

SYMPOSIUM PROGRAMME



18th
Panhellenic
Symposium of
Catalysis

Kozani,
8-10 October 2026



University of Western Macedonia
Department of Chemical Engineering



<https://catalysis18.chemeng.uowm.gr/>

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Zacharias Frontistis (Co-Chair)	Alexios-Spyridon Kyriakides
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Welcome Message

Dear Colleagues and Friends,

It is our great pleasure to welcome you to **Kozani and the University of Western Macedonia for the 18th Panhellenic Symposium of Catalysis (PSC18)**.

For nearly four decades, the Panhellenic Symposium of Catalysis has provided an important meeting point for our scientific community, bringing together researchers from universities, research institutes and industry to exchange knowledge, present new ideas and establish new collaborations. Equally important has been its role in giving **young scientists the opportunity to present their work, engage with established researchers and become active members of the catalysis community**.

This year's scientific programme reflects both the breadth of modern catalysis and its increasingly important role in addressing some of the major challenges facing our society. Through plenary and keynote lectures, oral presentations and poster sessions, PSC18 covers developments ranging from fundamental and mechanistic studies to **sustainable energy, hydrogen production, environmental protection and emerging catalytic technologies**. Πρόγραμμα συνεδρίου

Hosting this Symposium in **Western Macedonia** has particular significance. Our region is undergoing a profound energy and economic transition, making the development of scientifically sound and sustainable technological solutions more relevant than ever. Catalysis, through its central role in clean energy conversion, renewable fuels, hydrogen technologies, CO₂ utilization and environmental protection, can make an important contribution to this transition.

PSC18 is also an occasion to recognize those who have helped shape our field. It is a particular honour that this Symposium celebrates **Professors Christina Anna Mitsopoulou, Christos Kordulis and Symeon Bebelis**, on the occasion of their academic retirement and in recognition of their contributions to Catalysis in Greece and internationally.

On behalf of the Organizing Committee, we would like to warmly thank our plenary and keynote speakers, all participants, the members of the Scientific and Organizing Committees, our sponsors and supporters, and everyone whose contribution has made this meeting possible.

We hope that the days ahead will offer not only stimulating scientific discussions, but also opportunities to renew friendships, establish new collaborations and enjoy the hospitality of **Kozani and Western Macedonia**.

Welcome to PSC18. We wish you all a productive, inspiring and enjoyable Symposium.

Prof. Maria A. Goula

Prof. Zacharias Frontistis

Concise Programme

Thursday 8/10/2026		
08:30-	Registration	
09:30-10:00	Opening Ceremony	
10:00-10:45	Plenary Session 1 Plenary Speaker Prof. Gabrielle Centi	
10:45-11:15	Coffee Break	
11:15-13:15	Session 1 Catalysis for Energy and Sustainable Processes (Room 1)	Session 2 Nanostructured and Advanced Materials for Catalysis and Energy (Room 2)
13:15-14:30	Lunch Break	
14:30-15:15	Plenary Session 2 Plenary Speaker Dr. Polycarpus Falaras	
15:20-17:35	Session 3 Advanced Photocatalytic Materials for Energy and Environmental Applications (Room 1)	Session 4 Catalysis for Energy and Sustainable Processes (Room 2)
19:30-21:00	Evening Poster Session & Welcome Wine.	

Friday 9/10/2026		
09:00-11:15	Plenary Session 3 Plenary Speaker Prof. David Kubicka	
11:15-11:45	Coffee Break	
11:45-14:00	Session 5 Computational Catalysis, Modelling and Reactor Design (Room 1)	Session 6 Electrocatalysis (Room 2)
14:00-15:15	Lunch Break	
15:15-17:45	Session 7 Catalytic Conversion of CO/CO ₂ into Fuels and Chemicals (Room 1)	Session 8 Photochemical Catalysis and Sustainable Organic Synthesis (Room 2)
20:15-23:00	Conference Dinner	

Saturday 10/10/2026		
09:00-09:45	Plenary Session 4 Plenary Speaker Dr. Angelos Lappas	
09:45-11:30	Session 9 Biomass Conversion, Biofuels and Circular Carbon Feedstocks (Room 1)	Session 10 Environmental Catalysis (Room 2)
11:30-12:00	Coffee Break	
12:00-13:00	Sponsor Presentations (Room 1)	PhD Training Seminar (Room 2)
13:00-14:30	Round Table Energy Transition – Challenges, Opportunities and the Role of Catalysis (Room 1)	
14:30-15:00	Best Poster Award Ceremony, Conference Closure, Meeting of the Hellenic Catalysis Society	
15:00	Refreshments	

Thursday, 8/10

08:30-09:30	Registration (ZEP, University Rectorate Building)		
Opening Ceremony (ZEP, Room 1, Amphitheatre)			
Chairs:	Prof. Maria A. Goula (UOWM) & Prof. Zacharias Frontistis (UOWM)		
09:30-10:00	Opening ceremony		
10:00-10:45	Plenary Session 1: Prof. Gabrielle Centi (University of Messina, Italy) Transformative Catalysis for a Resilient and a Low-Carbon Future		
10:45-11:15	Coffee break		
Session 1:	Catalysis for Energy and Sustainable Processes - Advanced Mechanistic Studies in Heterogeneous Catalysis (ZEP, Room 1, Amphitheatre) Chairs: Prof. Soghomon Boghosian (U. Patras) & Assoc. Prof. Eleni Heracleous (IHU)		
11:15-11:45	Keynote 1 - Prof. Emeritus Angelos Efstathiou (University of Cyprus)	Transient Kinetics, Isotope Studies, and Operando Methodologies: Paving the Way for the Design of Advanced Catalytic Materials	142
11:45-12:00	M.A. Vasiliades, G.M.D. Zarkou, A. Theodociou, S. Christodoulou, A.M. Efstathiou	The Synergistic Effect of Cu ⁺ /Cu ²⁺ in Unsupported Cu _x O Catalysts for Low-Temperature CO Oxidation: A Transient Kinetic and Isotopic Study	6
12:00-12:15	M. Jabłońska	Selective Catalytic Reduction of NO _x over Cu-Containing Zeolites	49
12:15-12:30	I.M. Stergiou, N. Grivas, E. Korduli, S. Boghosian	In Situ Molecular Spectroscopy of Supported Transition Metal Oxide Catalysts: Vanadia and Tungsta Dispersed on Zirconia	109
12:30-12:45	I. Baltanidis, A. Karydis, Th. Kentri, L. Kollias, S. Boghosian	First In Situ Raman Monitoring of SO ₃ Splitting over nCuO-V ₂ O ₅ Mixed Oxide Catalysts for a Sulphur-Based Thermochemical Cycle	108
12:45-13:00	V. Koidi, E. Paraschoudi, A.A. Lappas, E. Heracleous	Mechanistic Insights into the Interaction of C ₁ –C ₃ Oxygenates with Cu/ZnO/Al ₂ O ₃ Catalysts via TG–MS Analysis	25
13:00-13:15	G.M.D. Zarkou, M.A. Vasiliades, S. Christodoulou, A.M. Efstathiou	Engineering Carbon-Resistant Ni/Ce-Ti-O Catalysts via Colloidal Synthesis for the Dry Reforming of Methane	5
13:15-14:30	Lunch break		
Session 2:	Nanostructured and Advanced Materials for Catalysis and Energy (ZEP, Room 2, Library)		

	<i>Chairs: Prof. Elisabetta Di Bartolomeo (University of Rome Tor Vergata) & Prof. Georgios Avgouropoulos (U. Patras)</i>		
11:15-11:45	Keynote 2 - Prof. Michalis Konsolakis (Technical University of Crete)	Rational Design of Non-Noble Metal Catalysts: Shape, Size and Synergy Effects	83
11:45-12:00	<u>D.A. Giannakoudakis</u> , F. Florides, M. Barczak	Green-Engineered Bimetallic ZIF-678/Carbon-Based Nanocomposites for Synergistic Catalytic Detoxification and Carbon Textile Nanoengineering	152
12:00-12:15	<u>E. Papadopoulos</u> , S. Karakoulia, V. Zacharopoulou, G. Karagiannakis, G. Kastrinaki, V. Zaspalis, A. Lappas, E. Iliopoulou	Nano-Structured MgO Basic Materials for the Catalytic Activation/Hydrogenation of CO ₂	23
12:15-12:30	<u>K. Gravvanj</u> , M. Louloudi	Support and Coordination Engineering of Fe ^{II} -Based Hybrid Catalysts for Efficient H ₂ -Production from Formic Acid	13
12:30-12:45	<u>A. Sotiriou</u> , M. Louloudi	Engineering NP-type Fe-Molecular Catalysts with Functional Interventions for Enhanced Hydrogen Production from Formic Acid	14
12:45-13:00	A. Krestou, <u>A. Tzouvara</u> , A. Kotsiolis, N. Kiratzis	Optimization of Solution Spray Pyrolysis and Sintering Parameters for Co-Free Perovskite Catalytic Film Formation in r-SOC	37
13:00-13:15	<u>G. Moysiadou</u> , M. Daletou, F. Paloukis	Silicon/Carbon Anodes for Lithium-Ion Batteries	33
13:15-14:30	<i>Lunch break</i>		
14:30-15:15	Plenary Session 2 (ZEP, Room 1, Amphitheatre): Dr. Polycarpos Falaras (INN Demokritos) Water Decontamination Using Innovative Nanocomposite Visible Light Activated Photocatalysts <i>Chairs: Prof. Zacharias Frontistis (UOWM) & Assist. Prof. Maria Antoniadou (UOWM)</i>		
Session 3:	Advanced Photocatalytic Materials for Energy and Environmental Applications (ZEP, Room 1, Amphitheatre) <i>Chairs: Prof. Ioannis Konstantinou (U. Ioannina) & Assist. Prof. Maria Antoniadou (UOWM)</i>		
15:20-15:50	Keynote 3 - Prof. Ioannis Deligiannakis (University of Ioannina)	Photocatalysis in the Era Beyond Quantum-Dots: the Concept of Interfacial-Quantum-States (I.Q.S.) in Catalytic Technology	81

15:50-16:05	L.Belles, Y.Deligiannakis	Interfacial Quantum States in $\text{ZrO}_2/\text{ZrO}_{2-x}$ Quantum Dots for Enhanced Photocatalytic H_2 Evolution	10
16:05-16:20	T.Ioannidou, <u>K.C. Christoforidis</u>	Photoactive Materials Based on TiO_2 , Carbon Nitride and MOFs for CO_2 Reduction and H_2 Production	17
16:20-16:35	<u>I.N. Lykakis</u>	Chemistry over Materials vs Selective Green Catalytic Organic Synthetic Transformations	53
16:35-16:50	<u>E. Sdoukou</u> , M. Antonopoulou, Z. Frontistis, I. Konstantinou	Tunable $\text{g-C}_3\text{N}_4$ Homo Junction Photocatalysts via Thiourea/Urea Ratio Control for Antibiotic Ciprofloxacin Degradation in Water	123
16:50-17:05	C. Gkatzouras, C. Dimitriou, Y. Deligiannakis, M. Louloudi	Photo-Assisted Molecular Catalysis by $\{\text{Fe}^{\text{II}}\text{-IGOPS @TiO}_2 \text{ Quantum Dots}\}$ Hybrid for Formic Acid Dehydrogenation	19
17:05-17:20	A. Zarkadoulas, A.A. Papadopoulou, M. Kourmoussi, A. Kyrlikitsi, P. Oikonomopoulos, C. A. Mitsopoulou	Transition Metal Diselenolene Complexes as Catalysts for the Photocatalytic Hydrogen Evolution Reaction	99
17:20-17:35	A. Kotsaridou, D.A. Giannakoudakis, <u>K. Triantafyllidis</u>	Sustainable Additive-Free Photocatalytic Upcycling of Bio-Based Polylactic Acid Using a Highly Porous and Acidic Titanate (Hydroxy)Oxide	156
Session 4:	Catalysis for Energy and Sustainable Processes (ZEP, Room 2, Library) <i>Chairs: Prof. Kyriakos Bourikas (HOU) & Assist. Prof. Eleana Kordouli (U. Patras)</i>		
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16:05-16:20	<u>P.Adamou</u> , C. Christodoulou, E. Harkou, I. Barlocco, N. Dimitratos, G. Manos, A. Villa, A. Constantinou	Photocatalytic Decomposition of Hydrous Hydrazine: Experimental and CFD Studies	21
16:20-16:35	<u>E.T. Poursaitidis</u> , C. Mantzourani, I. Triandafillidi, M.G. Kokotou, C.G. Kokotos	Green Organocatalytic Activation of H_2O_2 for the Epoxidation of Unactivated Olefins via Commercially Available Aldehydes	20
16:35-16:50	<u>E. Krassa</u> , C. Pentari, E. Topakas	Exploring Biocatalysis for Lignocellulose Conversion to Bio-Based Materials	48
16:50-17:05	<u>F. Zormpa</u> , B. Krause, A. Welle, E. Saraci	Unraveling the Catalytic Activity and Deactivation of Gold Modified Zeolites in Glucose Oxidation Reaction	153
17:05-17:20	<u>S. Spanothimniou</u> , L. Belles, A. Banis, N. Boukos, Y. Deligiannakis	Development of La-Doped NaTaO_3 Nanoparticles Decorated with Cu , Bi , Sn Atoms for Photocatalytic H_2/CO_2 Technologies	29

17:20-17:35	C.N Costa, G. Kantziai, M. Kektside, <u>P.G. Savva</u>	Hydrogen Production and Utilization in a Marine Auxiliary Engine	1
17:35-17:50	C. Italiano, <u>D. Maccarrone</u> , G. Marino, M. Thomas, A. Vita	Unravelling the Role of Ce–Zr Pyrochlores in Ammonia Cracking: From Catalyst Structure to Reaction Kinetics	91

19:30-21:00	Evening Poster Session & Welcome Wine. <i>The event will take place at the Koventareios Municipal Library of Kozani (Poster presenters may access the venue from 18:30 to set up their posters).</i>		
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Friday, 9/10

09:00-09:45	Plenary Session 3 (ZEP, Room 1, Amphitheatre): Prof. David Kubicka (University of Chemistry and Technology Prague) Catalysis-Enabled Biomass Economy Chair: Prof. Maria A. Goula (UOWM)		
Career Recognition Chairs: Prof. Kyriakos Bourikas (HOU), Prof. Christoforos Kokotos (NKUA) & Prof. Alexandros Katsaounis (U. Patras)			
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10:15-10:45	Career Recognition Lecture 2 - Prof. Christiana Mitsopoulou (NKUA)	Mechanistic and Performance Insights into Molecular and Nanoscale Noble-Metal-Free Catalysts for Hydrogen Evolution Reactions	7
10:45-11:15	Career Recognition Lecture 3 - Prof. Simeon Bebelis (University of Patras)	At the Interface of Heterogeneous Catalysis and Electrochemistry: Electrochemical Promotion and Electrocatalysis	140
11:15-11:45	Coffee Break		
Session 5:	Computational Catalysis, Modelling and Reactor Design (ZEP, Room 1, Amphitheatre) Chairs: Dr. Spyridon Voutetakis (CPERI/CERTH) & Assist. Prof. Alexis Kyriakides (UOWM)		
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12:30-12:45	S.D. Anogiannakis, G. Mpourmpakis	Effect of Doping on Metal Oxide Hydrogen Intercalation Using First Principles Calculations	76
12:45-13:00	S. Angousi, S.D. Anogiannakis, G. Mpourmpakis	Accurate Calculations of Reaction Thermodynamics for Pyrolysis Applications Using First Principles Methods and Machine Learning	77
13:00-13:15	P.I. Giotakos, D.K. Niakolas, S.G. Neophytides	Establishing the Operational Boundaries of the Transmission Line Model for Electrokinetic Characterization of SOFC Anodes	70

13:15-13:30	<u>K. Papageorgiou</u> , K. Kappis, C. Garoufalis, G. Avgouropoulos, J. Papavasiliou	Mechanistic Insights into Low-Temperature Methanol Steam Reforming over Hydrothermally and Combustion-Synthesized CuZnO _x Catalysts: A Combined In Situ DRIFTS and DFT Study	87
13:30-13:45	<u>E. Nterou</u> , G. Marnellos, C. Kotoulas	Design and Optimization of a Catalytic Ammonia Cracking Reactor for Hydrogen Production	11
13:45-14:00	Dr. Spyridon Varlas (Wiley, UK) (Online)	Sponsor Presentation: AI in Research Publishing	148
14:00-15:15	Lunch break		
Session 6:	Electrocatalysis (ZEP, Room 2, Library) <i>Chairs: Assist. Prof. Ioanna Papavasiliou (U. Patras) & Dr. Stella Balomenou (CPERI/CERTH)</i>		
11:45-12:15	Keynote 6 - Prof. Elisabetta Di Bartolomeo (University of Rome Tor Vergata, Italy)	Engineering Perovskite Oxides as Advanced Electrocatalysts for Solid Oxide Cells	89
12:15-12:30	<u>A. Souvalioti</u> , E. Ioannidou, L. Sygellou, S.G. Neophytides, D. Montinaro, D.K. Niakolas	Effect of Fe and Au Doping on Ni/GDC and Ni/YSZ for R-SOC Operation at Intermediate Temperatures	3
12:30-12:45	<u>K. Stamatelatos</u> , E. Ioannidou, C. Papadopoulou, S. Neophytides, D. Niakolas	H ₂ O Electrolysis on Fe-Modified Ni-Based Solid Oxide Cathodes	64
12:45-13:00	<u>L. Duranti</u> , M. Bellini, H.A. Miller, C. Quattrucci, G. Pagano, A.P. Panunzi, E. Di Bartolomeo	Perovskite Oxide Catalysts for Alkaline Water Electrolyzers	92
13:00-13:15	<u>N. Strataki</u> , D. Groutka, N. Vasileiou, S. Balomenou, D. Tsiplakides	Optimization of Operating Conditions and Cathode Configuration for PEM Electrochemical Hydrogen Pumping under Simulated Industrial Gas Mixtures	155
13:15-13:30	<u>G. Bampos</u> , A. Spiliopoulos, S. Ladas, A. Bikogiannakis, G. Kyriakou, S. Bebelis	Pt-Based Bimetallic Electrocatalysts for the Hydrogen Oxidation Reaction in Alkaline Medium	116
13:30-13:45	<u>K.M. Papazisi</u> , D. Tsiplakides, S. Balomenou	Electrochemical Reduction of CO ₂ towards Useful Products	154
13:45-14:00	<u>K. Sakoulevas</u> , S. Giamouridou, P. Goudonis	From Mg–Air Batteries to Fuel Cells: An Experimental and Computational Study of MnO ₂ -Based Air Cathodes	169
14:00-15:15	Lunch break		

Session 7:	Catalytic Conversion of CO/CO₂ into Fuels and Chemicals (ZEP, Room 1, Amphitheatre) <i>Chairs: Prof. Georgios Kyriakou (U. Patras) & Assist. Prof. Nikolaos Charisiou (UOWM)</i>		
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15:45-16:00	<u>A.I. Tsiotsias</u> , N. Charisiou, M.A. Goula	Integrated Capture and Methanation using Ni and Ru-based Dyal Function Materials	168
16:00-16:15	<u>E. Mandela</u> , E. Marousiadou, M. Lykaki, A. Orfanoudaki, V. Kyriakou, G.E. Marnellos, M. Konsolakis	Cobalt-Modified Iron Nanopolyhedra for Tuning CO ₂ Hydrogenation to Light Olefins	36
16:15-16:30	<u>E. Paraschoudi</u> , V. Koidi, A.A. Lappas, E. Heracleous	Concentration-Dependent Effects of H ₂ S on Cu/ZnO/Al ₂ O ₃ Catalyst Properties and Stability in CO ₂ Hydrogenation	47
16:30-16:45	L.M. Maghrabi, S. Singh, A. Dabbawala, A.I. Latsiou, D.H. Anjum, M.A. Goula, <u>K. Polychronopoulou</u>	Probing the CO ₂ Conversion Catalytic Capability of Nickel Decorated on Dry Ball Milled Multicomponent Supports	56
16:45-17:00	<u>A.I. Tsiotsias</u> , Y. Beelen, J. Groenenberg, A. Bansode	Enhancing Light Olefin Production from CO ₂ Using OXZEO Catalysts with Fe-Doped ZnAl ₂ O ₄	43
17:00-17:15	E. Tosounidis, <u>A. Margellou</u> , K. Triantafyllidis	Evaluation of Cu-Based Catalysts for the Efficient Conversion of CO ₂ to Methanol	95
17:15-17:30	<u>A.K. Bikogiannakis</u> , A. Lymperi, C. Drivas, A. Katsaounis, G. Kyriakou	Defect Engineered TiO ₂ as a Support for CO ₂ Hydrogenation	72
Session 8:	Photochemical Catalysis and Sustainable Organic Synthesis (ZEP, Room 2, Library) <i>Chairs: Prof. Maria Louloudi (U. Ioannina) & Prof. Ioannis Lykakis (AUTH)</i>		
15:15-15:30	Keynote 8 - Prof. Christoforos Kokotos (NKUA)	Organocatalysis Meets Photochemistry: Promoting Green and Sustainable Synthesis	79
15:30-15:45	<u>P.L. Gkizis</u>	Harnessing EDA Complexes for Efficient Photoacid Generation	31
15:45-16:00	<u>S.K. Serviou</u> , C. Cabanetos, C.G. Kokotos	High Fluorescent Benzoxanthene Imides: Enabling Efficient Photochemical Processes	8

16:00-16:15	<u>N.A. Stini</u> , V.P. Demertzidou, O.G. Mountanea, C.G. Kokotos	Unlocking Chlorine-Radical Photochemistry with MnCl_2	18
16:15-16:30	<u>A. Mamatsiou</u> , P.L. Gkizis	Photochemical Atom Transfer Radical Addition Induced by Graphitic Carbon Nitride	27
16:30-16:45	<u>C. Ntemertzi</u> , P.L. Gkizis	Photochemical Aerobic Oxidation of Sulfides to Sulfoxides Employing Graphitic Carbon Nitride	30
16:45-17:00	N. Karamoschos, <u>A. Katsamitros</u> , E. Mastora, A. Giannakakis, K.S. Andrikopoulos, D. Tasis	Carbon-Modified $\text{CdS@ZnIn}_2\text{S}_4$ Ternary Heterojunctions for Enhancing Photocatalytic H_2O_2 Evolution	40
17:00-17:15	<u>L. Polychronis</u> , I.N. Lykakis	From Nitroarenes to β -Lactams: A Telescoped Two-Step Protocol Combining Photo- and Metal-Catalytic Reaction of N-Arylhydroxylamines and Activated Terminal Alkynes	51
17:15-17:30	<u>M.G. Kallitsakis</u> , D.K. Gioftsidou, M.A. Terzidis, P.A. Angaridis, I.N. Lykakis	A Luminous Cu(I) Platform for Regioselective Light-Driven Allylic C–H Oxygenation	102
17:30-17:45	<u>A.D. Kouvelas</u> , I.N. Lykakis	Catalytic Synthetic Approach of Fused Bicyclic N-Bridgehead Acetals and N-Substituted Pyrrole Derivatives	71

20:00-23:00	Conference Dinner <i>Naoumidis, Agios Panteleimonas.</i> <i>Transportation to the Conference Dinner will be provided (Buses will depart at 18:50 from Kozani Central Square & Plateia Lassani).</i>		
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Saturday, 10/10

09:00-09:45 **Plenary Session 4** (ZEP, Room 1, Amphitheatre):
Dr. Angelos Lappas (CPERI/CERTH)
 Catalytic Pyrolysis Process toward Production of Renewable Fuels and Chemicals: Innovations and Challenges in Catalysis and Engineering
Chairs: Dr. Eleni Iliopoulou (CPERI/CERTH) & Prof. Savvas Douvartzides (UOWM)

Session 9: **Biomass Conversion, Biofuels and Circular Carbon Feedstocks (ZEP, Room 1, Amphitheatre)**
Chairs: Dr. Eleni Iliopoulou (CPERI/CERTH) & Prof. Savvas Douvartzides (UOWM)

9:45-10:00	<u>A. Dimitriadis</u> , I. Zarafidou, N. Gramatikopoulos, V. Pantalonas, S. Bezergianni	Alternative Marine E-Fuels via Hydrotreating of Plastic Pyrolysis Oil	24
10:00-10:15	<u>S. Stefanidis</u> , S. Karakoulia, K. Kalogiannis, A. Lappas	Supported and Unsupported Polyoxometalate Catalysts for the Oxidative Pretreatment of Lignocellulosic Biomass	96
10:15-10:30	K. Fani, J. Zafeiropoulos, E. Kordouli, S. Lycourghiotis, C. Kordulis, <u>K. Bourikas</u>	Upgrading Residual Fatty Biomass into Biofuels through Deoxygenation with a Palygorskite-Supported MoNi Catalyst	117
10:30-10:45	<u>A. Liatsou</u> , A. Marianou, S. Karakoulia, S. Stefanidis, E. Heracleous, A. Lappas	Glucose Oxidation to Gluconic Acid over Supported Au Catalysts Using H ₂ O ₂ : Effect of Support on Catalytic Performance and Stability	39
10:45-11:00	<u>M. Moschos</u> , S. Stefanidis, S. Karakoulia, D. Achilias, E. Iliopoulou, A. Lappas	Catalytic Pyrolysis of Rubbers over Hierarchical Zeolites for the Production of Aromatics	28
11:00-11:15	<u>J. Zafeiropoulos</u> , K. Fani, E. Kordouli, S. Lycourghiotis, C. Kordulis, K. Bourikas	Transformation of Triglyceride Biomass into Transportation Biofuels: Optimization of the Reaction Parameters over a MoNi/SiO ₂ Catalyst	118
11:15-11:30	<u>P. Soldatos</u> , A. Lemonidou, K. Triantafyllidis	Zeolite-Catalyzed Conversion of Plastic Waste to Naphtha-Range Hydrocarbons	59

11:30-12:00 **Coffee Break**

Session 10: **Environmental Catalysis (ZEP, Room 2, Library)**
Chairs: Prof. Zacharias Frontistis (UOWM)

9:45-10:00	<u>M. Mero-Benavides</u> , A.A. Ioannidi, M. Antonopoulou, Z. Frontistis, D. Mantzavinos	Peracetic Acid Activation by Shrimp Shell Biochar for the Oxidation of Valsartan in Water	66
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10:00-10:15	<u>T.N. Maimaris</u> , C. Gioti, M. Baikousi, N. Chalmes, A.B. Bourlinos, E.P. Giannelis, M.A. Karakassides, C.E. Salmas	Unveiling the Role of Biomass Precursors and Surface Hydrophilicity in the Catalytic Adsorption of H ₂ S Using Activated Carbons	114
10:15-10:30	<u>M. Baikousi</u> , F. Tsiogka, T. Maimaris, A. Parodos, N. Pantiskas, C.E. Salmas, M.A. Karakassides	Microwave-Assisted Valorization of Biomass and Slaughterhouse Waste into Activated Carbon for Cr(VI) Remediation	104
10:30-10:45	<u>C. Lykos</u> , E. Sdoukou, M. Antonopoulou, I. Konstantinou	Synthesis and Thermal Exfoliation under N ₂ Flow of g-C ₃ N ₄ Derived from Different Precursors for Efficient Photocatalytic Degradation of Amlodipine in Aqueous Media	121
10:45-11:00	<u>E. Evgenidou</u> , N.M. Ainali, A. Rapti, D. Bikiaris, D.A. Lambropoulou	Floating Magnetic PET–Fe ₃ O ₄ /TiO ₂ Photocatalysts for Antidepressant Removal	158
11:00-11:15	<u>I. Kontodimos</u> , C. Evaggelou, C. Mavromatidou, P. Grammelis, M.A. Goula	Food Waste Leachates as Circular Organic Feedstocks: Comparative Assessment of Bioconversion Pathways towards Alternative Fuels	161
11:30-12:00	Coffee Break		
Sponsor Presentations (ZEP, Room 1, Amphitheatre) <i>Chairs: Prof. Savvas Douvartzides (UOWM) & Assist. Prof. Athina Krestou (UOWM)</i>			
12:00-12:10	E. Klothakis (ANELIS-ΚΛΩΘΑΚΗΣ ΕΛΕΥΘΕΡΙΟΣ & ΣΙΑ Ε.Ε.)	Routine Operando Studies with Near Ambient Pressure – X-RAY Photoelectron Spectroscopy (NAP-XPS)	162
12:10-12:20	Y. Mouroutis-Prionistis (HELLAMCO)	Unlocking Catalyst Performance - An Introduction to Malvern Panalytical Advanced Catalysis Portfolio	163
12:20-12:30	O. Antonoglou (RIGAS LABS)	Preserving Sample Integrity in Catalysis: Advanced Workflows for Artifact-Free Analysis	164
12:30-12:40	V. Koulos (B-D INVENTIONS)	Digital Calcimetry in Catalysis Research: Capabilities and Application Perspectives	165
12:40-12:50	M. Ziagos (ΑΝΑΛΥΤΙΚΕΣ ΣΥΣΚΕΥΕΣ Α.Ε.)	Advancing X-ray Diffraction for Materials & Catalysis Research: (New) Capabilities of Bruker D6 PHASER	166
12:50-13:00	Ioannis-Hector Haloulos (ALFATEC INSTRUMENTS & CHEMICALS)	Advanced Technologies for Catalyst Characterization and High Pressure Reaction Testing	169
PhD Training Seminar (ZEP, Room 2, Library)			

12:00-13:00	Leonardo Duranti, Ph.D., Tenure Track Researcher, Department of Chemical Science and Technologies, University of Rome Tor Vergata	Materials design for high-temperature electrocatalysis: Solid Oxide Fuel Cells and Solid Oxide Electrolyzers towards efficient energy conversion and storage
13:00-14:30	Round Table: Energy Transition – Challenges, Opportunities and the Role of Catalysis (ZEP, Room 1, Amphitheatre)	
Moderators:	Assoc. Prof. Lefteris Topaloglou (UOWM) & Prof. Maria Goula (UOWM)	
Panelists:	Mr. Giorgos Amanatidis, Regional Governor of Western Macedonia Prof. Georgios C. Christoforidis, Vice Rector for Research and Innovation, UOWM Dr. Angelos Lappas, Research Director, CPERI/CERTH Dr. Nicholas Mantzaris, Policy Analyst, The Green Tank	
Best Poster Award Ceremony, Conference Closure, Meeting of the Hellenic Catalysis Society (ZEP, Room 1, Amphitheatre)		
14:30-14:40	Best Poster Award Ceremony	
14:40-14:50	Conference closure	
14:50-15:00	Meeting of the Hellenic Catalysis Society	
15:00	Refreshments	

Post-Conference Excursion to Vergina (Aigai)

Buses will depart from ZEP at 15:30.