

19th International Symposium on Advanced Organic Photonics (ISAOP-25)

21-22 May, 2025, El Jadida, Morocco

Organized by



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Conference Program

May 21, 2025		
08 :00 – 10 :00	Registration	
10 :00 – 10 :40	Opening Ceremony	
	<u>Session Chair:</u> Prof. Jean Michel Nunzi, Kanazawa University, Japan, Queen's University, Canada	
10 :40 – 11:00	Plenary 1: Prof. Adschiri Tadafumi Tohoku University, Sendai, Japan	
	<u>Session Chair:</u> Mohammed El Ganaoui, Lorraine University, France	
11 :00 – 11 :20	Plenary 2: Prof. Zouheir Sekkat Mohammed V University, Rabat, Morocco	
11 :20 - 12 :00	Coffee break	
	<u>Session Chair:</u> Toshikuni Kaino, Tohoku University, Japan	<u>Session Chair:</u> Mohammed El Ganaoui, Lorraine University, France
12 :00 - 12:20	Keynote 1: Prof. Tamada Kaoru Kyushu University, Fukuoka, Japan	Keynote 2: Prof. Souad El Hajjaji Mohammed V University, Rabat, Morocco
12 :20 – 12 :40	Keynote 3: Kasai Hitoshi Tohoku University, Sendai, Japan	Keynote 4: Prof. Najoua Labjar Mohammed V University, Rabat, Morocco
12 :40 – 12 :55	Laouid Amina	Jbilou Safia

	Photoluminescence Enhancement and Energy Transfer in Znqâ,, Thin Films Co-Doped with DCM Nicolaus Copernicus University, Torun, Poland	A Comprehensive Overview of Advanced Methods for Designing Composite Hydrogen Storage Vessels Hassan II University, Casablanca, Morocco
12 :55 – 13 :10	Afak Hamza Simulation and Characterization Perovskite Solar Cell based on MASNI3 using SCAPS-1D Sultan Moulay Slimane University, Beni Mellal, Morocco	Bouhouche Ichraq Advancements in Corrosion Protection: Exploring Innovative Coatings, Self-Healing Materials, and Surface Preparation Techniques: a review Mohammed V University in Rabat, Morocco
13 :10 – 13 :25	Handayani N. H. Vacuum-Deposited RbI for Large-Grained, High-Crystallinity, and Stable Perovskite Solar Cells Kanazawa University, Kanazawa, Japan	Zouine Ihssane Ambient Energy Harvesting Technologies for Railway Applications Chouaib Doukkali University, El Jadida, Morocco
13 :30 – 15 :00	Lunch	
	<u>Session Chair:</u> Souad El Hajjaji, Mohammed V University, Rabat, Morocco	
15 :00 – 15 :20	Plenary 3: Prof. Md. Shahiduzzaman Kanazawa University, Japan	
15 :20 – 15 :40	Plenary 4: Prof. Jean Michel Nunzi Kanazawa University, Japan Queen's University, Canada	
	<u>Session Chair:</u> Tetsuya Taima, Kanazawa University, Japan	<u>Session Chair:</u> Souad Morsli, Lorraine University, France
15 :45 – 16 :00	Keynote 3: Prof. Masahiro Nakano Kanazawa University, Japan	Cherkaoui Jaouad Nada Energy Harvesting with diverse micro piezoelectric setups Chouaib Doukkali University, El Jadida, Morocco
16 :00 – 16 :15	Keynote 4: Ando Shinji	Nini Meryem

	Tokyo Institute of Technology, Tokyo, Japan	Chemometric advances in COD analysis: Overcoming turbidity interference with a Hybrid PLS-ANN approach Hassan II University, Casablanca, Morocco
16 :15 – 16 :30	Furukawa Rei Characterization of Oriented Polymer Films with Embedded Carbon Micro-Coils: Electrical Behavior University of Electro-Communications, Tokyo, Japan	Baiboud Mohamed Comparative study of magnetic properties in V-doped CdX (X = S, Se and Te) compounds: First-Principles Investigation Ibn Zohr University, Agadir, Morocco
16 :30 – 16 :45	Derbal Habak Hassina Development and Modeling of Low-Cost Tandem Perovskite/Silicon Solar Cells University of Picardie Jules Vernes, Amiens, France	Benhadria El Houceine Copper oxide nanoparticles-decorated cellulose acetate: Eco-friendly catalysts for reduction of toxic organic dyes in aqueous media Mohammed V University in Rabat, Morocco
16 :45 – 17 :00	Elgoumiri Kaoutar Exploring the potential of CsGeI3 perovskite in boosting the efficiency of SnS based solar using SCAPS-1D simulator Ibn Zohr University, Agadir, Morocco	Tabine Abdelhakim Correction Methods for CC: Enhancing Accuracy in Lithium-Ion Battery State of Charge Estimation Chouaib Doukkali University, El Jadida, Morocco
17 :00– 17 :30	Coffee break Poster Session	
	<u>Session Chair:</u> Zouheir Sekkat, Mohammed V University, Rabat, Morocco	<u>Session Chair:</u> Najoua Labjar, Mohammed V University, Rabat, Morocco
17 :30 – 17 :45	Keynote 5: Otomo Akira National Institute of Information and Communications Technology, Kobe, Japan	Mardy Mustapha Edge-Dependent Electronic and Optical Properties of Graphene Nanoribbons: A First-Principles Study of Zigzag and Armchair Configurations Ibn Zohr University, Agadir, Morocco

17 :45 – 18 :00	<p>Feng Y. Highly Stable Perovskite Solar Cells via Controlled Intercalation of Cesium Halides into the MAPbI₃ Framework Kanazawa University, Kanazawa, Japan</p>	<p>Hammi Zineb Efficient Hydrogen Production in Alkaline Electrolysis Using Waste-Derived Hydrochar/Nanocellulose Electrodes Mohammed V University, Rabat, Morocco</p>
18 :00 – 18 :15	<p>Nakahara Yugo Roll-to-Roll Compatible Ionic Liquid-Assisted Perovskite Film Fabrication in Ambient Air for Highly Stable Solar Cells Kanazawa University, Kanazawa, Japan</p>	<p>Ameur Soukaina Elucidating the Factors Governing the Regio- and Stereoselectivity of 1,3-Dipolar Cycloaddition Reaction of Fused Pyrrole-2,3-diones with Nitrones: A MEDT and Docking Approach Chouaib Doukkali University, El Jadida, Morocco</p>
18 :15 – 18 :30	<p>Chouchna Assia Numerical Investigation of highly efficient and new low cost absorber material Ag₂GeS₃ using SCAPS 1D Ibn Zohr University, Agadir, Morocco</p>	<p>Halhaly Amine Energy Recovery from Industrial Wastewater Sludge: Challenges, Processes, and Sustainable Perspectives Mohammed V University, Rabat, Morocco</p>
18 :30 – 18 :45	<p>Yazawa Ruka High-efficiency Pb Recovery from Perovskite Solar Cells via Ion Exchange Resin Kanazawa University, Kanazawa, Japan</p>	<p>Etrini Ayoub Exploring the potential of 2D Dirac ZrB₂C₂ monolayer as promising anode material for Li-ion and sodium-ion batteries: DFT and AIMD investigation Sultan My Slimane University, Beni Mellal, Morocco</p>
18 :45 – 19 :00	<p>Liu Peng Impact of PbI₂, and A-site Solution Annealing on Perovskite Solar Cell Performance via Vacuum-Assisted Spin Coating Kanazawa University, Kanazawa, Japan</p>	<p>Tabine Abdelhakim Factors Driving Lithium-Ion Battery Aging: Current Intensity vs. Temperature Effects Chouaib Doukkali University, El Jadida, Morocco</p>

19 :00 – 19 :15	Okada-Shudo Yoshiko Protein-Based Neuromorphic Devices Emulating Visual Receptive Fields for Illusion Detection University of Electro-Communications, Tokyo, Japan	Chakar Khadija Development of a Stable Ternary Metal Oxide Nanofluid for Heat Transfer Enhancement in Photovoltaic/Thermal Collectors Chouaib Doukkali University, El Jadida, Morocco
19 :15 - 19 :30	Bouchra Es-Sounni Synthesis and characterization of novel metal complexes-based sulfonamide Schiff base ligand as photosensitizers in dye-sensitized solar cells Chouaib Doukkali University, El Jadida, Morocco	El Ghaouti CHAHID Utilizing Dielectric and Electrical Properties to Investigate Hexavalent Chromium Filtration via an Ultrafiltration Ceramic Membrane Chouaib Doukkali University, El Jadida, Morocco
May 22, 2025		
	<u>Session Chair:</u> Houda Labjar, Hassan II University, Casablanca, Morocco	
08 :30 – 08 :50	Plenary 5: Prof. Alexey Tameev Frumkin Institute, Russian Academy of Sciences, Moscow, Russia	
08 :50 – 09 :10	Plenary 6: Prof. Bernard Ratier Limoges University, France	
09 : 10 – 09 :30	Plenary 7: Prof. El Kebir Hlil Grenoble University, France	

	Plenary 8: Prof. Anna Zawadzka Torun University Poland	
9 :50 – 10 :30	Coffee break Poster Session IV	
10 :30 – 10 :45	V Dr Murugesh Eco-Friendly Innovations in Organic Photonics for Next-Generation Technologies JCT College Of Engineering And Technology, India	Sadek Otmane Application of a thin TiO ₂ layer as a transducer for the development of a biosensor for anti-COVID-19 antibody detection with docking study Chouaib Doukkali University, El Jadida, Morocco
10 : 45 – 11 :00	Iraoui Fatima Illumination of chiral medium by Whittaker-Gauss Beams Chouaib Doukkali University, El Jadida, Morocco	Bakkass Soukaina Application of Innovative Environmental Technologies for the Treatment and Reuse of Wastewater from Construction Sites and Industries: Physico Chemical Characterization and Performance Evaluation Mohammed V University in Rabat, Morocco
11 :00 – 11 :15	El Mouncharih Abdelkarim Graphene-Enhanced One-Dimensional Photonic Crystal Biosensors for Ultra-Sensitive Detection of Acetone Concentrations in Wastewater Cadi Ayyad University, Marrakech, Morocco	El Kake Abdelhadi Capacity-Based State of Health Estimation for Lithium-Ion Batteries under Aging Conditions Chouaib Doukkali University, El Jadida, Morocco
11 :15 – 11 :30	Yousoufi Fatima Synthesis, Characterization and Evaluation of the Antimicrobial Activity of A New Series of Benzimidazoles Phosphonates Chouaib Doukkali University, El Jadida, Morocco	Gounzari Mohammed Mechanical characterization of the binary CoCr metallic glass using molecular dynamics simulations Ibn Zohr University, Agadir, Morocco
11 :30 – 11 :45	Khouili Oussama Harnessing Intelligence for Solar Forecasting: ML vs DL Approaches in PV Output Prediction Chouaib Doukkali University, El Jadida, Morocco	Abouelhaoul Elalami Synthesis, Structural Characterization and Evaluation of the Anticorrosion Properties of a New Benzimidazole Compound: 5-Bromo-1,3-dihydro-4,6,7-trinitrobenzimidazol-2-one

		Chouaib Doukkali University, El Jadida, Morocco
11 :45 – 12 :00	El Hafidi El Mokhtar Hearth ash and fly ash filtration efficiency in industrial wastewater treatment and conductivity analysis monitoring Chouaib Doukkali University, El Jadida, Morocco	Zaroual Soumaya Predictive Maintenance in Industrial Systems: A Machine Learning Approach for Failure Prediction in Photonic and Smart Material-Based Environments Chouaib Doukkali University, El Jadida, Morocco
12 :00 – 12 :15	El Mrini Youssef Hybrid Energy Systems: Management Approaches and Critical Analysis Ibn Tofail University, Kenitra, Morocco	Idrissi Housna Selection of Gasification technology to maximize hydrogen-rich syngas from biomass using Multi-Criteria Decision-Making Methods Mohammed V University, Rabat, Morocco
12 :15 – 12 :30	El Hafiane Fouzia Les propriétés électronique du matériau 2D Sultan My Slimane University, Beni Mellal, Morocco	Gadda Nouhaila Sustainable Adsorption of Methylene Blue from Aqueous Medium by Hydrochar-Based Activated Carbon from <i>Chamaerops humilis</i> Fruit Pulp Mohammed V University, Rabat, Morocco
12 :30 – 12 :45	Salama Mohammed Magnetocaloric Effect of Ba _{0.8} Sr _{0.2} FeO ₃ Barium-Strontium Ferrites Chouaib Doukkali University, El Jadida, Morocco	Belahrach Bouchra Sustainable Energy Storage Materials and Circular Economy Mohammed V University, Rabat, Morocco
12 :45 – 13 :00	Sanad Asmae Synthesis of a Fruit Shell-Based Adsorbent for Methylene Blue Removal: Optimization Using Central Composite Design (CCD) Chouaib Doukkali University, El Jadida, Morocco	Assiya Atif Synthesis, Characterization, In Vitro and In Silico α -Amylase Inhibitory Activity of Novel 2,6-di(1,3,4-oxadiazol-2-yl)pyridine derivatives Compounds Chouaib Doukkali University, El Jadida, Morocco
13 :00 – 14 :30	Closing Ceremony and Lucnh	

Poster Session

N°	Authors	TITLE
P1	Abouais Ali	Bridgman Growth, and Correlation Between Thermal and Optical of ZnSeTe Crystals
P2	Benhadria El Houceine	Cellulose Acetate-Stabilized Cu ₂ O Nanoparticles for Enhanced Catalytic Reduction of Organic Pollutants
P3	Chakar Khadija	Comparative Stability Analysis of TiO ₂ , and Al ₂ O ₃ Nanofluids Using UV-Vis Spectroscopy Over Extended Storage
P4	Boumhamdi Mohammed	Compositional Effect on Optical and Thermal Properties of Cd _{1-x} Zn _x Te Mixed Crystals Grown by Bridgman Technique
P5	Lahrache Nabil	Corrosion inhibition of steel C38 in hydrochloric acid (1M) by a novel 1,2-bis (2-(1 H benzo (bisimidazol-2-yl) thio) ethoxy) ethane
P6	Diyagh Hafsa	Effects of Zn doping on optoelectronic properties and the transition from p-Type to n-Type in CuO thin films synthesized by M-SILAR
P7	Kouchtabi Mouhsine	Electrodeposition of Hydroxyapatite and β -TCP Coatings: Influence of Deposition Modes
P8	Zouine Ihssane	energy harvesting technologies in the rail sector

P9	Cherkaoui Jaouad Nada	Energy harvesting through different piezoelectric sensors
p10	Chaali Younes	Investigation of a new $\text{P2-Na}_{0,67}\text{Ni}_{0,25}\text{Co}_{0,17}\text{Mn}_{0,58}\text{O}_2$ cathode for sodium-ion batteries: Structural characterization and combined electrochemical and chemical deintercalation studies
P11	Abouelhaoul Elalami	Nitration of Benzimidazole Derivatives: Synthesis, Characterization and Evaluation of Biological Activities
P12	Redouane Mghaiouini	Optical properties of water under the action of the electromagnetic field in the infrared spectrum
P13	Bryk Mustapha	Optoelectronic Properties and Multiscale Numerical Optimization of $\text{CuIn}_{1-x}\text{Ga}_x\text{Se}$ Chalcopyrite Thin-Film Photovoltaics: Bridging DFT+U Insights and SCAPS-1D Device Performance
P14	Hafezi Yousef	Recyclable Emulsion Liquid Membranes for Nickel Recovery from Synthesized Phosphoric Acid: Performance, Stability, and Reusability
P15	Souhaili Ali	Sintering and Coalescence of homo and hetero-Nanoparticles (Ag and Au) and Their Deposition on Ag Substrate (0 0 1) : A Molecular Dynamics Study
P16	Sliman Omar	Superconducting and pinning vortex properties of mixed state in deuterated $\text{I}^{\text{0}}\text{-(BEDT-TTF)}_2\text{Cu[N(CN)}_2\text{]Br}$ organic superconductor.
P17	Assiya Atif	Synthesis and Anticorrosion Activity of 2-methyl-5-(2-methyl-1H-benzo[d]imidazol-5-yl)-1,3,4-oxadiazole
P18	Assiya Atif	Synthesis of 2,5-bis(2-(trifluoromethyl)-1H-benzimidazol-5-yl)-1,3,4-oxadiazole
P19	Youssoufi Fatima	Synthesis, Characterization and Biological Activity of New 4-Trifluoromethyl Substituted 2-(1H)-Pyridinone
P20	Youssoufi Fatima	Synthesis, Characterization and Evaluation of Biological Activity of New Trifluoromethyl Substituted Pyrazoles

P21	Chegrane Youssef	The Magnetic Properties of a V_2O_3 Bilayer
P22	Farajy Mohammed	Toward Efficient and Sustainable Lead-Free Perovskite Solar Cells: Thickness Optimization of $\text{CH}_3\text{NH}_3\text{SnI}_3$ Absorber Layer"
P23	Asmae SANAD	Green synthesis of Ag_2O nanoparticles from fruit seed shells for the removal of organic dyes
P24	Abdelmajid Assila	Enhancing Hydrogen Storage in MgH_2 : The Role of Mechanical Deformation and Elemental Substitution
P25	Mohamed omari	Evaluation of a New Bisbenzoxazole Derivative as Corrosion Inhibitor for Mild Steel in Molar HCl : Experimental and Theoretical Approaches
P26	Meryeme Joudi	Valorization of phosphogypsum for the synthesis of a MMT-HAP-CTS bio-composite: An efficient adsorbent for arsenic removal
P27	Imane Bachir	Theoretical Investigation of the Anticorrosion Properties of Benzimidazole Derivatives: A DFT, Molecular Dynamics, and Monte Carlo approach
P28	Halima Mortadi	Electric and dielectric properties of the solid solution $\text{K}_x\text{Cu}_{2-x}\text{P}_2\text{O}_7$ using impedance spectroscopy
P29	Labdere Outman	Magnetocaloric Potential of NdPd : A Theoretical Approach for Cryogenic Applications

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