTHESIS
FROM CHEMISTRY TO BIOLOGY, MEDICINE AND
MATERIALS SCIENCE

PROGRAMME

THURSDAY, OCTOBER 15, 2009

13:30-14:45 Registration

1st Session

*Chairs: Prof. Ioannis Gallos (Aristotle University of Thessaloniki)
Assoc. Prof. Panagiota Minakakis (University of Athens)*

14:45-15:00 Opening Remarks

15:00-15:45 COPPER AND IRIIDIUM CATALYZED ASYMMETRIC ALLYLIC
SUBSTITUTION
Prof. Alexandre Alexakis (*University of Geneva, Switzerland*)

15:45-16:10 biomimetic synthesis of acremine g and allomicrophyllone
Assoc. Prof. Manolis Stratakis (*University of Crete, Greece*)

16:10-16:35 A PRIVILEGED BENZOPYRAN RESEARCH AND DEVELOPMENT OF NEW
SYNTHETIC ROUTES
Dr. Gerasimos Rassias (*GlaxoSmithKline, UK*)

16:35-16:55 ADVANCES IN ENANTIOSELECTIVE ORGANOCATALYSIS: APPLICATIONS
OF LINCHPIN CATALYSIS
Dr. Christoforos G. Kokotos (*Princeton University, USA*)

16:55-17:30 *Coffee Break*

2nd Session

*Chairs: Prof. Michael Orfanopoulos (University of Crete)
Prof. Paul Cordopatis (University of Patras)*

17:30-18:15 CARBON-FLUORINE BOND: CONSTRUCTION AND DECONSTRUCTION
Prof. Veronique Gouverneur (*University of Oxford, UK*)

18:15-18:40 THE BIODIVERSITY IN NATURE PROVIDES SOLUTIONS TO SYNTHETIC
ORGANIC CHEMISTS
Assoc. Prof. Thomas Mavromoustakos (*University of Athens, Greece*)

- 18:40-19:00 LOOKING FOR POTENT INHIBITORS OF GLYCOGEN PHOSPHORYLASE-
THE STRUCTURE-BASED LIGAND DESIGN APPROACH IN VITRO & IN SILICO
Dr. Evaggelia D. Chrysina (*National Hellenic Research Foundation, Greece*)
- 19:00-19:20 NOVEL SPIROCYCLIC AMINOCYCLITOLS: SIMPLIFIED, RIGID
STRUCTURES WITH ANTIBIOTIC ACTIVITY
Dr. Ioannis A. Katsoulis (*N.C.S.R. "Demokritos", Greece*)
- 19:20 Cocktail

FRIDAY, OCTOBER 16, 2009

3rd Session

*Chairs: Prof. Violetta Constantinou (Agricultural University of Athens)
Prof. Nicholas Ferderigos (University of Athens)*

- 09:10-09:55 FROM HOMER TO HEDGEHOG: SYNTHESIS OF CYCLOPAMINE USING A
BIOMIMETIC AND DIASTEREOSELECTIVE APPROACH
Prof. Athanassios Giannis (*University of Leipzig, Germany*)
- 09:55-10:20 FROM ACADEMIC RESEARCH TO ITS EXPLOITATION FOR MEDICINAL
USES: SARTANS, A NEW GENERATION OF DRUGS FOR TREATING
HYPERTENSION AND CARDIOVASCULAR DISEASES (THE ELSARTAN
CASE)
Prof. John Matsoukas (*University of Patras, Greece*)
- 10:20-10:40 THE DISCOVERY OF IMIDAZO[4,5-*b*]PYRIDINE DERIVATIVES AS
INHIBITORS OF AURORA KINASES
Dr. Vassilios Bavetsias (*The Institute of Cancer Research, UK*)
- 10:40-11:00 POLYFLUOROKETONES: A FASCINATING TOOL IN THE QUEST FOR iPLA₂
SELECTIVE INHIBITORS
Dr. Victoria Magrioti (*University of Athens, Greece*)
- 11:00-11:30 *Coffee Break*

4th Session

*Chairs: Prof. Elias Couladouros (Agricultural University of Athens)
Prof. Valentini Ragoussi (University of Athens)*

- 11:30-12:15 NATURAL AND /OR BIOLOGICALLY ACTIVE PRODUCTS: A GOOD SOURCE
OF INSPIRATION FOR THE DEVELOPMENT OF METHODOLOGIES
Prof. Janine Cossy (*École Supérieure de Physique et de Chimie Industrielles
ParisTech, France*)
- 12:15-12:40 ARYL IODONIUM YLIDES OF HYDROXYQUINONES: SYNTHETIC
APPLICATIONS

Prof. Spyros Spyroudis (*Aristotle University of Thessaloniki, Greece*)

12:40-13:00 NATURAL PRODUCTS: MINE OF INSPIRATION

Dr. Alexandros L. Zografos (*Aristotle University of Thessaloniki, Greece*)

13:00-14:00 *Lunch Break*

14:00-15:30 *Poster Session*

Coffee Break

5th Session

Chairs: Prof. Athanassios Giannis (*University of Leipzig, Germany*)

Assoc. Prof. Thomas Mavromoustakos (*University of Athens*)

15:30-16:15 CATALYTIC ASYMMETRIC SYNTHESIS VIA COMBINED METAL AND ENZYME CATALYSIS

Prof. Jan-Erling Backvall (*University of Stockholm, Sweden*)

16:15-16:35 S-OXIDE ACTIVATED MANNICH REACTIONS IN MEDICINAL CHEMISTRY
ENANTIOSELECTIVE SYNTHESIS OF SUBSTITUTED β -LACTAMS

Assoc. Prof. Plato A. Magriotis (*University of Patras, Greece*)

16:35-16:55 SULFUR CONTAINING NITROGEN HETEROCYCLES VIA 1,3-DIPOLAR
CYCLOADDITIONS

Assoc. Prof. Yiannis Elemes (*University of Ioannina, Greece*)

16:55-17:15 BACILLUS SUBTILIS ESTERASE (BS2) AND ITS MUTANT E188W/M193C:
ATTRACTIVE TOOLS FOR THE SELECTIVE REMOVAL OF CARBOXYL
PROTECTING GROUPS

Dr. Efrosini Barbayianni (*University of Athens, Greece*)

17:15-17:35 INDEPENDENT SYNTHESIS OF DNA PYRIMIDINE BASE OPEN LESIONS
AND STUDY OF THEIR CYCLIZATION REACTION

Monica-Violetta Circu (*University of Athens, Greece*)

SATURDAY, OCTOBER 17, 2009

6th Session

Chairs: Prof. Haralambos Katerinopoulos (*University of Crete*)

Prof. Dionissios Papaioannou (*University of Patras*)

09:15-10:00 MULTIVALENT, COOPERATIVE CATALYSTS: FROM AGGREGATION
COLLOIDS TO DENDRIMERS, AND NANOPARTICLES

Prof. Paolo Scrimin (*University of Padova, Italy*)

10:00-10:25 SUPRAMOLECULAR ARCHITECTURES WITH CARBON-BASED
NANOSTRUCTURED MATERIALS

Dr. Nikos Tagmatarchis (*National Hellenic Research Foundation, Greece*)

10:25-10:45 RUTHENIUM-BASED METATHESIS CATALYSTS COORDINATED WITH HETEROCYCLIC CARBENE LIGANDS: SYNTHESIS, STRUCTURE, AND CATALYTIC ACTIVITY

Dr. Georgios C. Vougioukalakis (*NCSR “Demokritos”, Greece*)

10:45-11:15 *Coffee Break*

7th Session

Chairs: Prof. Alexandre Alexakis (University of Geneva, Switzerland)

As. Prof. Thanassis Gimisis (University of Athens)

11:15-12:00 WHEN SIMPLICITY LEADS TO COMPLEXITY

Prof. Ilan Marek (*Technion - Israel Institute of Technology, Israel*)

12:00-12:45 SYNTHESIS OF NOVEL AROMATIC ARCHITECTURES: BOWLS, GEARS, AND KNOTS

Prof. Jay Siegel (*University of Zurich, Switzerland*)

12:45 *Closing Remarks*