

PROGRAM

Monday 14.04.2025

8:30 – 9:00 (30mn)	REGISTRATION
9:00 – 9:30 (30mn)	Opening and Welcome HONOR CHAIRMAN Prof. Kamel CHARRADA (President of Monastir University, Tunisia) Prof Maher BEN CHIEKH (Director of Laboratory for the Study of Thermal & Energy Systems (LESTE), Tunisia) CHAIRMAN Prof.Nour SGHAIER (LESTE,Tunisia)
9:30 – 10:10 (40mn)	Plenary Session 1 <i>Prof. Michel QUINTARD [IMF Toulouse, France]</i> Multi-scale analysis of transport in porous media: model typologies session moderator : Prof. Nouredine Boukadida
10:10 – 10:25 (15mn)	Permeability Inference from 3D μCT Grayscale Images using Deep Learning Souhail Youssef* *IFP Energies Nouvelles-France
10:25 – 10:40 (15mn)	Numerical Simulation of Coupled Hydro-Bio-Geochemical Processes on Underground Hydrogen Storage Brahim Amaziane, Mustapha El Ossmani* , Fabrice Goler *ENSAM-AIDTM-Meknès-Morocco
10:40 – 10:55 (15mn)	Numerical Investigation of Heat Transfer with Heat Generation inside a Porous Media Raoudha Chaabane* *LESTE-ENIM-Tunisia
10:55 – 11:10 (15mn)	Analysis of Drying Kinetics, Energy Consumption, and Thermal Behavior of Strawberries During Intermittent Dehydration Houda Hachem* , Jihen Touati, Daoued Mihoubi *LMEEVED-CRTEn-Tunisia
11:15 – 11:45 (30mn)	COFFEE BREAK
	Session Moderator: Prof. Faten Fayala
11:45– 12:00 (15mn)	Funding mechanisms of research valorization and technology transfer ANPR
12:00 – 12:15 (15mn)	Design of Cloth-Masks as Personal Protective Equipment Using Artificial Intelligence Hamza. Alibi* , R. Baghdadi, M. Ben Halima, X. Zeng *LESTE-ENIM-Tunisia
12:15 – 12:30 (15mn)	Effect of Finishing Method on the Breathability and Drying Behavior of Polyester Knitted fabrics Med Ghaith Chakroun, Sofien Benltoufa, Adel Ghith, Faten Fayala* *LESTE-ENIM-Tunisia
12:30 – 12:45 (15mn)	Evaluation of Baby Diapers Performances

	Wala Kallala* , Faten Fayala, Adel Ghith *LESTE-ENIM-Tunisia
12:45– 13:00 (15mn)	Study the Effect of Fabrics' Parameters on Particles Filtration Efficiency of Cloth Masks Using Artificial Neural Network Rania Baghdadi* , Hamza Alibi, Meriam Ben Halima, Xianyi Zeng *ENIM-Tunisia
13:00 – 14:30 (90mn)	LUNCH
14:30 – 15:10 (40mn)	Plenary Session 2 <i>Prof. Rachida BOUHLILA [ENIT, Tunisia]</i> Scientific and economic relevance, assessment and modeling methods for evaporites environment in arid regions.
	Session Moderator: Prof Maher Ben Chiekh
15:10 – 15:25 (15mn)	Field Analysis and Numerical Modelling of Evaporation-induced Salt Coprecipitation in the Masonry of Carthage's Ruins. Aroua Mannai* , Lamia Guellouz, Johannes Hommel, Rainer Helmig, Rachida Bouhlila *LMHE-ENIT-Tunisia
15:25 – 15:40 (15mn)	Identifying Pollution in Aquifers Lamia Guellouz* , Faten Khayat *LMHE-ENIT-Tunisia
15:40 – 15:55 (15mn)	Insights into Brine Hydrogeochemical Characteristics in the Sabkha En Noual, Southern Tunisia Nesrine Nasri* , Ilyes Salhi, Rachida Bouhlila *LMHE-ENIT-Tunisia
15:55 – 16:10 (15mn)	Numerical simulation of the Thermal Charging/Discharging Process in Porous Media Belgacem Dhifaoui* , Walid Foudhil, Sadok Ben Jabrallah *LETTM-FST-Tunisia
16:10– 16:50 (40mn)	Plenary Session 3 <i>Prof. Sylvie LORTHOIS [IMF Toulouse, France]</i> Modeling blood flow and mass transfers within the brain
17:00 – 18:30 (90mn)	ELECTIONS OF THE STEERING COMMITTEE OF THE MAGHREB INTERPORE CHAPTER
19:30 – 21:30	DINER

09:00– 09:40 (40 mn)	Plenary Session 4 <i>Prof. Rainer HELMIG [University of Stuttgart, Germany]</i> From the Brain to Water Uptake of Roots to Fuel Cells: - Porous Media are "Almost" Everywhere
	Session Moderator: Prof Khalifa Slimi
09:40 – 09:55 (15mn)	CETTEX: Towards Responsible Textile Innovation and Research Speech by the CEO of CETTEX
09:55 – 10:10 (15mn)	Clogging of Colloids During Fluid Reinjection in Porous Media: Implications for Injectivity under Geothermal Conditions Jalila Boujlel* , Anne-Sophie Esneu, Arnaud Erriguible, Samuel Marre *IFP Energies Nouvelles-France
10:10 – 10:25 (15mn)	Modeling the Growth of a Subflorescence in a Porous Medium Oumaima Fekih* , Mohamed El Amine Ben Amara, Nour Sghaier, Marc Prat *LESTE-ENIM-Tunisia
10:25 – 10:40 (15mn)	Liquid/Gas Distribution at a PNM Junction when Including both Flow and Phase-Change Mechanisms Edouard Canot* , Maxime Boileau, Sean Mc Namara *CNRS – Univ. Rennes-France
10:40 – 10:55	Effect of Pore Size Distribution on the Drying path of a Micro-Model Mohamed El Amine Ben Amara* , Oumaima Fekih, Nourhene Lassoued, Nour Sghaier *LESTE-ENIM-Tunisia
10:55-11h15/(20mn)	COFFEE BREAK
11:15 – 11:30 (15mn)	Evaporation from a Porous Medium with Sodium Chloride Efflorescence Formation: Impact of Relative Humidity and Porous Medium Mean Pore Size Souissi Oumeima* , Paul Duru, Sandrine Geoffroy, Marc Prat *LMDC-Toulouse-France
11:30– 11:45 (15mn)	X-ray Imaging and Advanced Image Processing for Quantifying Salt Crystallization Processes and their Impact on Porous Media Syrine Ben Elhadj Hamida* , Stephane Faucher, Stephane Laurent, Peter Moonen, Hannelore Derluyn *CNRS- LFCR- DMEX-Pau-France
11:45 – 12:00 (15mn)	Improving the Hydrophobicity of PEMFC Fuel Cells: Effects of Matrix and Concentration on Deposition after Drying Lassoued Nourhene* , Mohamed Amine Ben Amara, Nour Sghaier *LESTE-ENIM-Tunisia
12:00 – 12:15 (15mn)	Tunisian Illito-Kaolinitic clays as Precursor for Alkali Activated Materials Zainab Jrad* , Francesco Genua, Isabella Lancellotti, Cristina Leonelli, Salah Mahmoudi *Higher Institute of Water Science and Technology-Gabes-Tunisia

12:15 – 12:30 (15mn)	Comparison of Different Phase Change Materials for a Pump Based on Metal Hydride: Mg₂Ni Amel Miled* *LESTE-ENIM, ANME-Tunisia
12:30– 12:45 (15mn)	Phase Change Material use in Buildings Ashraf Albrisheni*, Abhishek Asthana, Leila Zili-Ghedira *College of Engineering Technology-Janzour -Libya
12:45-13:00 (15mn)	Removal of Basic Fuchsin from Aqueous Solutions using Cistus Albidus L. as a Natural Adsorbent: A Promising Eco-friendly Approach Aida Zaabar*, Khalida Dahmani, Aghilas Brahmi, Nawel El Hanafi, Farid Aoudjit, Salima Ziani, Razika Aitout, Laid Makhloufi, Houa Hammache *LMDD-Bouira, LECVE-Bjeia-Algeria
13:00 – 14:30 (90mn)	LUNCH
14:30	EXCURSION TO EL DJEM
19:00	GALA DINER

9:00 – 09:40 (40mn)	Plenary Session 5 <i>Prof. Kamal MOHAMMEDI [UMB Boumerdes, Algeria]</i> An Overview of Meshless Computational Methods. Applications in Multiphase Flows.
	Session Moderator: Prof Abdelmadjid Jemni
09:40 – 09:55 (15mn)	Adsorptive Removal of Pharmaceutical Pollutants on Activated Carbon in Single and Multiple Systems Lotfi Sellaoui *CRMN-Tunisia
09:55 – 10:10 (15mn)	Adsorption of 4-Nitrophenol and 4-Chlorophenol on Polymeric Ionic Liquids: Adsorption Isotherms and Mechanism Rihab Ghorbali* , Lotfi Sellaoui, Houcine Ghalla *LQSP-FSM-Tunisia
10:10 – 10:25 (15mn)	Central Composite Design for the Modeling of Ibuprofen Adsorption Process in a Fixed-Bed granular activated carbon. Fadila Oughlis-Hammache* , Aida Zaabar, Lamia Moulahcene, Ounissa Senhadji-Kebiche, Nabil Kerrouche, Idir Bouafia *University Bouira-Algeria
10:25 – 10:40 (15mn)	Effect of H₂O₂ Granulation Fluid on the Textural Properties and Porosity of Hydroxyapatite-Metakaolin Geopolymer Adsorbent Granules Salima Ziani* , Aghilas Brahmi, Salima AitAli, Yanis Zakaria Lakehal, Samira Meski, Hafit Khireddine *LMDD-Bouira, LGE-Bjeia-Algeria
10:40 – 10:55 (15mn)	Efficiency of Cyclodextrin Polymer as an Adsorbent Lamia. Moulahcene* , Fadhila.Oughlis- hammache, Ounissa kebiche-Senhadji, Moudache Mesaad Skiba Mohamed *Akli Mohaned Oulhadj University-Bouira, Abderrahmane-Mira University-Bjeia-Algeria
10:55– 11:15(20mn)	COFFEE BREAK
11:15 – 11:55 (40mn)	Plenary Session 6 <i>Prof. Ziad SAGHIR [TMU Toronto, Canada]</i> Study of the Thermal and Hydraulic Performance of Porous Block versus Gyroid Structure: Experimental and Numerical Approaches
	Session Moderator: Prof Abdallah Mhimid
11:55 – 12:10 (15mn)	Optimizing the Mechanical Performances of Plaster-based composites Reinforced with Expanded Perlite and/or Leather Waste using Response Surface Methodology Chaïma Kaïba* , Ibtissem Boumnijel, Safouen Ben Fradj, Daoued Mihoubi *LMEEVED-CRTEn-Tunisia
12:10 – 12:25(15mn)	In-Depth Exploration Of The Surface Adhesion Mechanism For 6-N Propylthiouracil Bitter Taste On Human Receptors Via Statistical Physics Theory.

	Rim Salhi* , Mohamed Bouzid, Abdelmottaleb Ben Lamine *LPQS-FSM-Tunisia
12:25– 12:40 (15mn)	Modeling of Road Traffic Emissions and Their Environmental Impact in Porous Media for Sustainable Mobility Hana Mosbahi* *LMON-FSM-Tunisia
12:40 – 12:55 (15mn)	Dye Removal from Wastewater Using Modified Amberlite XAD16 Resin Granules Salima Ait Ali* , Salima Ziani, Aghilas Brahmi, Lakehal Yanis Zakaria, Idris Yahiaoui, Aissani-Benissad Farida *LMDD-Bouira, LGE- Université Abderrahmane Mira-Algeria
12:55 – 13:10 (15mn)	Carbon Nanotube or Traps Porosity for Sensitive Detection and Charge Residence under Optical Excitation Manel Troudi* , Nabil Sghaier, R.Chtourou *LANSER-CRTEn-Tunisia
13:10 – 14:30 (80mn)	LUNCH
	Session Moderator: Prof Foued Mzali
14:30 – 14:45 (15mn)	Thermochemical Modeling of Pyrolysis of Thick Biomass Particle Salem Kortas* , Rachid Méchi, Habib Farhat, Kamel Halouani *EMIR-IPEIM-Tunisia
14:45 – 15:00 (15mn)	Optical Nonlinearities in a Three-Dimensional GaAs/AlxGa1-xAs Elliptical Quantum Ring Under a Transverse Electric Field, Morphology, Temperature, and Pressure Effects Nabil Benzerroug* , Mohsen Choubani *LMON-FSM-Tunisia
15:00 – 15:15 (15mn)	Water Desalination Through a Structured Packed Humidifier Nadia Rahali* , Ahlem Zouaoui, Leila Zili-Ghedira *LESTE-ENIM-Tunisia
15:15 – 15:30 (15mn)	Physical and Chemical Hydrogen Storage Technologies Abd Uarhim Alhmoudi* , Leila Ghedira *Marine Engineering Department, Higher Institute of Marine Sciences Technologies-Libya
15:30 – 15:45 (15mn)	Thermal Sensing Characteristics of Nd_{0.06}Bi_{0.94}FO NPs for Thermistor Applications Ilhem Chiba* , Moneim Zannen, Fredj Hassen, Cecile Autret-Lambert *LMON-FSM-Tunisia
15:45– 16:15 (30 mn)	CLOSING CEREMONY