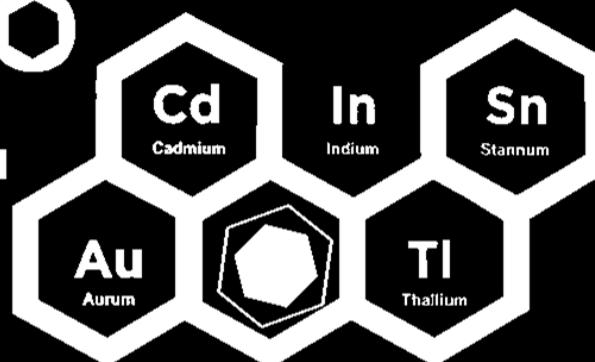


4TH SYMPOSIUM OF GRADUATE STUDENTS
OF THE CHEMISTRY DEPARTMENT, NKUA



4th
ΣΥΜΠΟΣΙ



Μεταπτυχιακών Φοιτητών Τμήματος Χημείας, ΕΚΠΑ

Zn Zincum	Ga Gallium	Ge Germanium	As Arsenicum
--------------	---------------	-----------------	-----------------



Scientific Program

Wednesday May 28th, 2025

10:00-10:20	<p>Welcome</p> <p>Opening remarks</p> <p>Evi Lianidou, <i>Professor, Chair of Chemistry Department</i></p>
	<p><u>Session 1</u></p> <p>Chair: Christina Varfi & Efthymios Alexandros Routsis</p>
10:20-10:40	Nikolaos Thomaidis, Laboratory of Analytical Chemistry, NKUA
10:40-11:25	Group PRESENTATIONS
10:40-10:55	<p>1st prize Greece – Törkiye Hackathon 2025</p> <p>Panos Oikonomopoulos, <i>laboratory of Inorganic Chemistry, NKUA</i></p>
10:55-11:10	<p>iGEM Athens 2024: e-PHAESTUS</p> <p>Charikleia Karaousta, <i>Laboratory of Organic Chemistry, NKUA</i></p>
11:10-11:25	<p>Leguminutty-Ecotrophelia 2024</p> <p>Aikaterini Andreou, Eirini Foti, Styliani-Polytimi Fragkou, Konstantina Gatou, Elpida Mantzakopoulou, <i>laboratory of Food Chemistry, NKUA</i></p>
	<p><u>Session 2</u></p> <p>Chair: Iren Georgia Stavrakaki & Evangelia Tsagkaraki</p>
11:30-11:50	Antigoni Cheilari, NKUA
11:50-12:30	ORAL PRESENTATIONS
11:50-12:00	<p>Ni-Catalysed Radical decarboxylation as a Late-stage Diversification Strategy for Stereoselective Synthesis of Phosphinic Inhibitors of M1 Aminopeptidases</p> <p>Styliani Timotheatou, <i>laboratory of Organic Chemistry, NKUA</i></p>



12:00-12:10	<p>Leaching Potential of Fire-Derived Ash and Its Impact on the Surface Microlayer in a Mediterranean Reservoir (Lake Marathon, Greece)</p> <p>Nikolaos Katsikatsos, <i>Laboratory of Environmental Chemistry, NKUA</i></p>
12:10-12:20	<p>Block copolymers of N-Vinylpyrrolidone and Vinyl Esters: Self- assembly behavior in aqueous solvents and drug encapsulation within the formed structures</p> <p>Aikaterini Maria Gkolemi, <i>Laboratory of Industrial Chemistry, NKUA</i></p>
12:20-12:30	<p>A New, Convenient Way of Accessing Ni(II) and Ni(I) Complexes via C-N Oxidative Cleavage</p> <p>Dimitrios Fragkis, <i>Laboratory of Inorganic Chemistry, NKUA</i></p>
12:30-13:30	<div>  <p>POSTER SESSION & COFFEE BREAK</p>  </div>
	<p><u>Session 3</u></p> <p>Chair: Efthymios Alexandros Routsis & Alikis Soufla</p>
13:30-14:30	<p>ORAL PRESENTATIONS</p>
13:30-13:40	<p>Systems-Level Assessment of Biomaterial Biocompatibility for Neural Interface Applications Using the IN3-BIO Workflow</p> <p>Nafsika Rossopoulou, <i>National Hellenic Research Foundation</i></p>
13:40-13:50	<p>Coatings with Enhanced Antifouling Properties</p> <p>Alexandra Gkolosi, <i>Laboratory of Industrial Chemistry, NKUA</i></p>
13:50-14:00	<p>Bimetallic hybrid Fe@Eu nanoparticles for dual function imaging and therapeutic applications</p> <p>Evangelia Tsitsou, <i>Laboratory of Inorganic Chemistry, NKUA</i> Cross-Linking of PVA</p>
14:00-14:10	<p>Accurate non-covalent interactions from first-principles methods</p> <p>Emmanouil Semidalas, <i>NKUA</i></p>
14:10-14:20	<p>Antitumoral effect of Silver Nanoparticles on Breast Cancer cells and their role in Cell Signaling Pathway</p>



	Posoula (Celia) Korakianiti, <i>Laboratory of Inorganic Chemistry, NKUA</i>
14:20-14:30	Synthesis and characterization of hybrid organic/inorganic halide perovskites for optoelectronic applications John Koutsoubogeras, <i>Laboratory of Physical Chemistry, NKUA</i>

	<u>Session 4</u> Chair: Nikolaos Katsikatsos & Maria Alysandraki
14:40-15:00	Georgios Katsouras, <i>E.Y.D.A.P. S.A.</i>
15:00-15:30	ORAL PRESENTATIONS
15:00-15:10	Polyurea-Crosslinked Alginate Aerogels for Metal Adsorption in Aqueous Solutions Aqueous Solutions Angeliki Piterou, <i>Laboratory of Inorganic/Environmental Chemistry, NKUA</i>
15:10-15:20	Using modified MOFs for Pb²⁺ removal in aqueous environment Panteleimon Kotidis, <i>Laboratory of Inorganic Chemistry, NKUA</i>
15:20-15:30	An Ultra-High Vacuum Scanning Tunneling Microscope Facility for Surface Chemistry & Molecular Nanosystems Aliki Soufla, <i>Laboratory of Physical Chemistry, NKUA</i>



Thursday May 29th, 2025

Session 5

Chair: Maria Alysandraki & Nikolaos Katsikatsos

10:00-10:20

Giasemi Angeli, TPCI, NHRF

10:20-11:10

ORAL PRESENTATIONS

10:20-10:30

Polyurea-Crosslinked Carboxymethylcellulose Aerogels
Varvara Vlachopoulou, *Laboratory of Inorganic Chemistry, NKUA*

10:30-10:40

Study of degradation of aflatoxins after sonication and determination by liquid chromatography-mass spectrometry
Christianna-Konstantina Kontoliou Papageorgiou,
Laboratory of Food Chemistry, NKUA

10:40-10:50

Establishing Dried Matrix Spot Proteomics for Discovery in Murine Tissue
Antzela Tzanai, *Department of Biology, NKUA*

10:50-11:00

Facile fabrication of high-performance L-Lysine carbon dots /TiO₂ hybrid nanoparticles for visible light driven photocatalytic applications
Maria Kourmoussi, *Laboratory of Inorganic Chemistry, NKUA*

11:00-11:10

Synthesis of phosphinic pseudopeptides as selective inhibitors of IRAP aminopeptidase.
Evangelia Maria Baltzi, *Laboratory of Organic Chemistry, NKUA*

Session 6

Chair: Varvara Vlachopoulou & Celia Korakianiti

11:15-11:30

AcRo-Pol

11:30-12:20

ORAL PRESENTATIONS



11:30-11:40	<p>Effect of the drying method on selected material properties of polyurea-crosslinked biopolymer aerogels</p> <p><i>Argiris Gomatos, Laboratory of Inorganic Chemistry, NKUA</i></p>
11:40-11:50	<p>TPU-based Cuff Electrodes for Neural Interfaces: Biocompatibility under the IN3-Bio Framework</p> <p><i>Aikaterini Skiada, National Hellenic Research Foundation</i></p>
11:50-12:00	<p>Methylation-Based Liquid Biopsy Using BALF and Plasma for Non-Small Cell Lung Cancer Detection.</p> <p><i>Stefania Dimitrakopoulou, Laboratory of Analytical Chemistry, NKUA</i></p>
12:00-12:10	<p>Ti(III) Organometallics with a Rigid Bis-Phenoxy NHC Pincer Ligand – Structures and Reactivity</p> <p><i>Irene Ligielli, Laboratory of Inorganic Chemistry, NKUA</i></p>
12:10-12:20	<p>Copper-chelated Hyperbranched Polyethyleneimines as antifungal agents against Aspergillus nidulans fungal cells with low human cytotoxicity</p> <p><i>Spiros Gerostathis, Institute of Biosciences and Applications, NCSR "Demokritos"</i></p>
12:20-13:30	<div>  <p>POSTER SESSION & COFFEE BREAK</p>  </div>
	<p><u>Session 7</u></p> <p>Chair: Iren Georgia Stavrakaki & Christina Varfi</p>
13:30-14:40	<p>ORAL PRESENTATIONS</p>
13:30-13:40	<p>Integrating Arduino in Science and Environmental Education: A Multidisciplinary Hydrogen Car Project for Chemistry Education</p> <p><i>Alexandros Andrias, NTUA, NKUA ChEd-ICT-ESD</i></p>
13:40-13:50	<p>Late-stage diversification of phosphinic pseudopeptidic inhibitors of M1 Zinc aminopeptidases using an oxidative Heck reaction</p> <p><i>Konstantinos Patiniotis, Laboratory of Organic Chemistry, NKUA</i></p>



13:50-14:00	<p>Application of Wastewater-Based Epidemiology for Viral Pathogen Surveillance on Cruise Ships: A Comparative Study of Sampling Methods</p> <p>Georgia Georgakopoulou, <i>Laboratory of Analytical Chemistry, NKUA</i></p>
14:00-14:10	<p>Engineering Cu Active-Sites on TiO₂ for highly efficient solar-driven hydrogen evolution</p> <p>Panagiotis Tzevelekidis, <i>Laboratory of Inorganic Chemistry, NKUA</i></p>
14:10-14:20	<p>IN3-BIO Framework: Biocompatible Plug Electrodes for Targeted Neural Interfacing in Exoprosthetic Systems</p> <p>Lydia Galouni, <i>National Hellenic Research Foundation</i></p>
14:20-14:30	<p>Decoding Waldenström's Macroglobulinemia (WM): High-Precision Mutation Profiling with Multiplex Digital PCR</p> <p>Eleni Thanou, <i>Laboratory of Analytical Chemistry, NKUA</i></p>
14:30-14:40	<p>A Computational Approach to the Structural and Optoelectronic Properties of Advanced Materials Using DFT</p> <p>Christina Kolokytha, <i>Laboratory of Physical Chemistry, NKUA</i></p>
	<p><u>Session 8</u></p> <p>Chair: Varvara Vlachopoulou & Alikì Soufla</p>
14:45-15:00	<p>Panagiotis Kaloudis, R&D Senior Manager, Pre Approval, DEMO</p>
15:00-15:50	<p>ORAL PRESENTATIONS</p>
15:00-15:10	<p>Low valent iron pincer dinitrogen complexes: Synthesis, Characterization and Reactivity</p> <p>Evangelos Papangelis, <i>Laboratory of Inorganic Chemistry, NKUA</i></p>
15:10-15:20	<p>One Assay, Nine Targets: Advancing Viral Surveillance with Multiplex RT-ddPCR</p> <p>Anastasia Zafeiriadou, <i>Laboratory of Analytical Chemistry, NKUA</i></p>
15:20-15:30	<p>Study of projectile-like fragments from the ⁸⁶Kr (25 MeV/nucleon) on ²⁰⁸Pb peripheral nuclear collision</p>



	Eleftheria Travlou, <i>Laboratory of Physical Chemistry, NKUA</i>
15:30-15:40	Multinucleon transfer in peripheral collisions of ^{64}Ni on ^{64}Ni at 25MeV/nucleon Eirini Kontogianni, <i>Laboratory of Physical Chemistry, NKUA</i>
15:40-15:50	Detailed Studies of Multinucleon Transfer in $^{40}\text{Ar} + ^{64}\text{Ni}$ Collisions at 15 MeV/nucleon Konstantinos Gkatzogias, <i>Laboratory of Physical Chemistry, NKUA</i>
16:15-16:45	BEST ORAL AND BEST POSTER AWARD <i>CLOSING CONFERENCE</i>



POSTER SESSION	
1	<p>DFT and Time-Dependent DFT studies on 7-hydroxy-4-substituted coumarins: Efficient photoacids for acetalization reactions</p> <p>Efthymios Alexandros Routsis, <i>Laboratory of Organic Chemistry, NKUA</i></p>
2	<p>Exploring Polynuclear SBUs in Dicarboxylate-Based Rare Earth MOFs</p> <p>Maria Ladaki, <i>Laboratory of Inorganic Chemistry, NKUA</i></p>
3	<p>Fortifying yoghurt with orange peel bioactive compounds: A step towards sustainable functional food development</p> <p>Georgios Nikolaos Vlachos, <i>Laboratory of Food Chemistry, NKUA</i></p>
4	<p>Chalcones derivatives (a and b) as promising anti-inflammatory compounds</p> <p>Nikitas Georgiou, <i>Laboratory of Organic Chemistry, NKUA</i></p>
5	<p>Gold nanoparticles conjugated with folic acid for cervical cancer treatment</p> <p>Eleni Lygrou, <i>Laboratory of Inorganic Chemistry, NKUA</i></p>
6	<p>On the Reactivity of a Novel Iron Pincer Dinitrogen Complex with Six-Membered Ring NHCs towards Si-H Activation.</p> <p>Ippokratis Galanakis, <i>Laboratory of Inorganic Chemistry, NKUA</i></p>
7	<p>Synthesis and biological evaluation of nanoparticles Fe@Te and Fe@Sm</p> <p>Evangelia Katsoti, Katerina Dazea <i>Laboratory of Inorganic Chemistry, NKUA</i></p>
8	<p>In Silico evaluation of therapeutic compounds for targeted treatment of Myasthenia Gravis</p> <p>Errikos Petsas, <i>Laboratory of Organic Chemistry, NKUA</i></p>
9	<p>Assessing the antifungal resistance of silver nanoparticles against <i>Aspergillus niger</i> isogenic mutants</p> <p>Konstantina Avdala, <i>Laboratory of Food Chemistry, NKUA</i></p>



10	<p>MoS₂ and NHC metal complexes as catalysts for the A₃ coupling reaction</p> <p>Florentia Stamovlasi Spyropoulou, <i>Laboratory of Organic/Physical Chemistry, NKUA</i></p>
11	<p>Introduction of the "Atom Economy" principle of Green Chemistry in Secondary Education</p> <p>Evangelia Gkogia, NKUA, ChEd-ICT-ESD</p>
12	<p>Stereoselective synthesis of chiral cyclopentanol towards natural products of the Jasminun species</p> <p>Rafailia Papandreou, Charitini Papandreou, <i>Laboratory of Organic Chemistry, NKUA</i></p>
13	<p>Synthesis and Characterization of N,P-doped Carbon Quantum Dots as potential candidates for Anticancer and Antibacterial Applications</p> <p>Anastasia Chatzivasiloglou, <i>Laboratory of Inorganic Chemistry, NKUA</i></p>
14	<p>Bipyridine-modified highly dispersed Cu sites on TiO₂ for enhanced visible-light absorption and photocatalytic activity.</p> <p>Georgia Pantela, <i>Laboratory of Inorganic Chemistry, NKUA</i></p>
15	<p>Molecular Characterization Of Circulating Tumor Cells (CTCs) In Sporadic Medullary Thyroid Carcinoma (spMTC) Patients</p> <p>Konstantina Tekou, <i>Laboratory of Analytical Chemistry, NKUA</i></p>
16	<p>MOFs synthesis with sulfonamide ligands</p> <p>Maria Alysandraki, Danai Veli <i>Laboratory of Inorganic Chemistry, NKUA</i></p>
17	<p>A comparative study of Ni(II) and Co(II) diselenolene complexes in light-driven hydrogen evolution reaction</p> <p>Asimina Andreana Papadopoulou, <i>Laboratory of Inorganic Chemistry, NKUA</i></p>



18	<p>Hydrothermal growth of copper oxide nanoparticles in defined areas on a silicon substrate by optical lithography</p> <p><i>Athanasia Fouka, Laboratory of Industrial Chemistry, NKUA</i></p>
19	<p>Water-soluble quaternized amino phosphine ligands for transition metal catalyzed aqueous catalysis</p> <p><i>Perikleia Diamantopoulou, NHRF</i></p>
20	<p>Synthesis and Characterization of Star-Shaped Poly(n-hexyl isocyanate) Homopolymers via Coordination Polymerization and Core-First Methodology Using Multi-Functional (Half-)titanocene Alkoxy Complexes</p> <p><i>Evangelos Apostolakis, Laboratory of Industrial Chemistry, NKUA</i></p>
21	<p>Producing Electric Voltage with Benzyl Alcohol</p> <p><i>Liveria Tsagri, Laboratory of Physical Chemistry, NKUA</i></p>
22	<p>Evaluation of Polyurea-Crosslinked Alginate Aerogels for Drug Delivery Applications</p> <p><i>Georgia Prapa, Laboratory of Inorganic Chemistry, NKUA</i></p>
23	<p>"Green" synthesis of nitrogen-carbon quantum dots, characterization, antibacterial properties</p> <p><i>Michail Alexopoulos, Theodoros-Anargyros Dounias, Laboratory of Inorganic Chemistry, NKUA</i></p>
24	<p>Synthetic Studies towards Jaspofoliamoside D, a Macrocyclic Secoiridoid Natural Product</p> <p><i>Maria Mavridou, Laboratory of Organic Chemistry, NKUA</i></p>
25	<p>Colloidal Chemistry and Nanostructure Engineering of Gold Nanorods for Glioblastoma Applications.</p> <p><i>Sofia-Maria Gratsia, Laboratory of Inorganic Chemistry, NKUA</i></p>
26	<p>Synthesis Of pH-Responsive Hybrid Copolymers and the Encapsulation Of Proteins to Combatautoimmune Diseases</p> <p><i>Christina Varfi, Laboratory of Industrial Chemistry, NKUA</i></p>



27	<p>Reference intervals for hair cortisol in healthy adults based on electrochemiluminescence method</p> <p><i>Anna Vergi, Laboratory of Analytical Chemistry, NKUA</i></p>
28	<p>Photophysical Properties of Donor–Acceptor (D-A) BODIPY Fluorescent Dyes</p> <p><i>Georgios Ampeliatis, Laboratory of Physical Chemistry, NKUA</i></p>
29	<p>Experimental Study of α-cluster Transfer Channels in Peripheral Collisions at Fermi Energies using the MARS Spectrometer</p> <p><i>Chrysi Giannitsa, Laboratory of Physical Chemistry, NKUA</i></p>
30	<p>Mixed ligands complexes of Cu(II) and Pt(II) with 1-10-phenanthroline and a curcumin derivative. Synthesis, characterization and Studies of their interaction with CT-DNA.</p> <p><i>Ioannis Korovesis, Aristotelis Mazarakis, Laboratory of Inorganic Chemistry, NKUA</i></p>
31	<p>Development of an optical aptasensor targeting troponin I bybiofunctionalizing europium-containing polymers</p> <p><i>Evangelia Tsitsou, Laboratory of Inorganic Chemistry, NKUA</i></p>
32	<p>The Complexation Mechanism Of An Anticancer Pt-Drugs With Polymers Containing Poly(L-Histidine)</p> <p><i>Iren Georgia Stavrakaki, Laboratory of Industrial Chemistry, NKUA</i></p>
33	<p>Development of educational materials focusing on chemistry of the social scientific issue climate change</p> <p><i>Panagiotis Paraskevopoulos, NKUA , ChEd-ICT-ESD</i></p>
34	<p>Synthesis of Poly(γ-benzyl-L-glutamate) Homopolymers of Defined Molecular Weights</p> <p><i>Evangelia Tsagkaraki, Laboratory of Industrial Chemistry, NKUA</i></p>
35	<p>Electrochemical Determination of Iodide Ions</p> <p><i>Maria Kandia, Laboratory of Analytical Chemistry, NKUA</i></p>



36	<p>Encapsulation Of Platinum-Based Drugs In Poly(Ethylene Oxide)-Block-Poly(L-Histidine) Copolymers And Study Of Their Self-Assembly</p> <p>Eleni Kalantzi, <i>Laboratory of Industrial Chemistry, NKUA</i></p>
37	<p>UV-Induced Cross-Linked PVA Films with Ammonium Metatungstate for Underwater Application</p> <p>Sofia Minadaki, <i>Laboratory of Industrial Chemistry, NKUA</i></p>
38	<p>Synthesis and Characterization of Hybrid Au@Ru Nanoparticles for Targeted Anticancer Applications</p> <p>Nikoletta Andriopoulou, <i>Laboratory of Inorganic Chemistry, NKUA</i></p>
39	<p>Synthesis and Characterization of Nickel–Bis(dithiolene) Complexes Bearing Proximal Proton Relays</p> <p>Konstantinos Anagnostou, <i>Laboratory of Inorganic Chemistry, NKUA</i></p>
40	<p>Activation of TiO₂ nanoparticles with N-doped CQDs for water purification</p> <p>Markella Ioanna Vogia Rompazani, <i>Laboratory of Inorganic Chemistry, NKUA</i></p>
41	<p>Orange peels waste valorization: Production of a functional cheese in brine enriched with bioactive compounds</p> <p>Klea-Eleni Foka, <i>Laboratory of Food Chemistry, NKUA</i></p>
42	<p>Synthesis of Cu-Doped SnO₂ nanoparticles for Antimicrobial Applications</p> <p>Maria Georgia Ploumpi, <i>Laboratory of Inorganic Chemistry, NKUA</i></p>
43	<p>Synthesis, characterization and evaluation of Cu(II) complexes as metallothrapeutic agents</p> <p>Alkistis Eleni Liatsou, <i>Laboratory of Inorganic Chemistry, NKUA</i></p>
44	<p>Patulin detoxification by application of cold atmospheric plasma technology</p> <p>Katerina Lamprou, <i>Laboratory of Food Chemistry, NKUA</i></p>



45	<p>Green Synthesis of Carbon Quantum Dots for Geoenvironmental Applications</p> <p>Alexandra Efthymiadou, <i>Laboratory of Inorganic Chemistry, NKUA</i></p>
46	<p>Enhancing Chemistry Lab Learning with QR Codes: A Study on Student Performance and Autonomy</p> <p>Georgios Mourtioglou, NKUA, NTUA ChEd-ICT-ESD</p>
47	<p>Development of an Amino Acid-Based Organic Linker for MOFs: Synthetic attempts with copper.</p> <p>Eleni Palli, Kalliopi Anastasia Mylonaki, <i>Laboratory of Inorganic Chemistry, NKUA</i></p>
48	<p>Synthesis of Bio-MOFs and drug delivery system evaluation</p> <p>Bintas Christos, INN, NCSR "Demokritos"</p>
49	<p>Synthesis of M(II) (M= Fe, Co) Complexes featuring Hemilabile Bidentate CAAC ligands Bidentate CAAC ligands</p> <p>Christina Sioutka, <i>Laboratory of Inorganic Chemistry, NKUA</i></p>
50	<p>Synthesis of Methyl Ester Derivatives of Cannabinoid Acids with Extended Alkyl Side Chains</p> <p>Anna Magiati, <i>Laboratory of Organic Chemistry, NKUA</i></p>
51	<p>Hybrid TiO₂@Cu@Ce Nanoparticles: A Multifunctional Platform for Water Purification Applications</p> <p>Stelios Liagos, <i>Laboratory of Inorganic Chemistry, NKUA</i></p>
52	<p>Non-Invasive Detection of NSCLC: Diagnostic Utility of Promoter Methylation in Salivary DNA</p> <p>Zinovia Christou, <i>Labaratory of Analytical Chemistry, NKUA</i></p>