

General Program Schedule

CrysTech-AI'26

February 2nd- 3rd 2026

University of El Oued

The day before Sunday February 1 st ,2026		Registration 14:00 El Oued Hotel -El Oued-	
First day Monday February 2 nd , 2026		Registration 08:00 Mediatech Lecture Hall –In front of the Faculty of Technology	
9:00-9:30		Opening ceremony	
9:30-10:15	Plenary 1 Pr. BENMYA Omar (Echahid Hamma Lakhdar University -El Oued-) Materials Science in the Era of Big Data and Artificial Intelligence	President(s)	Bechki Lazhar
			Delmi Samia
10:15-11:00	Plenary 2 Pr. OUHENIA Salim (Abderrahmane Myra university -Bejaia-) Combined X-ray Diffraction Approaches for the Structural, Microstructural, and Textural Characterization of Polycrystalline Materials	President(s)	Chihi Ismail
			Atia Mohammed Elhadi
11:00-11:30	Coffee break + Poster session (P-01 to P-35)	President(s)	Ghougali Mebrouk
			Gahtar Abd Elouahab
11:30-12:30	Oral session (O-01 to O-04)	President(s)	Mahamdioua Nabil
			Beggas Azzeddine
12:30-14:00	Lunch		
14:00	Excursion		

Second day Tuesday 3 rd February, 2026		Registration 08:00 Mediatech Lecture Hall –In front of the Faculty of Technology	
9:00-9:45	Plenary 3 Pr. MAHAMDIOUA Nabil (Mohammed Seddik Ben Yahia University -Jijel-) Unlocking the Crystal Structure of Polycrystalline Materials by Rietveld Refinement: Case Studies of Perovskite and Double Perovskite Systems	President(s)	Mimouni Mourad
			Bechki Djamel
9:45- 10:30	Plenary 4 Pr. BENHAOUA Boubakeur (Echahid Hamma Lakhdar University -El Oued-) Crystallization through cooling and heating	President(s)	Salim Ouhenia
			Ghani Rihia
10:30-11:00	Coffee break + Poster session (P-36 to P-70)	President(s)	Bagui Mohammed
			Khalef Abdelhamid
11:00-12:00	Oral session (O-05 to O-08)	President(s)	Benhaoua Boubakeur
			Ben mya Omar
12:00-12:30	Closing ceremony		
12:30-14:00	Lunch		

Speakers



Pr. BENMYA Omar
(Echahid Hamma Lakhdar
University -El Oued-)

Materials Science in the Era of
Big Data and Artificial
Intelligence



Pr. OUHENIA Salim
(Abderrahmane Myra
university -Bejaia-)

Combined X-ray Diffraction
Approaches for the Structural,
Microstructural, and Textural
Characterization of Polycrystalline
Materials



Pr. MAHAMDIQUA Nabil
(Mohammed Seddik Ben Yahia
University -Jijel-)

Unlocking the Crystal Structure of
Polycrystalline Materials by
Rietveld Refinement: Case Studies
of Perovskite and Double Perovskite
Systems



Pr. BENHAOUA Boubakeur
(Echahid Hamma Lakhdar
University -El Oued-)

Crystallization through cooling
and heating

GLOBAL PARTICIPATIONS LISTING

Oral presentations

ID	SPEAKERS	TITLE
O-01	Ouahab Zakaria	Deep Learning for Crystal System Classification
O-02	Bensaidane Youcef	Elaboration and characterization of Fe ₂ -Mn-Ga
O-03	Korichi Hamiche	Electronic Structure Modification and Visible-Light Absorption in Sn-Doped Hybrid and Inorganic APbI ₃
O-04	Taib Hana	Growing Crystals of zeolite
O-05	Charif Rania	Hydrostatic Pressure Effects on the Physical Properties and Bandgap of Antimony-Based Magnesium Trirutile
O-06	Oumessaoud Sara	Mechanical properties of a Molecular API Crystal: Structure-property correlation
O-08	Kherfi Hamza	Synthesis and single crystal XRD-based structural and formula revision of cesium hydrogen oxalate, with IR, thermal, intermolecular, and void analyses

Posters

ID	SPEAKERS	TITLE
P01	Khalfaoui Fadhila	A Comparative Analysis of the Structural Properties of Sand Dunes in Two Regions of El Oued
P02	Zine Zineb	Ab Initio Study of the Structural, Electronic, Magnetic, and Thermodynamic Properties of FeNi Alloys.
P03	Khezzane Anouar	Advanced Green Synthesis of Metal Oxide Nanocomposites for Enhanced Photocatalytic and Adsorptive Remediation of Heavy Metals and Hydrocarbons in Petroleum Wastewater Review
P04	Sek Lakhdar	AI-Assisted Prediction of Crystal Defects in Alkali-Doped CuO Thin Films
P05	Keraghel Fatiha	Analysis of defects in enameled sheets from national industrial production
P06	Khezazna Amina	Caractérisation structurale et amélioration des performances d'un adsorbant naturel pour l'élimination des polluants organiques des eaux usées.
P07	Benkanoun Aouaouche	Characterization and Hirshfeld Surface Analysis of the Heterometallic 2D Coordination Polymer [BaCu(OOC-C ₆ H ₄ -COO) ₂ (H ₂ O) ₄] _n .
P08	Slimani Hana	Characterization of concrete from ultrasonic group velocity measurement
P09	Guerziz Bochra	Comparative Structural Characterization of Cu(II), Co(II), and Zn(II) Complexes with an N ₂ O ₂ Tetradentate Schiff Base Ligand

P10	Laib Ibtissam	Crystalline Nano-Assembly of Ciprofloxacin-Loaded Cu ₂ O Particles as an Advanced Dual-Action Therapeutic System.
P11	Laib Ibtissam	Crystallographic Characterization and Therapeutic Potential of Ciprofloxacin-Loaded Cu ₂ O Nanoparticles: A Multifunctional Platform for Antidiabetic and Antibacterial Applications
P12	Touati Tliba Leila	Crystallographic Growth and XRD Analysis of Spray-Deposited SnO ₂ , Thin Films
P13	Salmi Chaima	Crystallographic, Optical, and Computational Characterization of Green-Synthesized Mn ₃ O ₄ /PVP PVP Nanocomposite
P14	Kir Iman	Crystallographic, Structural, and Surface Engineering of Green-Synthesized CuO/PEG Nanoparticles Derived from Lemon Peel Extract
P15	Chaib Wafa	Data-Driven Prediction of Lattice Parameter in Fluorite-Type Metal Hydrides
P16	Boursas Fawzia	DFT and molecular docking investigations of bis(2-amino-3-carboxypyrazin-1-ium) sulfate dihydrate
P17	Zeroual Soria	DFT Investigation of the Structural and Electronic Properties of Dichloromesitylene
P18	Guerfi Badis	DRX d'échantillon d'argile
P19	Chibani Aboubaker	EFFECT OF COPPER DOPING ON STRUCTURAL CHARACTERISTICS OF α -Fe ₂ O ₃ THIN FILMS FABRICATED VIA SPRAY PYROLYSIS
P20	Nour el houda Redjough	Effect of precursor molarity on Copper Oxide Thin films Deposited by Sol-Gel Dip-Coating Technique.
P21	Hadj Larbi Khadidja	ELABORATION AND CHARACTERISATION OF TiO ₂ DEVELOPED BY DIFFERENT METHODS OF ELECTRODEPOSITION AND ITS EFFECT ON PHOTOELECTRODEGRADATION OF MO DYE
P22	Lakhdari Meriem	Elaboration and characterization of tin oxide thin films by electrochemical method
P23	Leila Segueni	Fe-Doped SnO ₂ , Thin Films as Transparent Conducting Oxides: Structural Insights and Performance
P24	Barani Djamel	Green Synthesis of AgFeO ₂ , Nanocomposites Mediated by Portulaca oleracea for Enhanced Photocatalytic Degradation of Chlorpyrifos
P25	Nour-El Houda Derki	Green Synthesis of Magnesium Oxide Nanoparticles Using Cymbopogon Schoenanthus Extract
P26	Gadi Chifa	High Harmonic Generation as a Probe of Crystal Structure and Topological Phase in Su–Schrieffer–Heeger Chain
P27	Allouche Fatima	Hirshfeld Surface Analysis for the Investigation of Intermolecular Interaction of Hybrid Compound
P28	Chermat Zeyneb	Impact of additives on the crystallography of refractory ceramics
P29	Touati Tliba Meriem	Influence of iron doping on optical and structural properties of ZnO thin films prepared via spray pyrolysis method
P30	Djamila Berra	Influence of Precursor Concentration on the Morphology and

		Crystallinity of Synthesized CuO/Cu ₂ O, Nanoparticles
P31	Ghanem Kenza	Influence of SMAW Welding Current on X60 Steel Structure
P32	Zaiz Issam	Intégration des approches géochimiques et multivariées pour la caractérisation des minéraux évaporitiques de l'aquifère de la vallée d'Oued Souf : apports du XRD et potentiel de l'intelligence artificielle.
P33	Rabhi Chaima	Le Bail refinement of XRD results of the Bi-2223 phase
P34	Sarra Achaichia	optical, photoluminescence and electrical properties of aluminium zinc oxide thin films prepared by pyrolysis spray technique
P35	Zobeidi Ammar	Optimization, thermodynamic and kinetic studies of Orange G dye adsorption by chitosan beads from aqueous solution using Box-Behnken Design
P36	Younsi Chahra	Optimizing the Structural and Optical Properties of Hydrothermally Synthesized ZnO Nanowires for Enhanced Antimicrobial Performance
P37	Cheriet Nour El Houda	Performance Analysis of a Fuzzy Logic Controller for Liquid Level Systems
P38	Guemari Fathi	pH-Controlled Synthesis and Characterization of Nanoparticles
P39	Bouafia Abderrhmane	Plant-Mediated Synthesis and Characterization of Various Nanoparticles Using Plant Leaf Extract
P40	Ghani Rihia	Preparation and Investigation of the Crystalline Properties of the (Ca _{1-x} Sm _x) _{0.9} Sr _{0.1} FeO _{2.5} Brownmillerite Compound
P41	Bagtache Radia	Preparation of a New Host-Guest Copper Phosphate
P42	Afaf Bouchaala	Preparation of MgO–SiO ₂ films from natural materials and study of their structural properties using X-ray diffraction
P43	Abdessettar Djaouhar	Properties of Silver Nanoparticles: Distinguishing Shape and Size
P44	Mahboub Mohammed Sadok	Quantitative X-ray Diffraction and Phase Analysis of Gypsum Waste for Adsorption Applications
P45	Maroua Reguig	Rare-Earth Elements as Performance Enhancers for Solar-Pumped Lasers: A Study on Doping YAG with Sm, Er, and Gd
P46	Derki Maroua	Response Surface Methodology-Based Optimization of the Size of Biosynthesized Zinc Oxide Nanoparticles from Solenostemma argel and Anastatica hierochuntica Extracts
P47	Khaldi Soumaia	Single-Phase NiCo ₂ O ₄ Spinel Oxide Synthesized via Rapid Combustion Route: Structural Characterization and Enhanced Photocatalytic Activity
P48	Zeroual Soria	Structural Analysis of Dibromomesitylene: A DFT and Crystallography Study
P49	Mahboub Mohammed Sadok	Structural and Chemical characterization of El-Foulia Industrial Gypsum: Implications for Material Valorization
P50	Khaoula Alia	Structural and Crystallographic Analysis of Magnetic Chitosan–Clay–Benzoin–Fe ₃ O ₄ Schiff Base Composite Using X-ray Diffraction, Rietveld Refinement, and Its Application as a Thionine Dye Adsorbent

P51	Namoussa Tedjani Yahia	Structural And Morphological Characterization Of CuO Nanoparticles Synthesized Via a Green Method Using Date Fruit Waste Extract: X-Ray Diffraction And Rietveld Refinement Analysis
P52	Ouezzani Maroua	Structural Characterization of the CuO@ Natural Dune Sand Composite for Solar Photocatalytic Applications
P53	Zerrouki Karima	Supramolecular Co-crystal of 8-Hydroxyquinoline with Acetone-(2,4-dinitrophenyl)hydrazone: One-Pot Synthesis, Structural Investigation and Hirshfeld Surface Analysis
P54	Charif Rania	Synthesis and characterization of trirutile structure Zn _{1-x} Mg _x Sb ₂ O ₆ (X=0, 0.5 and 1) solid solution
P55	Kerkatou Mounia	Synthesis and X-Ray Structural Characterization of a New Zn(II) Complex Based on an Aromatic Nitrogenous Heterocyclic Ligand
P56	Torche Khoulood	Synthesis, crystal structure, Hirshfeld surface analysis of new sulfanilamide derivatives.
P57	Kerkatou Redouane	Synthesis, structural characterization, spectral properties, cohesion and Hirshfeld surface. Study of new two-dimensional organometallic zinc complexes.
P58	Charef Azzeddine	Band Gap Engineering and Enhanced UV Response in Mg _x Ti _{1-x} O ₂ , Thin Films: A First-Principles Study
P59	Charef Azzeddine	Texture Evolution and Preferred Orientation in Ga ₂ O ₃ , ZnO, Al ₂ O ₃ and Bi ₂ O ₃ Thin Films Studied by Rietveld Refinement
P60	Allouche Amel	The Entanglement Entropy of a Crystalline Phonon Lattice
P61	Benhamoud Ahlam	topographical and morphological properties of iron-palladium thin films
P62	Guia Djamel Eddine	Using UV-Vis Diffuse Reflectance Spectroscopy to Determine the Band Gap of Perovskite Materials.
P63	Tabet Amina	X-ray Diffraction Characterization of Ca ₅ (PO ₄) ₃ F@Ca ₅ P ₈ Nanocomposites
P64	Meftah Souad	X-ray Diffraction–Based Determination of Ni ₃ GaAs Crystal Structure Enhanced by Multiscale Computational Modeling
P65	Bahia Messai	XRD Analysis of Pb _{1-x} Sr _x [(Zr _{0.52} Ti _{0.43})(Al _{0.5} Sb _{0.5}) _{0.05}]O _{3-x} F _{2x} Ceramics.
P66	Harchouche Zine el abidine	Performance Analysis of a Fuzzy Logic Controller for Liquid Level Systems
P67	Djedda abir	Hydrothermal Synthesis and Characterization of Carbon Dots: A General overview
P68	Sulaiman Mogalli	Effect of Sr Content on the Structural and Magnetic Properties of Hexaferrites Prepared by Co-precipitation
P69	Chahra BOUKAOUS	Structural and vibrational properties of green-synthesized CuO–ZnO nanocomposite
P70	Manel Melouli	Structural Characterization of La _{1-x} Sr _x Fe _{0.7} Ni _{0.3} O ₃ Perovskites Using X-Ray Powder Diffraction

P71

Leila Bouras

Fabrication and characterization of nanostructured thin films for photovoltaic application