

SCIENTIFIC PROGRAM

Friday 18.10.2019

9:30-10:45 REGISTRATION

10:45-11:00 OPENING CEREMONY

11:00-13:00 SESSION I – Chairs: Mitsopoulou, Vorgias

- 11:00-11:45 PL1 Green Chemistry: A Basic Factor for Sustainable Bio-economy
K. Poulos (University of Patras, Greece)
- 11:45-11:55 O1 Eco-friendly novel nickel(II) complexes and their usage as catalysts for hydrogen production via photocatalysis and electrocatalysis
F. Kamatsos, C.A. Mitsopoulou (National and Kapodistrian University of Athens, Greece)
- 11:55-12:05 O2 Mechanism of hydrogen evolution in nickel-thiolate catalysed proton reduction: a DFT study
M. Drosou, F. Kamatsos, C.A. Mitsopoulou (National and Kapodistrian University of Athens, Greece)
- 12:05-12:15 O3 Homoleptic Cu(I) complexes incorporating substituted 2,2'-pyridyl-quinoline based ligands. Synthesis, characterization and application in Dye-Sensitized Solar Cells
A. Peppas, D. Perganti, P. Falaras, A.I. Philippopoulos (National and Kapodistrian University of Athens, Greece)
- 12:15-12:25 O4 A sustainable, Zn-catalyzed domino reaction for the synthesis of trisubstituted allenes in a single step
L. Zorba, N.V. Tzouras, G.C. Vougioukalakis (National and Kapodistrian University of Athens, Greece)
- 12:25-12:35 O5 Carbon nanodot graphitic carbon nitride (CD-C₃N₄) photooxidation of aryl alkanols – Mechanistic studies
V. Giannopoulos, Ioulia Smonou (University of Crete, Greece)
- 12:35-12:45 O6 Mechanochemical transformations of α -chitin
G. Marqoutidis, F.M. Kerton (Memorial University of Newfoundland, Canada)
- 12:45-12:55 O7 Solid state fermentation for the production of microbial protein from grape pomace
E. Sotiropoulou, M. Liouni, A.C. Calokerinos, E.T. Nerantzis, M. Christea, G. Boskou (National and Kapodistrian University of Athens, Greece)

13:00-14:30 LUNCH

14:30-16:30 SESSION II – Chairs: Kokotos, Vougioukalakis

- 14:30-15:15 PL2 Bioeconomy: Trend or Reality?
C. Vorgias (National and Kapodistrian University of Athens, Greece)
- 15:15-15:25 O8 Thioxanthen-9-one: A powerful green photoorganocatalyst for organic transformations
N.F. Nikitas, C.G. Kokotos (National and Kapodistrian University of Athens, Greece)

- 15:25-15:35** **O9** Design and synthesis of novel NHC precursors. Study of their efficiency in the organocatalytic transformations of aldehydes
E. Papadaki, V. Magrioti (National and Kapodistrian University of Athens, Greece)
- 15:35-15:45** **O10** Phenylglyoxylic Acid: A powerful promoter of green photochemical organic transformations
E. Voutyritsa, C.G. Kokotos (National and Kapodistrian University of Athens, Greece)
- 15:45-15:55** **O11** Developing novel, green and sustainable organocatalytic oxidations mediated by hydrogen peroxide
I. Triandafillidi, C.G. Kokotos (National and Kapodistrian University of Athens, Greece)
- 15:55-16:05** **O12** Green catalytic processes towards the synthesis of *N*-heterocyclic compounds from azines
M.G. Kallitsakis, E. Loukopoulos, E. Charistoudi, I. Charisteidis, K.S. Triantafyllidis, G.E. Kostakis, I.N. Lykakis (Aristotle University of Thessaloniki, Greece)
- 16:05-16:15** **O13** Stereoselective reductions of α -cyanoalkyl- β -keto esters catalyzed by NADPH-dependent ketoreductases
K. Myrtollari, T. Tyrikos-Ergas, I. Smonou (University of Crete, Greece)
- 16:15-16:25** **O14** Hydrogen production through glycerol steam reforming reaction over Ni catalysts based on ZrO₂ modified with Y₂O₃
A. Bakagianni, S. Stavrou, G. Siakavelas, K. Papageridis, N. Charisiou, M. Goula (University of Western Macedonia, Greece)

16:30-17:00 COFFEE BREAK

17:00-17:50 SESSION III – Chairs: Koulougliotis, Kyritsis

- 17:00-17:10** **O15** Recovery of functional ingredients from wine lees and investigation of their antioxidative properties
P. Filippou, P. Vareltzis, A.J. Karabelas (Aristotle University of Thessaloniki, Greece)
- 17:10-17:20** **O16** Recovery of antioxidant ingredients from oregano oil distillation process
G. Vakratsas, P. Vareltzis (Aristotle University of Thessaloniki, Greece)
- 17:20-17:30** **O17** Green fuel production via upgraded bio-oil integration in an existing refinery stream
A. Dimitriadis, G. Meletidis, P. Manara, L.P. Chryssikou, S. Bezergianni (Centre for research & Technology Hellas, Greece)
- 17:30-17:40** **O18** Electrolysis of water; Green Science in -Greek- Secondary Schools
N. Ioannou, E. Paloumpa (School Science Laboratory Center of Laconia, Greece)
- 17:40-17:50** **O19** Green chemistry in STEM activities for primary and secondary education students: Plastic or paper bags are more environmentally friendly? Is there another option?
E. Kalambokis, L. Antonoglou, C. Hadjiantoniou-Maroulis (Anatolia College, Greece)

17:50-20:00 POSTER PRESENTATIONS - WINE RECEPTION

Saturday 19.10.2019

9:30-11:05 SESSION IV – Chairs: Poulos, Zouboulis

- 9:30-10:15** **PL3** New Insights on the Structure of Softwood Kraft Lignin & its Fractions with Tangible Green Chemistry Practical Applications
D.S. Argyropoulos, S. Patil, S. Sen (North Carolina State University, USA)
- 10:15-10:45** **O20** “Integrated biorefinery” for lignocellulosic biomass valorization to fuels and chemicals
A. Margellou, K. Rekos, C. Pappa, A. Fotopoulos, K. Triantafyllidis (Aristotle University of Thessaloniki, Greece)
- 10:45-10:55** **O21** Hemicellulose and lignin biomass streams valorization via catalytic hydrogenation/hydrogenolysis reactions
A. Margellou, K. Rekos, C. Pappa, K. Triantafyllidis (Aristotle University of Thessaloniki, Greece)
- 10:55-11:05** **O22** Optimization of microwave hydrothermal treatment of sawdust: obtaining high value chemicals
A. Vriza, A. Fan, J.H. Clark (University of Liverpool / University of York-Green Chemistry Center of Excellence, UK)

11:05-11:30 COFFEE BREAK

11:30-13:00 SESSION V – Chairs: Argyropoulos, Triantafyllidis

- 11:30-12:00** **O23** Baeyer-Villiger oxidations and ring-opening aminolysis reactions catalyzed by families of dinuclear lanthanide(III) complexes
N.C. Anastasiadis, K.F. Konidaris, S.S. Balula, C.M. Granadeiro, V. Psycharis, S.P. Perlepes (University of Patras, Greece)
- 12:00-12:30** **O24** Highly stable 2-D Zr MOFs with exceptional actinide sorption capability
N.Panagiotou, I. Liatsou, A. Pournara, G. Angeli, M.J. Manos, P.N. Trikalitis, I. Pashalides, A. Tasiopoulos (University of Cyprus, Cyprus)
- 12:30-13:00** **O25** Metal nanoparticles and coordination polymers in organic chemistry as vehicles for green synthetic methodologies
I.N. Lykakis (Aristotle University of Thessaloniki, Greece)

13:00-14:30 LUNCH

14:30-16:30 SESSION VI – Chairs: Tasiopoulos, Perlepes

- 14:30-15:00** **O26** Catalytic activity of transition metal complexes bearing chalcogenido-imidodiphosphino and bis(phosphino)amine chelating ligands
P. Kyritsis (National and Kapodistrian University of Athens, Greece)
- 15:00-15:30** **O27** Three component – one pot microwave assisted green synthesis of 2-(hydrazono)-2,3-dihydroquinazolin-4(1H)-ones
T. Balalas, M. Douka, N. Beta, K.E. Litinas, K.C. Fylaktakidou (Democritus University of Thrace, Greece)

- 15:30-16:00 O28** Alkaline activation of industrial waste mixtures of ferronickel and fayalitic slag and waste concrete
A.I. Vavouraki, K. Komnitsas (Technical University of Crete, Greece)
- 16:00-16:10 O29** Chemoselective reduction of nitro-moiety catalyzed by AgNPs: An innovative pathway towards *N*-heteroatom compounds synthesis
D. Iordanidou, A. Bena, I.N. Lykakis (Aristotle University of Thessaloniki, Greece)
- 16:10-16:20 O30** Cobalt complexes as efficient catalysts for the reduction of nitroarenes into amines: A selective transformation mediated by methylhydrazine
D.I. Ioannou, M.G. Kallitsakis, P.A. Angaridis, I.N. Lykakis (Aristotle University of Thessaloniki, Greece)
- 16:20-16:30 O31** One pot synthesis of quinazolinone and dihydroquinazolinone analogues using Natural Deep Eutectic Solvents (NaDESS) as solvents and catalysts
M. Bairaktari, E. Kallinikou, L. Gouriou, A. Detsi (National Technical University of Athens, Greece)

16:30-17:00 COFFEE BREAK

17:00-18:00 SESSION VII – Chairs: Fylaktakidou, Komnitsas

- 17:00-17:30 O32** Green Chemistry via implementation of the Web-based Inquiry Science Environment (WISE) in Greek Secondary Schools
K. Salta, L. Antonoglou, D. Koulougliotis (Ionian University, Greece)
- 17:30-18:00 O33** Understanding the circular bioeconomy
A. Zouboulis, E. Peleka (Aristotle University of Thessaloniki, Greece)

18:00-19:00 POSTER PRESENTATIONS

Sunday 20.10.2019

9:30-12:00 SESSION VIII

9:30-12:00 ROUND TABLE DISCUSSION

12:00-12:30 COFFEE BREAK

12:30-14:00 CLOSING CEREMONY

14:00-15:00 LUNCH

POSTER PRESENTATIONS

- P1** Stereoselective enzymatic synthesis of α -fluoro- β -hydroxy esters
S. Melampianaki, I. Smonou (University of Crete, Greece)
- P2** Application of a circular economy model in steel industry
I. Panagiotoulas, A. Sakellari, M. Riga, G. Filippi, E. Dassenakis, M. Scoullas (National and Kapodistrian University of Athens, Greece)
- P3** Green and sustainable photochemical aerobic oxidation of thiols to disulfides
N. Spiliopoulou, C.G. Kokotos (National and Kapodistrian University of Athens, Greece)
- P4** Green photochemical synthesis of hydroxamic acids from aldehydes
M. Apostolopoulou, C.G. Kokotos (National and Kapodistrian University of Athens, Greece)
- P5** Bifunctional catalytic activity of alumina-supported gold nanoparticles towards the green synthesis of 2-amino-3-aryl-imidazo[1,2- α]pyridines
M. Tzani, M.G. Kallitsakis, T.S. Symeonidis, I.N. Lykakis (Aristotle University of Thessaloniki, Greece)
- P6** Optimization of a green extraction method to obtain bioactive compounds from wild rose hips
A. Papaioannou, A.R.N. Pontillo, M. Bairaktari, Th. Lympelopoulou, A. Detsi (National Technical University of Athens, Greece)
- P7** Valorization of lignin as epoxy polymer bio-additive
C. Pappa, D. Giliopoulos, A. Margellou, A. Fotopoulos, K. Triantafyllidis (Aristotle University of Thessaloniki, Greece)
- P8** Novel 1,2,3-triazole-quinolinone analogues synthesized via green click-chemistry methodology
I. Kostopoulou, M.-A. Karadendrou, A. Detsi (National Technical University of Athens, Greece)
- P9** Novel organocatalytic epoxidation of alkenes utilizing hydroxamic acids as the catalyst
F. Trigka, I. Triandafyllidi, A. Yfanti, C.G. Kokotos (National and Kapodistrian University of Athens, Greece)
- P10** Green photocatalytic synthesis of amides from aldehydes
A. Tsoukaki, E. Skolia, N.F. Nikitas, C.G. Kokotos (National and Kapodistrian University of Athens, Greece)
- P11** Encapsulation of a reducing enzyme in protein-polymer nanoparticles: Study of the catalytic activity of the new nanoreactor
A. Chatzoudis, A. Theodorou, K. Velonia, I. Smonou (University of Crete, Greece)
- P12** Facile catalytic synthetic methodology of polysubstituted pyrroles promoted by Cu 1D coordination polymers
D. Andreou, M.G. Kallitsakis, E. Loukopoulos, G.E. Kostakis, I.N. Lykakis (Aristotle University of Thessaloniki, Greece)
- P13** Synthesis and characterization of novel protic ionic liquids as potential agents for CO₂ capture
D. Skarpalezos, E. Avraam, C. Politidis, A. Tzani, A. Kyritsis, A. Detsi (National Technical University of Athens, Greece)
- P14** Selective reduction of aldehydes via transfer hydrogenation process catalyzed by silver nanoparticles (AgNPs)
D. Georgantzas, D. Iordanidou, I. Charistides, K.S. Triantafyllidis, I.N. Lykakis (Aristotle University of Thessaloniki, Greece)
- P15** Degradation of pharmaceutical compounds in hospital wastewater effluents using TiO₂-P25, g-C₃N₄ and SrTiO₃/g-C₃N₄ under simulated solar irradiation
P. Konstas, C. Kosma, I. Konstantinou, T. Albanis (University of Ioannina, Greece)
- P16** Photolytic and photocatalytic degradation of furosemide by TiO₂ and graphitic carbon nitride photocatalysts: Kinetics, identification of transformation products and toxicity evaluation
G. Kotsikou, I. Konstantinou (University of Ioannina, Greece)

- P17** Integrated management and exploitation of multi-dispersed agricultural residues – application to energy production
A. Bakagianni, G. Siakavelas, N. Charisiou, E.G. Papadakis, M. Goula (University of Western Macedonia, Greece)
- P18** Adsorption of C.I. Acid Black 1 onto perlites
M. Roulia, A.A. Vassiliadis (National and Kapodistrian University of Athens, Greece)
- P19** Plant hormones in organic fertilizer derived from biotransformation of peaty lignite
K. Chassapis, A. Panara, N. Thomaidis, A. Vlyssides, M. Roulia (National and Kapodistrian University of Athens, Greece)
- P20** Heavy metal ion MOFs as models for the sorption of metal ions in aqueous solutions from an alkaline earth based MOF
P. Oikonomopoulos, A. Margariti, A.D. Pournara, A. Economou, C. Kokkinos, M.J. Manos, G.S. Papaefstathiou (National and Kapodistrian University of Athens, Greece)
- P21** An oxalamide Ba-MOF for the effective sorption and detection of Cr(VI) in aqueous media
F. Koliopoulos, G.D. Tarlas, A.D. Pournara, S. Aggeli, S. Diamantis, A.D. Katsenis, A.J. Tasiopoulos, P.N. Trikalitis, T. Lazarides, M.J. Manos, G.S. Papaefstathiou (National and Kapodistrian University of Athens, Greece)
- P22** Animal fats to green transportation fuels
A. Dimitriadis, G. Meletidis, L.P. Chryssikou, S. Bezergianni, A.I. Kokkalis, L.I. Doufas (Centre for Research & Technology Hellas, Greece)
- P23** A sustainable method for the KA² reaction: Developing a novel, copper-NHC catalytic system for the synthesis of tetrasubstituted propargylamines
S.G. Chalkidis, E.Z. Tonis, G.C. Vougioukalakis (National and Kapodistrian University of Athens, Greece)
- P24** Towards making the KA² coupling a part of “Click Chemistry”: A single metal enables the expedient and sustainable assembly of tetrasubstituted propargylamines and trisubstituted allenes
N.V. Tzouras, A. Zarkadoulas, G.C. Vougioukalakis (National and Kapodistrian University of Athens, Greece)
- P25** Mixed ligand cyclometalated complexes of Pt(II) and Pd(II) with 2-phenylpyridine and aromatic diimines: NMR study for structural variations in solid state and solution
M. Georgiou, A. Garipidou, E. Sifneou, A. Grigoriadis, T. Tsolis, K. Ypsilantis, A. Garoufis (University of Ioannina, Greece)
- P26** Lanthanide(III) complexes of bidentate and tetradentate Schiff bases as efficient oxidation catalysts using the “green” hydrogen peroxide oxidant
A. Baxevanakis, I.-M. Margaritis, K.F. Konidaris, M. Papastergiou, M. Louloudi, S.P. Perlepes, N.C. Anastasiadis (University of Patras, Greece)
- P27** Lanthanide(III)-Schiff base complexes as efficient catalysts for polymerization of methyl methacrylate and ε-caprolactone
N.C. Anastasiadis, C.P. Raptopoulou, G. Raptopoulos, P. Paraskevopoulou, S.P. Perlepes, K.F. Konidaris (University of Patras, Greece)
- P28** Laboratory waste management protocols in Greece
M. Riga, G. Filippi, I. Panagiotoulas, E. Dasenakis, M. Scoullas (National and Kapodistrian University of Athens, Greece)
- P29** Exploitation of chitosan membranes in metal ion adsorption applications
E. Vlachou, Th. Dimitra, G. Bokias (University of Patras, Greece)
- P30** ROMP-derived aerogels for environmental remediation
G. Raptopoulos, D. Chriti, F. Leontaridou, M. Papastergiou, P. Paraskevopoulou (National and Kapodistrian University of Athens, Greece)
- P31** Metal-catalyzed synthesis of polyurea aerogels
E. Effraimopoulou, D. Chriti, M. Papastergiou, G. Raptopoulos, P. Paraskevopoulou (National and Kapodistrian University of Athens, Greece)

- P32** Hydrogen evolution study using two novel dithiolene complexes of Ni(II)
F. Kamatsos, E.E. Efstathiou, S. Balou, M. Drosou, C.A. Mitsopoulou (National and Kapodistrian University of Athens, Greece)
- P33** Synthesis, characterization and catalytic properties of Ni(II) and Pd(II) complexes bearing PNP type of ligands
P.-C. Ioannou, A. Mourtsiadi, K. Nano, C.P. Raptopoulou, V. Psycharis, J. Zednik, J. Vohlidal, I. Kostas, P. Kyritsis (National and Kapodistrian University of Athens, Greece)
- P34** Microwave assisted polyol synthesis of ZnO and Zn_xFe_{3-x}O₄ nanoparticles for protein fibrillation/antifibrillation studies
C. Dendrinou-Samara, K. Giannousi, O. Antonoglou (Aristotle University of Thessaloniki, Greece)