



INTERNATIONAL CONGRESS  
OF APPLIED CHEMISTRY  
& ENVIRONMENT



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## Day 1 | Thursday, 12 December

Day 1   Thursday, 12 December			
13H30	<b>Registration</b>		
14H30- 15H00	<b>Opening ceremony</b> ❖ <b>Prof. Hatem DHAOUADI</b> , Chairman, Director of the Environmental Chemistry and Clean Processes Research Laboratory ❖ <b>Prof. Kamel CHARRADA</b> , President of the University of Monastir ❖ <b>Prof. Hichem BEN JANNET</b> , Dean of Faculty of Sciences of Monastir		
15H00- 15H45	<b>KEYNOTE 1</b> <b>Prof. Marie-Odile SIMONNOT</b> <b>Separation Processes to Recover Metals Extracted from Soils Using Plants</b>		
<b>Poster Session 1</b>			
16H00- 18H00	<b>Session 1</b> <b>Biomaterials and Nanotechnology + Green Chemistry and Natural Substances</b>	<b>Session 2</b> <b>Environment and Climate Change</b>	<b>Session 3</b> <b>Clean Processes and Renewable Energies</b>
	<b>Chairwomen : Saoussen HAMMAMI+ Estelle METAY</b>	<b>Chairwomen : Marie-Odile SIMONNOT+ Sonia DRIDI</b>	<b>Chairmen : Jalila SGHAIER + Nizar MEKSI</b>
16H00- 16H10	<b>BN-P5: <u>Belguesmi Aymen</u>, Souilah Amal, Elaloui Elimame, Fattoum Arbi</b> “Synthesis and characterizations of carbon xerogels from pyrogallol and formaldehyde for the electrical applications”	<b>ECC-P6: <u>Ali Alouache</u>, Faiza Nessark, salima Kaizra</b> “Synthesis and analysis of a composite material: polypyrrole/ZnO - use as a coating against corrosion of stainless steel A316”	<b>CPRE-P3: <u>Marwa Ammar</u>, Nahed Soussi, Ameni Mokni, Hatem Mhiri</b> “A Trombe Wall Optimised For Mediterranean Climate: An Architectural Strategy For Energy Efficiency”
16H10-16H15	<b>BN-P9: <u>Chaima Gharbi</u>, Mohsen Mhadhbi, Lamia Khedhiri</b> “A comparative study of MXenes’ properties in previous researches for energy storage and conversion”	<b>ECC-P7: <u>Faiza Nessark</u>, Ali Alouache, Hani Benguessmia, Salima Kaizra</b> “Electrochemical behaviour of modified electrode: GCE/poly [4 - (pyrrol-1-yl methyl) benzoic acid]-nickel”	<b>CPRE-P5 : <u>Abdessalem Omri</u>, Mourad Benzina</b> “Photodegradation of a cationic dye in the presence of natural iron oxide”
16H15-16H25	<b>BN-P13: <u>Zoubir Aziz</u>, Mohammed Amine Boudjeltia, Mohamed Cherif Terkhi, Mohammed Abderrahim Bennani</b> “Theoretical investigation of ternary semiconductors half-Heusler RhTaZ (Z = Si, Ge and Sn) for thermoelectric applications”	<b>ECC-P12: <u>Fouad Kherbouche</u>, Youcef Benmimoun, Mourad Berdadi Bendaha</b> “Mechanistic Insights into the Influence of Submicron Particle Properties on Electrostatic Precipitator Collection Efficiency”	<b>CPRE-P6 : <u>Hiba Cherif</u>, Jalila Sghaier, Hatem Mhiri</b> “Numerical Analysis of Solar Receiver Configurations with Integrated Heat Exchanger ”
16H25-16H35	<b>BN-P21: <u>Nour Elhouda Dardouri</u>, Thierry Roisnel, Habib Nasri</b> “Spectroscopic, Structural Characterization of a New Cadmium(II) Acetato Meso-Arylporphyrin: Analysis of Electrical Conductance and Dielectric Properties”	<b>ECC-P17: <u>Nawfel Mosbahi</u>, Lassad Neifar, Jean-Claude Dauvin</b> “Climate change effects on structure and diversity of benthic fauna associated with <i>Zostera noltei</i> meadows in the Gulf of Gabès”	<b>CPRE-P7 : <u>Azza Masmoudi</u>, Ahlem Sik Ali, Hatem Dhaouadi, Hatem Mhiri</b> “Mathematical modeling of thin-layer draining solar drying of sewage sludge”

16H35-16H45	GCNS-P5: <u>Tayeb Berramdane</u> , Mohamed Yahaoui, Mkhatria Rania, Talhaoui Fella, Mohamed Yousfi “Studying the effect of using different extraction methods on the content of total phenolics and antioxidant activity of algerian powder spices”	ECC-P18: <u>Anissa Ghomrassi</u> , Hatem Mhiri, Philippe Bournot “Enhancing Thermal Performance of Parabolic Trough Solar Collector by Internal Inserted Fins and External Metallic Layer”	CPRE-P9: <u>Yoldoss Chouari</u> , Hella Adouni, Herve Bournot, Wassim Kriaa, Hatem Mhiri “Empirical correlation derived by CFD simulation on Mixing in a Rapidly Mixed Tubular Burner”
16H45-16H55	GCNS- P8: <u>Elaissi Arwa</u> , Baghdadi Rania, Ghith Adel, Missaoui Mohsen “Comparison between Posidonia fiber and cotton fiber”	ECC-P21: <u>Maryi Teieb</u> , Hatem Dhaouadi, Sonia Dridi-Dhaouadi “Preparation and characterization of activated carbons derived from Prickly Pear Seeds through chemical activation using H <sub>3</sub> PO <sub>4</sub> .”	CPRE-P11 : <u>Nahed Soussi</u> , Marwa Ammar, Ameni Mokni, Hatem Mhiri “Effect of Trombe wall design on building energy consumption and thermal comfort: A case study in the Mediterranean climate of Monastir”
16H55-17H05	GCNS- P12: <u>Tayeb Berramdane</u> , Kamel Krantar, Chouiha Abdelkader, Mohamed Yousfi “Evaluation of antibacterial activity of methanolic spices extracts of some medicinal plants Algerian”	ECC-P22: <u>Rihab Miladi</u> , Nader Frikha, Slimane Gabsi “Impact of operating conditions, membrane properties and plant design on the energetic performance of vacuum membrane distillation desalination”	CPRE-P13 : <u>Souhir Mankai</u> , Fatma Ouled Saad, Jamel Madiouli, Jalila Sghaier “Experimental Study and Evaluation of Single Slope Solar Still Combined with External Reflector and Packed Bed”
17H05-17H15	GCNS- P20: <u>Sana Mallek-Ayadi</u> , Neila Bahloul “Biotechnological valorization of <i>Cucumis melo</i> L. seeds for food industries: Storage conditions and functional features”	ECC-P24: <u>Abdelghafour Dellal</u> , <u>Abdelouahab Lefkir</u> “K-means clustering for modelling Daily suspended sediment load using artificial neural network models”	CPRE-P15 : <u>Marwa Ezzine</u> , Hiba cherif, Zied Guidara, Jalila Sghaier “Numerical Study on the Optimization of Wind Capture Efficiency: A Focus on Divergent-Convergent Angles”
17H15-17H25	GCNS- P21: <u>Zeineb Mzoughi</u> , Lobna Dems, Didier Le Cerf, Hatem Dhaouadi, Hatem Majdoub “Supercritical CO <sub>2</sub> Extraction and Physicochemical Characterization of Polysaccharides from Orange Peels: Sustainable Ingredients for Cosmetic Formulations”	ECC-P25: <u>Raoudha Sadraoui</u> , Monia Saidi, Imen Kallel “Retrospective study of clinical and immunohistochemical parameters of lung cancer in the Gafsa mining basin”	ECC-P10: <u>Hella Adouni</u> , Yoldoss Chouari, Hervé Bournot, Wassim Kriaa, Hatem Mhiri “New Ventilation Technique to Prevent Sewer Blockages”
17H25-17H35	GCNS- P22: <u>Oumhani Benorif</u> , Kamel Hachama, Abdelkader Khadraoui, Safia Djedri “Formulation of an Extended-Release Oral Suspension using Essential Oil from <i>Borago officinalis</i> ”		
18H00- 20H00	Dinner		
21H00- 23H00	My Thesis Story		

## Day 2 | Friday, 13 December

08H30- 09H00	<b>Registration</b>		
09H00- 09H45	<b>KEYNOTE 2</b> <b>Prof. Heikki SEPPÄ</b> <b>Reconstructing Past Climatic Changes in the North African-Mediterranean Region Over Multimillennial Timescales</b>		
09H45- 10H30	<b>KEYNOTE 3</b> <b>Prof. Estelle METAY</b> <b>From Polyols to Amphiphiles</b>		
10H40- 12H00	<b>Oral Session 1</b>		
	<b>Session 1</b> <b>Biomaterials and Nanotechnology</b>	<b>Session 2</b> <b>Environment and Climate Change</b>	<b>Session 3</b> <b>Sustainable Textiles and Circular Economy</b>
	<b>Chairmen : Mohamed Farouk MHENNI + Ahmed BELLAGI</b>	<b>Chairmen : Heikki SEPPÄ + Hatem DHAOUADI</b>	<b>Chairmen : Neji LAADHARI + Hatem MHIRI</b>
10H40- 11H00	<b>BN-P2: <u>Mouna BOUDAGGA</u>, Faouzi Khedher, Boubaker Jaouachi.</b> Study of the Compression Performance of Composite Materials Based on Waste Tire and Natural Fibers.	<b>ECC-P19: <u>Najah MAJOURI</u>, Jalila Sghaier, Mohamed El mankibi.</b> Sustainable Composite Materials Based on Southwest Tunisian Clay for Energy Efficiency in Buildings.	<b>STCE-P12: <u>Rawdha Znegui</u>, Noureddine Baaka, Nizar Meksi, Hatem Dhaouadi.</b> Optimization of microwave-assisted aqueous extraction of colorants from date palm fiber fibrillum using multilevel factor design.
11H00- 11H20	<b>BN-P12: <u>Abir Nour MAATALLAH</u>, Fadhel Jaafar, Neji Ladhari.</b> Development of Bio-Functional Textiles Based on Colocynth Oil Microcapsules.	<b>ECC-P5: <u>Mouna Haj NASER</u>.</b> Carbon and Water Footprint of jeans - a Life Cycle Assessment Approach.	<b>STCE-P11: <u>Fatma Zahra SAHRAOUI</u>, Imen Maatouk, Arwa Turki, Asma El Oudiani.</b> Valorization of office paper recycling processes.
11H20- 11H40	<b>BN-P14: <u>Asma FRAJ</u>, Fadhel Jaâfar, Luisa Coderch, Neji Ladhari, Meritxell Marti.</b> Lavender essential oil nanocapsules embedded in polyamide gauze dressing.	<b>ECC-P20: <u>Maryi TEIEB</u>, Hatem Dhaouadi, Sonia Dridi-Dhaouadi.</b> Response surface modeling of Amoxicillin removal from aqueous solution: Box-Behnken experimental design and batch adsorption.	<b>STCE-P10: <u>Ines Khemissi</u>, Noureddine Baaka, Faouzi Khedher, Boubaker Jaouachi.</b> Spent Coffee Grounds as a Promising Source of Natural Textile Dyes: Optimization of the Extraction Process
11H40- 12H00	<b>BN-P10: <u>Nour Elhouda Dardouri</u>, Albert Moyano, Habib Nasri.</b> Synthesis, Characterization, X-ray Molecular Structure, Antioxidant, Antifungal, and Allelopathic Activity of a New Isonicotinate-Derived meso-Tetraarylporphyrin.	<b>ECC-P27: <u>Haykel Sellami</u></b> Climate change-induced drought impacts on water resources in Tunisia: on the urgent need for adaptation.	<b>STCE-P14: <u>Maha Abdelillah</u>, Manel Ben Ticha, Nizar Meksi, Hatem Dhaouadi.</b> Advanced Modeling and Optimization of Acrylic Fibers Cationization Using Combined Response Surface Methodology (RSM) and Artificial Neural Networks (ANN).
12H00-12H20	<b>BN-P20: <u>Zeineb Mzoughi</u>, Manel Sfar, Houda Lazreg, Didier Le Cerf, Hatem Majdoub.</b> Pepper seeds polysaccharide: Extraction, structural characterization, and biological assesment		
12H00- 14H00	<b>Lunch</b>		

14H00- 14H45	<b>KEYNOTE 4</b> <b>Prof. Slah MSAHLI</b> <b>Thermal and Acoustic Performance of Natural Fiber-Based Materials</b>		
14H45- 15H30	<b>KEYNOTE 5</b> <b>Prof. Sabria BARKA</b> <b>Chemistry, So Close...So Far; So Good...So Bad</b>		
15H40- 18H00	<b>Oral Session 2</b>		
	<b>Session 1</b> <b>Clean Processes and Renewable energies</b>	<b>Session 2</b> <b>Environment and Climate Change</b>	<b>Session 3</b> <b>Sustainable Textiles and Circular Economy</b>
	<b>Chairmen : Nizar MEKSI+ Jalila SGHAIER</b>	<b>Chairwomen : Sonia DRIDI+ Sabria BARKA</b>	<b>Chairmen : Slah MSAHLI+ Neji LAADHARI</b>
15H40- 16H00	<b>CPRE-P4: <u>Abdessalem OMRI</u>, Sourour Salhi, Mourad Benzina.</b> Oxidation of methylene blue in aqueous solution by the modified sono-Fenton process.	<b>ECC-P3: <u>Aichetou BRAHIM BOUTEBIB</u>, Abdoulaye Demba N'diaye, Sid'Ahmed Baba Elhoumed, Bocar Kalidou M'Baye, Bakari Mohamed Semega.</b> Evaluation of iron contamination and human health risk assessment in Groundwater of Catchment Area Water in Nakatt from Kiffa (Mauritania).	<b>STCE-P8: <u>Rahma BEN BRAHEM</u>, Abd Jelil Radhia, and Ladhari Neji.</b> Optimization of plasma treatment variables to improve dyeing process of COT/PET fabrics.
16H00- 16H20	<b>CPRE-P14: <u>Hiba CHERIE</u>, Jalila Sghaier, Hatem Mhiri.</b> Comparison of two cylindrical receivers with spiral tube.	<b>ECC-P9: <u>Lakhdar AIDAQUL</u>.</b> Monitoring of environmental pollution in Algeria during the period 2003-2018, using satellite data: Nitrogen dioxide trends.	<b>STCE-P7: <u>Syrine BOUSSADIA</u>, Maha Abdellileh, and Hatem Dhaouadi.</b> Contribution of DFT to Understanding the Dyeing Mechanism of Natural and Synthetic Fibers.
16H20- 16H40	<b>CPRE-P10: <u>Marwa EZZINE</u>, Hiba cherif, Zied Guidara, Jalila Sghaier.</b> Numerical Analysis of Influence of Blade Geometry on Wind Capture Systems.	<b>ECC-P23: <u>Sirine MABROUK</u>, Dhaouadi Hatem.</b> Experimental and DFT study on the removal of Azithromycin by activated carbon prepared from grape seeds.	<b>STCE-P3: <u>Rihab HARIZI</u>, Taoufik Harizi, Ikram Zbali.</b> Valorisation of Tunisian tannery wool for thermal insulation.
16H40- 17H00	<b>CPRE-P19: <u>Raoudha Garma</u>, Doniazied Sioud, Housam Binous, Ahmed bellagi.</b> Thermodynamic analysis of sustainable H <sub>2</sub> -rich syngas recovery and ammonia synthesis possibility through SCWG of Tunisian agricultural waste biomass	<b>ECC-P16: <u>Nawfel Mosbahi</u>, Lassad Neifar, Jean-Claude Dauvin.</b> Contamination and Ecological Quality Status of the Southern Tunisian coasts	<b>STCE-P1: <u>Oumaima AMARA</u>, Maha Abdellileh, Walid Hedrich, Nizar Meksi, Hatem Dhaouadi.</b> Green Innovation in Indigo Dyeing: Advancing Sustainable Practices through Foam Dyeing Technology.

17H00-17H20	<p><b>CPRE-P20: <u>Doniazed Sioud</u>, Ismail Boukholda and Ahmed Bellagi.</b>          Technical Study of Solar Driven Ejector Absorption Cooling System Under Tunisian Climatic Conditions.</p>	<p><b>ECC-P4: <u>Sahar MAZGAR</u>, Ghazza Massmoudi, Hatem Dhaouadi.</b>          Improvement of Dark Blue Reactive Dye Degradation Via Heterogeneous Catalysis of Fenton Reaction.</p>	<p><b>STCE-P15: <u>Wafa GHEDIRA</u>, Marwa Souissi, Fernando Carrillo Navarrete, Chedly Boudokhane, Hatem Dhaouadi.</b>          Comparative Analysis of Natural and Synthetic Resins for Eco-Friendly Hydrophobic Treatments in Textile Applications</p>
17H20-17H40	<p><b>CPRE-P23: <u>Abir Ghezaiel</u>, Nizar Ben Ezzine, Jalila Sghaier, Ahmed Bellagi.</b>          Experimental and numerical investigation of Heat Pump driven Humidification–Dehumidification (HDH_HP) Desalination system.</p>		
18H00- 20H00	Dinner		
21H00- 00H00	Musical Evening		

Day 3 | Saturday, 14 December

09H00-- 09H45	<b>KEYNOTE 6</b> <b>Prof. Ahmed BELLAGI</b> <b>Green Hydrogen: Power to X</b>	
10H00- 11H00	<b>Poster Session 2</b>	
	<b>Session 2</b> <b>Clean Processes and Renewable Energies</b>	<b>Session 3</b> <b>Sustainable Textiles and Circular Economy</b>
	<b>Chairmen : Hatem DHAOUADI + Heikki SEPPÄ</b>	<b>Chairmen : Neji LAADHARI + Nizar MEKSI</b>
10H00-10H10	<b>CPRE-P17: <u>Fatma Ouled Saad</u>, Souhir Mankai, Jamel Madiouli, Jalila Sghaier</b> "Performance enhancement of the basin type solar still using turbulence system"	<b>STCE-P2: <u>Oumaima Amara</u>, Maha Abdellileh, Walid Hedrich, Nizar Meksi, Hatem Dhaouadi</b> "Ecological Dyeing of Cotton Fiber with Indigo Carmine Dye: Development of Foam Dyeing Technology"
10H10-10H20	<b>CPRE-P18: <u>Jamel Madiouli</u>, Souhir Mankai, Fatma Ouled Saad, Jalila Sghaier</b> "Experimental Study and Evaluation of Single Slope Solar Still Combined With external reflector and sponges"	<b>STCE-P5: <u>Wided Fersi</u>, Nouredine Baaka, Hatem Dhaouadi, Sonia Dridi-Douadi</b> "Enhanced Biological Activities and Efficiency of Textile Fibers Dyed with Various Extracts from <i>Hypericum Triquetrifolium</i> Turra"
10H20-10H30	<b>CPRE-P21: <u>Aya Guellout</u>, Ilhem Kaabi , Meriem Guellout, Yacine Benguerba</b> "Investigation of the corrosion inhibition efficiency of eutectic solvents as a function of concentration and their impact on sustainable chemistry"	<b>STCE-P13: <u>Rawdha Znegui</u>, Nouredine Baaka, Nizar Meksi, Hatem Dhaouadi</b> "Eco-friendly microwave-assisted dyeing of wool with natural colorant extracted from date palm fiber fibrillum"
11H00-12H00	<b>Closing Ceremony</b>	
12H00- 14H00	<b>Lunch</b>	



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