

**The Mohammed First University,
The Faculty of Sciences Oujda and the Moroccan Center of
Development & Science**

Organize



Campus University of Transfer of Technologies and Expertise –
Knowledge Campus, Technopole Oujda, Morocco

Scientific Program

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THE THEMES OF THE ICMES'2016 CONFERENCE

FIRST SESSION: ORGANIC, INORGANIC AND NANOMATERIALS

- Inorganic and hybrid materials and their potential uses
- Organic compounds and their applications in our life, medicine and electronics.
- Nanomaterials and their valorizations
- Clean and Biodegradables polymers, etc.

SECOND SESSION: WATER, POLLUTION AND ENVIRONNEMENT

- Protection of the environment for our veritable and future life
- Water studies for saving our planet
- Detection and analyzed of pesticides
- Treatment of solid and liquid waste
- Air pollutants and their effect on health
- Corrosion and protection of metals
- Impact of chemical products and processes on the environment, etc.

THIRD SESSION: NATURAL PRODUCTS AND APPLICATIONS

- Extraction and valorization of natural products
- Drug discovery
- Bioactive Natural Products
- Food Studies
- Products and Agriculture, etc.

FOURTH SESSION: RENEWABLE ENERGIES AND SUSTAINABLE DEVELOPMENT

- Conversion and transformation of biomass
- Fine chemicals
- Green chemistry
- Clean processes
- Energy economy or energy generation
- Theoretical calculations and modeling, etc.

GENERAL PROGRAM

Wednesday, November 30th

15:30 - 18:30 Registration (*Faculty of Sciences Oujda*)

Thursday, December 1st

08:00 - 09:00 Welcome and Registration (*Knowledge Campus - Technopole Oujda*)

09:00 - 09:30 **Opening Ceremony ICMES'16**
Mohammed Mhedia : Le Wali de la Région de l'Oriental
Mohamed Benkaddour : Le Président de l'Université Mohammed Premier Oujda
Abdenbi Bioui : Le président du Conseil de la Région de l'Oriental

09:30 - 10:45 **Plenary Conference 1**
Metal-Organic Frameworks from Design Strategies to Applications.
Prof. M. Eddaoudi
Plenary Conference 2
Role of Biotechnology in Sustainable Agriculture.
Prof. F. Bekkaoui

10:45 - 11:30 Coffee break

11:30 - 13:00 **First session:** Organic, inorganic and nanomaterials
Second session: Water, pollution and environnement
Third session: Natural products and applications
Fourth session: Renewable energies and sustainable development

13:00 Lunch

14:00 - 15:15 **Plenary Conference 3**
Removal of Pesticides by electrochemical oxidation using a Boron Doped Diamond anode.
Prof. K. Groenen Serrano
Plenary Conference 4
Nanomaterial based biosensors for environmental monitoring.
Prof. A. Amine

15:15 - 16:30 **First session:** Organic, inorganic and nanomaterials
Second session: Water, pollution and environnement
Third session: Natural products and applications
Fourth session: Renewable energies and sustainable development

16:30 - 17:30 Coffee break & Poster Session 1

Friday, December 2nd

08:30 – 09:45	Plenary Conference 5 & 6 Excimers formation, energy transfer and ligand-to-cluster charge transfer in a Zr-based MOF: relevance to nanophotonic and nanophotocatalysis. Dedication to Professor Ahmed H. ZEWAIL Nobel Price Prof. A. Douhal
09:45 – 11:00	First session: Organic, inorganic and nanomaterials Second session: Water, pollution and environnement Third session: Natural products and applications Fourth session: Renewable energies and sustainable development
11:00 – 11:30	Coffee break
11:30 – 13:00	First session: Organic, inorganic and nanomaterials Second session: Water, pollution and environnement Third session: Natural products and applications Fourth session: Renewable energies and sustainable development
13:00	Lunch
14:00 – 15:15	Plenary Conference 7 Spin Transition Molecular Nanomaterials and polymeric networks. Prof. Y. Garcia Plenary Conference 8 Cyclodextrin-based hybrid materials: application to water decontamination. Prof. S. Degoutin
15:15 – 16:30	First session: Organic, inorganic and nanomaterials Second session: Water, pollution and environnement Third session: Natural products and applications Fourth session: Renewable energies and sustainable development
16:30 – 17:30	Coffee break & Poster Session 2

Saturday, December 3rd

08:30 – 09:15	Plenary Conference 9 The impac of magnetic nanomaterials in sample preparation. Prof. M. Zougagh Plenary Conference 10 Electrochimie et traitement de surface. Prof. M. Ebn Touhami
09:450 – 11:00	First session: Organic, inorganic and nanomaterials Second session: Water, pollution and environnement Third session: Natural products and applications Fourth session: Renewable energies and sustainable development
11:00 – 11:30	Coffee break & Poster Session 3
11:30 – 13:00	First session: Organic, inorganic and nanomaterials Second session: Water, pollution and environnement Third session: Natural products and applications Fourth session: Renewable energies and sustainable development
13:00	Closing ceremony & Lunch

Detailed Program of the ICMES 2016 Conference

Wednesday, November 30 th	
15:30 - 18:30	Registration
Thursday, December 1 st	
08:00 - 09:00	Welcome and Registration
09:00 - 09:30	Opening Ceremony ICMES'16 Mohammed Mhedia Le Wali de la Région de l'Oriental Mohamed Benkaddour Le Président de l'Université Mohammed Premier Oujda Abdenbi Bioui Le Président du Conseil de la Région de l'Oriental
09:30 - 10:45	Plenary Conference 1: Prof. M. Eddaoudi King Abdullah University of Science & Technology, Saudi Arabia Metal-Organic Frameworks from Design Strategies to Applications. Plenary Conference 2: Prof. F. Bekkaoui Director of the Wheat Improvement Flagship Program at the National Research Council of Canada in Saskatoon Role of Biotechnology in Sustainable Agriculture. Chairmen: Prof. M. Ebn Touhami & Prof. B. Hammouti
10:45 – 11:30	Coffee break
FIRST SESSION: ORGANIC, INORGANIC AND NANOMATERIALS	
Room 1	
11:30 – 13:00	Chair: Prof. R. Touzani & Prof. A. Zahidi CT1. E. Mejdoubi. Polyethylene Glycol Apatite Nanoparticles as composite membranes. CO1. ID3: B.Smili, M. Mayoufi, I. Kaban & J.G. Gasser. Study of the temperature-dependent behaviour and crystallization of Ni ₆₀ Nb ₂₀ Zr ₂₀ metallic glasses by resistivity, thermopower and DSC. CO2. ID23: O. Cherifi & K. Sbihi. The siliceous microalgae <i>Navicula subminuscula</i> (Manguin) as a biomaterial for removing metals from tannery effluent. CO3. ID28: A. Bouoidina, M. Chaouch, A. Lahkimi, M. Taleb, B. Hammouti & F. El-Hajjaji. Essential oil of <i>Foeniculum vulgare</i> : an effective corrosion inhibitor on mild steel immersed in hydrochloric medium. CO4. ID82: H. Fatmi, R. Ababou, J.-M. Matray. Temporal response of claystone formations under barometric and earth tide effects, with application to deep geologic storage of radioactive waste (Underground Research Laboratories of Mont Terri and Tournemire).

SECOND SESSION: WATER, POLLUTION AND ENVIRONNEMENT	
Room 2	
11:30 – 13:00	<p>Chair: Prof. K. Haboubi & Prof. A. El Idrissi</p> <p>CO5. ID13: B. Medjahed, S. Naili & M. Bouzit. Analyze seasonal and daily variation of pollutants (PM10, NO and NO2) and impact in an urban area.</p> <p>CO6. ID199: V. Tkach, S. C. de Oliveira, V.S. Neves, R. Ojani & P.I. Yagodynets. the mechanistic investigation for the possibility of the use of coo(oh) as an electrode modifier for analysis of complex-forming substances.</p> <p>CO7. ID17: S. Akazdam, M. Chafi, L. Sebbahi, R. Benchekroune, B. Gourich, N. Barka & M. Tahiri. Decolourization of Acid Orange 7 Dye from Aqueous Solution by Adsorption on NaOH Treated Eggshells in Continuous Fixed Bed Reactor Application using Response Surface Methodology: Optimization by Box–Behnken Design.</p> <p>CO8. ID20: R. Atmani, M. El Kouali, M. Talbi, A. El Brouzi, F. Ouzidan & N. Amardo. Numerical study of absorption and desorption systems of a liquid of simulation by polymer, without evaporation on the surface.</p> <p>CO9. ID21: M. Asnourne, F. Abdelmalek, K. Mesghouni & A. Addou. Management of Municipal Solid Waste of Tiaret city (Western Algeria).</p> <p>CO10. ID267: R. Addou, K. Hannawi, W. Prince Agbodjan & M. Zenasni. Characterization of Jerada mine coal waste and their impact on physical properties of mortars at different temperatures.</p> <p>CO11. ID848: A. Wakrim, F. Byoud, S. El Ghachtouli, J. Jamal Eddine & M. Azzi. Characterization and treatment of liquid waste of a production unit of food dyes by advanced oxidation processes.</p> <p>CO12. ID100: A. Brahim, A. Chafi, Z. Irzi, I. MERIMI, M. Mouzouri, N. Nouayti & F. Aziz. Ecotoxicological and polymetallic typology of surface waters of the Lower Moulouya (Oued Za & Oued Sebra), eastern Morocco.</p> <p>CO13. ID859: F. Dimane, K. Haboubi, I. Hanafi & A. El Himri. Impact of pollution factors on water quality in the downstream area of the Oued Nekor valley (Al Hoceima-Morocco).</p>
THIRD SESSION: NATURAL PRODUCTS AND APPLICATIONS	
Room 3	
11:30 – 13:00	<p>Chair: Prof. M. Ramdani & Prof. A. Bouyanzar</p> <p>CO14. ID2: A. Hallouti, H. Karim, A. Zahidi, A. El Mousadik, A. Ait Ben Aoumar & H. Boubaker. Search, isolation and identification of entomopathogenic fungi of the Mediterranean fruit fly (<i>Ceratitis capitata</i>).</p> <p>CO15. ID42: A. Rabeï, H. Beldi & Noureddine Soltani. Response of biomarkers in transplanted <i>Donax trunculus</i> (Mollusc, Bivalve).</p> <p>CO16. ID49: S. Sedki, H. Nhhala, J. Kassila, K. Chebbaki, H. Akharbach, A. Abrehouch, M. Idhalla & H. Er-Raioui. Effects of replacement of meta-nauplii of artemia by micro-pellet diet on the larval rearing of meagre, <i>Argyrosomus regius</i>.</p> <p>CO17. ID55: Y. El Ouadi, M. Manssouri, A. Bouyanzar, L. Majidi, N. Lahhit, H. Bendaif, H. Elmsellem, A. Zarrouk, R. Benkaddour & B. Hammouti. Essential oil composition and antifungal activity of <i>Pelargonium Graveolens</i> originating from North-East Morocco, against postharvest phytopathogenic fungi in apples.</p> <p>CO18. ID285: J. Nkengurutse, A. Khalid, A. C. Kakunze & I. Amahrech. Plant production of three indigenous Fabaceae tree species from Tropical Africa: <i>Brachystegia microphylla</i>, <i>Entada abyssinica</i> and <i>Pericopsis angolensis</i>.</p>

	FOURTH SESSION: RENEWABLE ENERGIES AND SUSTAINABLE DEVELOPMENT Room 4
	Chair: Prof. K. Kassmi & A. Nougouai
11:30 – 13:00	<p>CT2.M.E. Afilal. Valorisation du biogaz au niveau des décharges contrôlées : problèmes et solutions adaptées au contexte Marocain.</p> <p>CO19.ID6:A. Khettabi, D. Bria & M. Elmalki. New approach applied to analyzing a periodic Helmholtz resonator.</p> <p>CO20.ID7:M. Lekrati, L. Zerouk, A. Ibnlfassi & E. Saad. Fitting of Myrtus communis L. drying kinetics curves to mathematical models mentioned in the literature.</p> <p>CO21.ID14:A. Khettabi. Generalized Sylvester theorem applied to study 1D acoustic periodic expansion chamber.</p> <p>CO22.ID15:Y. Angar, S. Kebbouche-Gana, N. E. Djelali & M. L. Gana. Production of clean hydrogen energy for fuel cell applications from the electro-catalytic oxidation of ammonium ions in acidic medium.</p> <p>CO23.ID443: R. OUAABOU, H. Hafida, A. IDLIMAM &M. MAHROUZ. Conservation and processing of cherries by solar energy and study of the total quality.</p>
13:00	Lunch
14:00-15:15	<p>Plenary Conference 3: Prof.K.Groenen Serrano Paul sabatier University-Toulouse III, France</p> <p>Removal of Pesticides by electrochemical oxidation using a Boron Doped Diamond anode.</p> <p>Plenary Conference 4: Prof. A. Amine Faculty of Sciences and Techniques, Hassan II University, Mohammadia, Morocco</p> <p>Nanomaterial based biosensors for environmental monitoring.</p> <p>Chairmen: Prof. M. Sbaa & Prof. M. Zougagh</p>
	FIRST SESSION: ORGANIC, INORGANIC AND NANOMATERIALS Room 1
	Chair: Prof. E. El Majdoubi & Prof. M. Berrabeh
15:15-16:30	<p>CO24.ID44: A. Sahli, S. Debbaghiand & S. Sahli. Optimization and failure criteria for composite materials by the boundary element method.</p> <p>CO25.ID58: L. Srata, S. Farres, F. Fethi, H. Chatei & M. El Kaouini. Marchica soil analysis using Laser Induced Breakdown Spectroscopy.</p> <p>CO26.ID59: M. Rhomari, M. Benrraou & D.J. Jones. Synthesis, characterization of sulfonic acid-functionalized mesoporous titanium(IV) phosphonates.</p> <p>CO27.ID67: S. Arhzaf, M. N. Bennani, S. Abouarnadasse &A. Amhoud. Effect of interlayer anions on the catalytic activity of hydrotalcite-derived mixed oxides in aldol condensation between furfural and acetone.</p> <p>CO28.ID101: M. Mechouet, N. Idiri, C. Belkessam &A. Kadri. Hybrid electrode formed by nanoparticles incorporated into polypyrrole by cyclic voltammetry rout: Electrocatalysis of O2 reduction.</p>

	<p>CO29.ID34: R. Soulimane, A. Hakkoum, R. Bachir & S. Bedrane. New friendly environment materials based on nano-gold / pillared clays – catalytic activity.</p> <p>CO30.ID39: S. Tayane, Z. Rhandour, S. Aboulhrouz, K. Mtalsi, T. Jei, A. Abourrich & A. Benamara. Characterization of aluminum orthophosphate supported molybdenum oxide and its activity in the catalytic reactions of 2-methylpentane and 4-methyl-1-pentene.</p> <p>CO31.ID851: A. Al Ali, M. Suleiman, I. Warad & A. Hussein. Synthesis, characterization of Sulfur Nanoparticles and their Anti biological Activities.</p> <p>CO32.ID507: F. Naitali & H. Ghoualem. Study of photocatalytic degradation of a drug, the ketoprofen.</p> <p>CO33.ID853: M. Galai, M. Ebn Touhami, K. Berrami, H. Benqlilou, T. Belhaj, I. Mansouri & H. Nassali. Influence of phosphorous on corrosion behavior of α-brasses in Azrou soil medium.</p>
15:15-16:30	SECOND SESSION: WATER, POLLUTION AND ENVIRONNEMENT Room 2
	Chair: Prof. M. Taleb & H. Oudda
	<p>CO34.ID69: S. Belhousse, F. Z. Tighilt, S. Sam, K. Lasmi, N. Belhaneche-Bensemra & N. Gabouze. Electrochemical sensor of organics pollutants based on polythiophene and silicon nanowire.</p> <p>CO35.ID384: G. Enaime, A. Yaacoubi, A. Bacaoui, M. Seffen & T. Selmi. Preparation and characterization of activated carbons from olive waste using physical and chemical activation for Indigo carmine adsorption.</p> <p>CO36.ID108: K. Chourti, M. Abou-Salama, P. Marchet, Y. El Hafiane & M. Karroua. Study of the structural evolution and the dielectric properties in the $Sr_2Sm(1-x)Nd_xTi_2Nb_3O_{15}$ solid solution.</p> <p>CO37.ID153: M. Bousrabat, M. Kharbach, I. Barra, M. Alaoui & A. Bouklouze. Development and validation of an LC-MS/MS method for dosage of Salbutamol and its impurities in different matrices.</p> <p>CO38.ID172: F.Z. Tighilt, S. Belhousse, S. Sam, A. Rahal & N. Gabouze. Elaboration of sensor based on porous silicon and polypyrrole for electrochemical detection.</p> <p>CO39.ID196: Y. Hajjam & S. Cherkaoui. The influence of phosphate solubilizing microorganisms on symbiotic nitrogen fixation.</p> <p>CO40.ID200: R. Ahmad & S. Khan. Removal and recovery of Tanneries waste dyes: A cost effective approach.</p> <p>CO41.ID850: H. Derfoufi & B. Legssyer. The eastern morocco water courses and their microbial characteristics.</p> <p>CO42.ID37: M. Laqbaqbi, M. Khayet, M. C. García-Payo & M. Chaouch. Treatment of Waters Colored with Drimarene Yellow K-2R by Direct Contact Membrane Distillation (DCMD).</p> <p>CO43.ID828: B. El Ibrahimy, A. Jmiai, R. Oukhrib, M. Chadili, L. Bazzi & S. El Issami. pH effect on the 3003 Aluminum alloy corrosion inhibition by Cysteine amino-acid in 2% NaCl solution.</p>

	THIRD SESSION: NATURAL PRODUCTS AND APPLICATIONS
	Room 3
15:15-16:30	Chair: Prof. L. Majidi & Prof. H. Tabyaoui
	<p>CO44.ID77: R. Ben Mrid, R. El omari, N. El Mourabit, Y. Bouargalne & M. Nhiri. Changes in the Activities of Antioxidant Defense and Glyoxalase System Enzymes in Leaves of Two Moroccan Sorghum (<i>Sorghum bicolor</i>) Ecotypes with Different Sensitivities to Nitrogen Stress.</p> <p>CO45.ID86: K. Sellam, E. D. T. Bouhlali, M. Ramchoun, M. Bammou, C. Alem & L. El Rhaffari. Antifungal activity of <i>Cotulacineria</i> Del. essential oil against postharvest phytopathogenic fungi in apples.</p> <p>CO46.ID103: M. Chetouani, I. Mzabri, A. Aamar, A. Boukroute, N. Kouddane & A. Berrichi. Effect of gibberellic acid (GA3) on seed germination <i>Thymus satureioides</i> L. and <i>lavandula dentate</i>.</p> <p>CO47.ID116: K. Taleb-Toudert, M. Deffoun, M. Larbi Khouja & A. Kellouche. Characterization of borage seeds' oil (<i>Borago officinalis</i> L.) coming from a region of Kabylia (Algeria). Evaluation of its biological activity regarding three pathogenic bacteria and a stored commodities pest; <i>Callosobruchus maculatus</i> (Coleopteras: Bruchidae).</p> <p>CO48.ID129: S.K. Shomeina, O. T. Alzaki, S. D. Mohieldin & S. M. A. Yagi. Effect of <i>Senna obtusifolia</i> Organic Solvents Extracts on Soda Pulping of Sudanese Sugarcane Bagasse.</p> <p>CO49.ID131: S. Hseini & A. Kahouadji. Systematic and ethnobotanical studies of medicinal plants in Morocco.</p>
15:15-16:30	FOURTH SESSION: RENEWABLE ENERGIES AND SUSTAINABLE DEVELOPMENT
	Room 4
15:15-16:30	Chair: Prof. D. Bria & Prof. S. Zouggar
	<p>CO50.ID60: I. Barra, M. Kharbach, M. Alaoui, M. Bousrabat & A. Bouklouze. Identification of gasoline adulteration with diesel using GC/MS Technique.</p> <p>CO51.ID64: L. Sabri, M. Benzirar & M. Zazoui. Estimation of Hourly Global Solar Radiation for Ouarzazate, Morocco using ASHRAE Model.</p> <p>CO52.ID70: H. Chaib & A. Kriker. Study Thermo-Mechanical Brick reinforced by local Fibers Plant.</p> <p>CO53.ID72: R. Bahloul, S. Sayouri, K. Limame, M. M. Yahyaoui, B. Jaber & L. Laanab. Sol gel processed Fe-doped CdTiO₃ materials for photovoltaic applications.</p> <p>CO54.ID80: A. Hallaoui, A. El Assyry, S. Boukhris, A. Khadraoui, H. Oudda, M. El Hezzat & A. Zarrouk. Photophysical study by density functional theory for photovoltaic effects of some quinoxaline derivatives.</p> <p>CO55.ID99: A. Ould Brahim & S. Abderafi. Optimisation of the energy consumption and CO₂ reduction, in the gasoline stabilization column.</p> <p>CO56.ID844: M. Hamzah, M. Khenfouch & V. V. Srinivasu. Optical and Thermal Characterization of Polyvinyl alcohol/Moroccan clay nanocomposites.</p> <p>CO57.ID849: N. Benzbiria, W. Qafsaoui, M. Zertoubi, S. Echihi & M. Azzi. Cathodic reduction of oxygen on ordinary steel in neutral medium.</p>
16:30 -17:00	Coffee break

Poster Session 1**Chair: Prof. A. Dafali & Dr. F. Jeffali****17:00 – 17:30**

- CP1. ID12:** S. Elfadil, M. Bouchdoug, A. Jaouad & M. Mahrouz. Amendment of phosphate flotation waste and phosphogypsum and its effects on organic matter degradation, compost maturity, and quality of the finished compost during cattle manure composting.
- CP2. D16:** D. Ikerroud & W. Kherfane. Wastewater treatment: zinc and nickel elimination
- CP3. ID18:** M. FERHAT, M. KACHEBA & S. A. BENMEBAREK. Scab pistachioas a natural inhibitor for X70 steel corrosion in 1N H₂SO₄. Effect of extraction solvent.
- CP4. ID19:** A. Belhaine, M. R. Ghezzer, F. Abdelmalek, A. Ghomari & A. Addou. Removal of methylene blue by a spent bleaching earth brought from the oil refining industry in Western Algeria.
- CP5. ID22:** N. Bahammou, O. Cherifi, H. Bouamama & T. Moubchir. Postharvest control of grey mold of tomato using seaweed extracts.
- CP6. ID26:** H. Sabri, O. Cherifi, A. Maarouf & M. Cheggour. Wastewater impact on macroalgae biodiversity in Essaouira coast (Morocco).
- CP7. ID52:** G. Kerrache, M. Idrissi, F.Z. Yahiaoui, M. Amara, H. Benaissa & L. Chelda. Study of the effectiveness of the sewage treatment plant in the city of Saida (Algeria).
- CP8. ID66:** I. Merad, A. Rabeï & N. Soltani. Acute toxicity of cadmium on an edible Mollusk *Donax trunculus* L.: measure of metallothioneins in mantle, gonad and digestive gland during the sexual rest.
- CP9. ID79:** A. Menasra, D. Fahloul, A. Fayçal & A. Messaoudi. Convective drying and experimental study of its effect on the physical characteristics, the mass diffusivity and the activation energy of strawberry (*Fragaria X Ananassa*).
- CP10. ID115:** S. Farres, L. Srata, I. Hamdani, S. Addou, M. Chikri & F. Fethi. Plants analysis using Laser Induced Breakdown Spectroscopy.
- CP11. ID120:** S. Saissi, L. Zerrouk, A. Ibnifassi & E. Saad. Influence of Rehomogenisation treatment of PbCdBiAg alloys for the new generation of battery grids.
- CP12. ID158:** H. Bouguerria, S. Chetioui, D. A. Rouag, S.E. Bouaoud & L. Ouahab. Synthesis and characterization of novel azo-compound 1-(3-acetylphenyl)-2-(2-oxidonaphthalen-1-yl) diazen-1-ium.
- CP13. ID183:** S. Aourabi, K. Ammor, M. Sfaira & F. Mahjoubi. study of anticorrosion action of different extracts obtained by conventional and assisted ultrasonic methods of *ammi visnaga*.
- CP14. ID185:** A. Tilioua, A. El Amrani & C. Messaoudi. Transient heat transfer flow calculation through photovoltaic module.
- CP15. ID227:** Badra A., Nabila T., Saloua M. & Samia B. Degradation of water quality case of the western plain annaba (northeast of algeria).
- CP16. ID233:** A. P. Aizebeokhai, A. I. Olayinka & K. D. Oyeyemi. The combined use of vertical electrical sounding and 2D electrical resistivity imaging for near-surface characterization.
- CP17. ID240:** M. Guendouz, D. Boukhelkhal & A. Korteby. Properties of sand concrete containing organics waste.
- CP18. ID245:** A. Thoume, A. Elmaksoudi, M. Zertoubi, D. Benmessaoud Left, M. Dakir & M. Azzi. Experimental study of amino phosphonate as new and effective corrosion inhibitor for carbon steel in 1M HCl.

- CP19. ID246:** S. Dakir, M. Dakir, M. Zertoubi, D. Benmessaoud Left, A. Elmakssoudi, M. Azzi. Corrosion inhibition of carbon steel by *Juniperus thurifera* Var. *africana* extracts in 1 M hydrochloric acid: Extraction and Electrochemical studies.
- CP20. ID247:** M. Znini, M. Manssouri, J. Costa, J. Paolini & L. Majidi. *Anethum graveolens* essential oil as a green corrosion inhibitor for steel C38 in hydrochloric acid: Correlation between inhibitive effect and electronic properties of extract major constituents using density functional theory.
- CP21. ID268:** H. BAKKALI, L. BEN ALLAL & M. AMMARI. The main factors affecting geopolymerization process of class-F fly ash: Compressive strength and Micro-structure analysis.
- CP22. ID270:** S. Gharby, H. Harhar, F. Chemat & Z. Charrouf. Quality Comparison of cactus Oil extracted with MeTHF and Hexane.
- CP23. ID273:** S. Khannyra, M. Addou, A. Boucetta, A. Mrigal & Z. Sofiani. Nonlinear optical properties of new synthesized conjugated organic molecules based on pyrimidine and oxazepine.
- CP24. ID275:** H. El baydary, K. Touzani, A. Medich, A. Rochdi & D. Hmouni. Agrophysiological Study and optimization of the stage of germination of Anonier (*Annona cherimola*).
- CP25. ID291:** H. Zaki, M. Benlyas, Y. Filali Zegzouti & M. Bouachrine. Computational Studies of anti-proliferative effects of some indole derivatives on Breast Cancer cell lines by combining DFT, 3D-QSAR and Molecular Docking.
- CP26. ID295:** M. Douma, K. Haboubi, A. Lamhamdi & K. Andaloussi. Hydrothermal treatment using microwave radiation synthesis of $A_2Sn_2O_7$ (A = Eu, Y) stannate pyrochlores.
- CP27. ID303:** L. Loubbidi, A. Chagraoui, C. Izem, L. Bourja, S. Villain, B. Orayech, A. Tairi, A. Moussaoui & O. Ait Sidi Ahmed. Synthesis and physicochemical properties of new materials based on bismuth oxide.
- CP28. ID313:** R. Aziam, M. Chiban, E. Eddaoudi, A. Soudani, M. Zerbet & F. Sinan. Adsorption properties of Moroccan prickly pear cactus peel for Congo red dye removal: effect of some environmental parameters.
- CP29. ID314:** R. Chami, F. Benssajay, S. Alehyen, M. EL Achouri, K. Marakchi & A. Genbour. Electrochemical investigation and Quantum chemical studies on corrosion inhibition for ester-quats surfactants on iron in hydrochloric acid.
- CP30. ID317:** Z. Majbar, Z. Rais, M. El Haji, M. Taleb, H. Bouka & M. Nawardali. Valorization and development of olive mill wastewater by co-composting.
- CP31. ID335:** S. Labied, T. El ghailassi, A. Bouih, T. Guedira & O. Benali. Study of effect of the kaolinite in the mortar of cement matrices confinement of ion exchange resins.
- CP32. ID338:** S. Karim, A. Aouniti, F. El hajjaji, M. Taleb, C. Belbachir & I. Rahhou. Bioaccumulation of heavy metals in commercially important marine fishes (*Palaemon Serratus*, *Sparus aurata*, *Dicentrarchus labrax* and *Solea Vulgaris*) caught in the Mediterranean coast from the North East of Morocco.
- CP33. ID341:** O. Daoudi, M. Fahoume & K. Nouneh. Characterization of CuO Thin Films grown by successive ion layer adsorption and reaction method for solar cells application.
- CP34. ID356:** S. Tabti, A. Djedouani, S. Rahmouni & R. Touzanid. Synthesis of new complex compounds of functionalized Dehydroacetic acid units: catecholase study and

electrochemical properties.

- CP35. ID370:**F. Ennoukh, D. Chafik, R. Bchitou & A. Bouhaouss. Removal of hexavalent chromium from aqueous solutions by a novel powder prepared from leaves of *Arganiaspinosa*(L).
- CP36. ID403:**W. Juimo, T. Cherradi & L. Abid. Evaluation of properties of volcanic scoria for using as lightweight aggregate concrete.
- CP37. ID436:**H. Rizki, A. Nabloussi, F. Kzaiber, H. Latrache, C. Zanane, K. Elfazazi & H.Hanine. Comparative assessment of bioactive components, antioxidant effects from 15 cultivars of sesame (*Sesamumindicum* L.) for different crop years.
- CP38. ID446:**M. Dib, A. Essoumhi, H. Ouchetto, S. Akhramez, H. Fadili, K. Ouchetto, A. Hafid, M. Sajieddine & M. Khouili. Magnesium-Aluminum carbonate Layered double hydroxides:Solid base Catalysts for Synthesis of 3, 4-Dihydropyrimidin-2(1H)-one.
- CP39. ID450:** M. Ouknin, L. Majidi, A. Romane & P. Ponthiaux. Chemical composition, adsorption proprieties and corrosion inhibition on mild steel of *Thymus satureioides* essential oil.
- CP40. ID452:**A. Dellouche, A. Djedouani, H. Mousser, A. Mousser & R. Touzani. Synthesis, X-ray crystal structure and Catecholase activity investigation of new tetradentate Schiff bases ligands.
- CP41. ID464:** M. Ibrahim, A. Arbaoui & Y. Aoura. Design analysisof a desalination-refrigeration unit powered by a solar photovoltaicthermal collectors PVT.
- CP42. ID615:** F. Byoud, A. Wakrim, S. El Ghachtouli, Z. Zaroual, A. Assabbane& M. Azzi. Characterization and study of the floccs issued from the electrocoagulation treatment of the food industry effluent.
- CP43. ID473:** A. Dridi & S. Somrani. Effect of the body temperature on the textural characteristics of based biomaterials poorly crystallized apatites prepared at basic pH.
- CP44. ID857:** A. Bouoidina, M. Chaouch, A. Lahkimi, Z. Rais, M. Taleb, A. Abdellaoui, F. El-Hajjaji &B. Hammouti. Study of the antioxidant activity and the anti-corrosion action of the *Foeniculum Vulgare* extract for mild steel corrosion in hydrochloric acid.
- CP45. ID863:** S. El Mehdi & A. Amine. Metal oxide nanoparticles based alcohol sensor.
- CP46. ID864:** A. Ghanam, A. Ait Lahcen & A. Amine. Electroanalytical study of Bisphenol A using various carbon materials

Friday, December 2nd

08:30 – 09:45

Plenary conference 5 &6:

Prof. A. Douhal

University of Castilla La Mancha, Toledo, Spain

Excimers formation, energy transfer and ligand-to-cluster charge transfer in a Zr-based MOF: relevance to nanophotonic and nanophotocatalysis.

Chairmen: Prof.A. Romane, Prof. A. Nougouei & Prof. E. El Boudouti

FIRST SESSION: ORGANIC, INORGANIC AND NANOMATERIALS

Room 1

Chair: Prof. A. Aouniti & Prof. A. Zarouk

09:45 – 11:00

CT3.C. Jama, M. Esbayou & F. Bentiss. Effect of surface pretreatment for improved corrosion protection of carbon steel using cold plasma deposited organosilicon coatings.

CO58.ID102: A. H. El Foulani, A. Aamouche, A. Jedaa, M. Amjoud & K. Ouzaouit. Detection and conversion of gas by cobalt-zinc ferrite nanoparticles prepared by various methods.

CO59.ID112: M. Aqil, A. El Idrissi, A. Aqil, F. Ouahib, C. Detrembleur & C. Jérôme. A novel synthetic route toward novel RedOx polymer active materials for organic radical batteries.

CO60.ID127: N. Gouita, T. Lamcharfi, M. Bouayad, F. Abdi & N. S. Echatoui. The effect of Fe concentration on microstructure and dielectric properties of BaTi_{1-x}Fe_xO₃ ceramics.

CO61.ID128: N. Hadi, T. Lamcharfi, F. Abdi, N. S. Echatoui & A. Elbasset. Characterization of (1-x) CaCu₃Ti₄O₁₂ – (x) BaTiO₃ Ceramics Synthesized by Solid State Route.

CO62.ID135: N. Belmokhtar, M. Ammari & L. Ben allal. Effect of SiO₂/Na₂O/KOH ratio on compressive strength of geopolymers binders derived from Metakaolin and an industrial sludge: A comparative study.

CO63.ID143: M. Khudhair, M. Salahdine Elyoubi & A. Elharfi. Development of a new Binder hydraulic (cement composite) based on a mixture of natural Pozzolan active 'PN' and pure limestone 'P.Lime': Study of the physical-chemical and mechanical properties of cement and mortar.

CO64.ID155: R. Mezaache, Y. Bikard, J. M. Weibel, A. Benkouider, C. Sirlin & P. Pale. Palladium salts as efficient catalysts for the selective protection and deprotection of alcohols as diarylmethyl ethers.

CO65.ID900: N. El Akchioui, N. Benaya, S. Choukrad. Fluidification of Stochastic Petri Net by Continuous Petri Net: Piecewise-Constant and adaptive methods.

	<p style="text-align: center;">SECOND SESSION: WATER, POLLUTION AND ENVIRONNEMENT Room 2</p> <p>Chair: Prof. A. Chetouani & Prof. A. Guenbour</p> <p>CT4.R. Salghi. Phytobac and electrocoagulation: two practical management tools for pesticides wastewaters.</p> <p>CO66.ID202: D. Yigerta, D. Dossounon, A. Daher, A. A. Abakar & M. Blaghen. Removal of Mercury from Mercury-Contaminated Water using Free and Alginate entrapped (Immobilized) Bacteria (<i>Escherichia coli</i> R-100).</p> <p>CO67.ID207: N. Nouayti, D. Khattach, M. Hilali & A. Brahmi. Contribution to the hydrochemical study of springs Jurassic of the High Ziz Basin: contribution of remote sensing and GIS.</p> <p>CO68.ID209: M.Larouj, R. Salghi, R. Benkaddour, H. Lgaz, S. Jodeh, A. Zarrouk, A. El Midaoui & H. Oudda. Pyrimidothiazine derivative as a good inhibitor at high temperature for a carbon steel in acidic solution.</p> <p>CO69.ID215: A. M. Soliman, D. Al-Shamse, A. A. Murad, A. Aldahan & T. Thimann. Removal of Cr (IV) from water using activated carbon prepared by physical activation from leaflet of date palm trees.</p> <p>CO70.ID223: N. Djebri, N. Boukhalfa, M. Boutahala & N.E. Chelleli. Low cost biosorbent for adsorptive removal of organic pollutants from water.</p> <p>CO71.ID229: K. D. Oyeyemi, A. Aizebeokhai & O. M. Olofinnade. Groundwater resource evaluation in a crystalline basement terrain using geoelectrical resistivity imaging: Southwestern Nigeria.</p> <p>CO72. ID600: M. El-Massaoudi, A. Salhi, C. El Abiad & S.I Radi. Chemical modification of silica gel with pyrazolic compound for the removal of Cd(II), Cu(II), Pb(II) and Zn(II) traces from the aqueous solutions.</p> <p>CO73. ID865: A. Ait Lahcen, A. Baleg, Priscilia Baker, Emmanuel Iwuoha & Aziz Amine. Electrochemical determination of 17-β-Estradiol in environmental water samples using nanostructured magnetic molecularly imprinted polymers.</p>
<p>09:45 – 11:00</p>	<p style="text-align: center;">THIRD SESSION: NATURAL PRODUCTS AND APPLICATIONS Room 3</p> <p>Chair: Prof. M. E. Afilal & Dr. H. Elmsellem</p> <p>CO74.ID166: H. Musa & A. A. Abubakar. Synthesis and characterization of silver nanoparticles-embedded alkyd resins derived from castor seed oil.</p> <p>CO75.ID179: H. Khan, T. Ben Hadda & R. Touzani. Therapeutic potential of Nitidine, a plant alkaloid: Need to explore the clinical status.</p> <p>CO76.ID216: B. Damiyine, A. Guenbour & R. Boussem. Rhodamine B adsorption on natural and modified Moroccan clay with cetyltrimethylammonium bromide: Kinetics, equilibrium and thermodynamics.</p> <p>CO77.ID276: S. Bouhallel, B. Belhadi, R. Souilah, D. Djabali & B. Nadjemi. Morphological variation and chemical composition of pearl millet (<i>Pennisetum glaucum</i> (L.) R. Br) cultivated in Sahara of Algeria.</p> <p>CO78.ID263: A. Salhi, A. Bouyanzer, Y. Rokni, R. Bellaouchi and A. Asehrou & B. Hammouti. Total phenolics content, antioxidant and antimicrobial activities of extracts from <i>Pistacia lentiscus</i>.</p>

09:45 – 11:00	FOURTH SESSION: RENEWABLE ENERGIES AND SUSTAINABLE DEVELOPMENT Room 4
	<p>Chair: Prof. T. Ben Hadda & Dr. F. Jeffali</p> <p>CO79.ID119:B. H. Béakou, K. El Hassani, A. M. Houssaini, M. Belbahloul, E. Oukani & A. Anouar. Cassava peel biomass for malachite green disposal.</p> <p>CO80.ID154:V. V. Tkach, S. C. de Oliveira, R. Ojani & P. I. Yagodynets'. The mathematical description for rhenium electrodeposition from perrenates in potentiostatic constant-voltage mode.</p> <p>CO81.ID160:N. Haddou, Z. El afia, M. Y. Messous, A. Moussaif, B. Belhorma, M. Tahiri, A. El Yahyaoui, M. R. Bricha & J. El Khamkhami. Synthesis and characterization of thin oxide co-doped Erbium and Ytterbium: Application to photonic conversion in solar photovoltaic.</p> <p>CO82.ID164:S. El Mzioui, Z. M. Fahim, S. Bouzzine, M. Bouachrine, M. Naciri Bennani, M. Hamidi. Influence of various electron-donating carbazole groups in D-π-A sensitizers on the performance of dye-sensitized solar cells.</p> <p>CO83.ID170:A. Didi, A. Dadouch, M. Bencheikh, J. Tajmouati, H. El Bekkouri & O. Jai. Feasibility of producing Molybdenum-99 using in nuclear medicine.</p> <p>CO84.ID618: G. Bouabid, E. Mosnegutu, V. Nedeff&M. Azzi. Large-scale characterization of RDF fuel in a semi-pilot incineration reactor.</p>
11:00 - 11:30	Coffee break
11:30 – 13:00	FIRST SESSION: ORGANIC, INORGANIC AND NANOMATERIALS Room 1
	<p>Chair: Prof. A. Aouniti & Prof. A. Zarouk</p> <p>CO85.ID157: S. Chetioui, H. Bougueria, A. Mili, D. A. Rouag &S.E. Bouaoud. Synthesis, characterization and DRX of new copper complex'Bis{Bis(1-((E)-(3methoxyphenyl)diazenyl)naphthalen-2-yloxy)}di-copper'.</p> <p>CO86.ID169: A. Tirbiyine, Y. Ait Ahmed, A. Taoufik, M. Mamor, H. El Ouaddi, H. Elhamidi,H. Chaib, A. Nafidi &S. Senoussi. Critical current density and pinning strength of vortex ink-(BEDT-TTF)₂ Cu[N(CN)₂]Br organic superconductor.</p> <p>CO87.ID182: G. O. Bamigboye, A. A. Adedeji, D. O. Olukanni & K. J. Jolayemi. Effect of granite/gravel (washed) combination on fresh Properties of Self compacting concrete.</p> <p>CO88.ID191: N. Boukhalfa, N. Djebri & M. Boutahala. High diclofenac uptake capacity inside hydrophobic cavities of CTA⁺ intercalated montmorillonite.</p> <p>CO89.ID195: F. Dergal & A. Mansri. In-situ polymerization of the 4VP on the mica surface: characterization by TGA, DSC and IRTF.</p> <p>CO90.ID225: M. Barbachi & F. Bourquin. Numerical and Experimental Study of a fiber optic sensor according to its opto-geometrical characteristics.</p> <p>CO91.ID235: O.M. Olofinnade, A. N. Ede & J.M. Ndambuki. Use of Ground Waste Glass Powder as Partial Substitute for Portland Cement in Normal-Weight Concrete Production.</p> <p>CO92.ID845:A. Bumajdad. Synthesis and Catalytic Activity of CuOx-modified Ceria Nanoparticles on Different Supports.</p> <p>CO93.ID866: M. Alami, E.H. El Boudouti & B. Djafari-Rouhani. Phonon Tunneling Through Vacuum Cavities in Piezoelectric Multilayers.</p>

	<p style="text-align: center;">SECOND SESSION: WATER, POLLUTION AND ENVIRONNEMENT Room 2</p> <p>Chair: Prof. A. Chetouani & Prof. A. Guenbour</p> <p>CO94. ID48: M. Abouri, H. Bakraouy & S. Souabi. Coagulation flocculation treatment of stabilized leachate from landfill Ouled Berjal of Kenitra city.</p> <p>CO95. ID280: I. Mourtah, E. El Atmani, I. Tourarssi, Y. CHAOUQI, N. Sefiani & M. Hlaibi. Processes of Facilitated extraction of chromium ions from acidic medium through grafted polymer membranes.</p> <p>CO96. ID318: E.Ech-chihbi,R.Salim, H. Oudda, F. El Hajjaji, Z. Rais & M.Taleb. Experimental and quantumchemical study on the inhibition of mild steel corrosion by “2-phenylimidazo[1,2-a]pyrimidine-3-carbaldehyde”in 1M HCl.</p> <p>CO97. ID325: S. Alehyen,M. EL alouani, M. Zerzouri, M. EL Achouri& M. Taibi. Fixed bed adsorption for the removal ofcopper(ii) using fly ash based geopolymer matrix for wastewater treatment.</p> <p>CO98. ID328: F. Benhiba, N.Lotfi, Z. Benzekri, H. Bourazmi, H. Zarrouk, A. Zarrouk, A. Elmidaoui, A. Guenbour, S. Boukhris & H. Oudda. Le rôle d’un composé 2-(4-chlorophenyl)-6-methyl-1,4-dihydroquinoxaline (Q1) de la famille de la quinoxaline dans l'inhibition de la corrosion de l’acier C35 en milieu acide chloridrique HCl1M.</p> <p>CO99. ID329: H. Demnati, L. El Farh, A. Sghiri & M. Doubi. Caractérisation physico-chimique et états de pollution par les éléments traces métalliques des eaux de la basse Moulouya ainsi que les barrages Macharaa Hammadi et Mohammed V.</p> <p>CO100. ID349: H. Izza & M. Korichi. Effect of surfactant on mass transfer for extraction of aromatics from lubricating oils.</p> <p>CO101. ID230:A. P. Aizebeokhai, K. D. Oyeyemi. Assessment of groundwater contamination by septic tank effluents using geoelectrical resistivity imaging: Southwestern Nigeria.</p> <p>CO102. ID829: A. Baddouh, M. M. Rguiti, L. Bazzi & M. Hilali. Study of electrochemical degradation of fungicide residue Thiabendazole (TBZ) in chloride medium on Tin Oxide Electrode.</p>
<p style="text-align: center;">11:30 – 13:00</p>	<p style="text-align: center;">THIRD SESSION: NATURAL PRODUCTS AND APPLICATIONS Room 3</p> <p>Chair: Prof. M. E. Afilal & Dr. H. Lamselam</p> <p>CO103. ID293:R. Azzallou, M. Ait Taleb, R. Mamouni & S. Lazar. One-pot synthesis of amidoalkyl naphthols using Animal Bone Meal (ABM) as an efficient and recyclable heterogeneous catalyst.</p> <p>CO104. ID334:T. Zahidi, A. Lekchiri, A. Berrichi, W. Lekchiri, M. Minouni &H. EL Halouani. Extraction and comparison of new peroxidase from Brassica oleraceae var. Ramosa’s leaves and roots.</p> <p>CO105. ID343:S. Bouhassoun & L. Mesli. Diet of the Barn Swallow <i>Hirundo rustica</i> (LINNE, 1758) in Zenata station (Tlemcen, Algeria), in 2011 and the harmful effects of insecticides on his regime.</p> <p>CO106. ID359:K. Mchiouer, S. Bennani, M. Meziane. Antibiotic resistance of lactobacilli strain isolated from raw cow’s milk of Oujda city (Morocco).</p> <p>CO107. ID364:S. Abdellaoui, H. Masski, I. Tai & H. El Halouani. Growth, reproduction and diet of the European hake <i>Merlucciusmerluccius</i> (Linneaus, 1758) of the Atlantic coast of Morocco.</p>

	CO108. ID393: A. Benaradj, H. Boucherit & O. Hasnaoui. Ecology groupings to Pistacia atlantica in South-Oranian (Algeria).
	FOURTH SESSION: RENEWABLE ENERGIES AND SUSTAINABLE DEVELOPMENT Room 4
	Chair: Prof. T. Ben Hadda & Dr. F. Jeffali
11:30 – 13:00	<p>CO109. ID210:I. Frar, M. Ammari & L. Ben Allal. Port dredged sediments as an innovative materials in the building materials (fired brick and mortar).</p> <p>CO110. ID220:N. Chakhchaoui, H. Ennamiri, A. Hajjaji, A. Eddiai, M. Meddad & Y. Boughaleb. Model of piezoelectric self powered supply for Portable Devices using technical textile as a support.</p> <p>CO111. ID550:S. Fellak & A. Boukir.Spectroscopic Analysis of Changing Lignocellulose Structure in Historical Wood Materials during Artificial Weathering.</p> <p>CO112. ID222: S. Talbi, A. Lamkaddem, I. Atmane, M. Melhaoui, K. Hirech, R. Malek, K. Kassmi & N. Bachiri. Design of a solar oven box-type with thermal storage dedicated to the rural regions of the oriental district.</p> <p>CO113. ID237:M. Barbachi, K. Boudjellal, M. Bouabaz, A. Imad, F. Jeffali, S. Ajouguim. Physical characterization of sea shell for a concrete formulation.</p> <p>CO114. ID238: A. Alami Merrouni, A. Amrani & A. Mezrhab. Simulation analysis and comparison of the electricity production from large scale PV plantsin Morocco &USA.</p> <p>CO115. ID269: N. Charhouni, M. Sallaou & A. Arbaou. Analysis of Challenges affecting wind farm design.</p> <p>CO116. ID569:M. Souihel, S. Raefat, M. Garoum, N. Laaroussi. Estimation of the impact ofMoroccan woodbased elementson the energy efficiency in Moroccan buildings.</p>
13:00	Lunch
14:00 – 15:15	<p>Plenary Conference 7 : Prof. Y. Garcia Louvain-la-Neuve, Belgium</p> <p>Spin Transition Molecular Nanomaterials and polymeric networks.</p> <p>Plenary Conference 8: Prof. S. Degoutin University Lille 1, France</p> <p>Cyclodextrin-based hybrid materials: application to water decontamination.</p> <p>Chairmen: Prof. S. Radi & Prof. N. Benchat</p>
	FIRST SESSION: ORGANIC, INORGANIC AND NANOMATERIALS Room 1
	Chair: Prof. A. Mansri & B. Hammouti
15:15– 16:30	<p>CT5.M. Messali. Ionic liquids: green small molecules with impressive applications.</p> <p>CO117. ID282: P.O. Awoyera, J. O. Akinmusuru, K. C. Ekedum, A. Aderoba & K. J. Jolayemi. Influence of Ceramic Aggregates on Strength Properties of Recycled Aggregate Concrete.</p> <p>CO118. ID284: A. Aityoub, M. El Meray, A. Abouelfida, A. Benyaich& R. Idouhli. Optimization of heavy metals extraction from the soils of the municipal dump of the city of Marrakech: design of experiment (DOE) application.</p> <p>CO119. ID302: S. Tarhouchi, E. El Atmani , I. Tourarssi , K. Touaj , L. Lebrun & M. Hlaibi. Two</p>

	<p>polymer membrane types for facilitated extraction process of paracetamol compound, analysis and comparison of results.</p> <p>CO120. ID348: M. Dahhou, R. El Moussaouiti, N. Barbach, M.K. Hamria, H. Kada & I. Amrani. Influence of the addition of alumina sludge on the physicochemical characteristics of CPJ 55 cement M.</p> <p>CO121. ID363: D. Talamsamani, K. Yamni, N. Tijani, M. Ait Mouha & B. Ba Mohamed. Quantitative analysis of various phases in the clinker and cement: Application of X-ray powder diffraction.</p> <p>CO122. ID376: D. Boukhelkhal, O. Boukendakdji, S. Kenai, M. Guendouz & E. H. Kadri. Beneficial effect of natural and industrial Algerian wastes in the production of heat treated SCC.</p> <p>CO123. ID383: N. Habbati, M. Benzakour, M. E. Touhami, M. Mcharfi, M. Sfaira & A. T. Benjelloun. Theoretical study by the DFT of Oxadiazoles-Fe complexes.</p> <p>CO124. ID852: M. Galai, M. Ebn Touhami, H. Benqlilou, T. Belhaj, K. Berrami, I. Mansouri, H. Elkafssaoui & B. Oaoui. Nitrate effect on degradation processes of ($\alpha+\beta$) brass in Azrou soil medium.</p> <p>CO125. ID854: N. Dkhireche, M. Galai, M. Rbaa, Y. El Kacimi, H. Elkafssaoui, B. Lakhrissi & M. Ebn Touhami. Corrosion inhibition of carbon steel in molar hydrochloride acid solution by using "2, 4, 5-triphenyl-4,5-dihydro-1H-imidazole".</p> <p>CO126. ID861: A. Mouadili and E.H El Boudouti. Acoustic demultiplexer based on symmetric and asymmetric Fano resonances in slender tubes.</p> <p>CO127. ID862: I. Quotane and E.H. El Boudouti. Bulk and surface acoustic waves in graphene-semiconductor one-dimensional phononic crystals</p>
15:15– 16:30	SECOND SESSION: WATER, POLLUTION AND ENVIRONNEMENT Room 2
	<p>Chair: Prof. R. Benkaddour & Dr. F. Mansouri</p> <p>CO128. ID439: Joseph AKINMUSURU, Ayobami BUSARI, Bamidele DAHUNSI and Olatokunbo OFUYATAN. Self compacting concrete in rigid pavement construction: flexural properties of some selected brands of cem ii/ a-I and cem ii/ b-I. Joseph AKINMUSURU, Ayobami BUSARI, Bamidele DAHUNSI and Olatokunbo OFUYATAN.</p> <p>CO129. ID466: I. Chaer, A. El Cadi, M. Khaddor & J. Brigui. UV-vis, XRD and IR spectroscopy analyses of organic matter from soil Moroccan landfill (Case Tangier).</p> <p>CO130. ID498: J. Isaad, H. Cherkaoui Dekkaki & M. Hassani Zerrouk. New materials for the selective and sensitive colorimetric and fluorescent detection of the toxic ions in biological systems.</p> <p>CO131. ID525: H. Haddad & H. Ghoualem. Hydrochemical characteristics of the water shed sources of Algiers.</p> <p>CO132. ID838: I. Merimi, H. Oudda, F. El-Hajjaji & B. Hammouti. Synthesis and Effect of a new surfactant derived from 2-mercaptobenzimidazole, on inhibition of carbon steel corrosion in 1M HCl.</p> <p>CO133. ID535: H. Elmontassir, K. El Falaki, M. Afdali & Y. Karhat. Valorization of sludge from drinking water treatment in the brick development.</p> <p>CO134. ID553: S. Alahiane, A. Sennaoui, F. Sakr, M. dinne, S. Qourzal & A. Assabbane. Adsorption and photocatalytic degradation of indigo carmine dye in aqueous solutions.</p> <p>CO135. ID557: H. Mekaoussi. L'impact du changement climatique sur la production du ble dur et possibilite d'amelioration.</p>

	<p>CO136. ID564: A. Sennaoui, S. Alahiane, F. Sakr, M. Dine, A. Assabbane & E. Ait Addi. Degradation of a benzoic acid and its derivatives by Electro-Fenton/BDD process: Optimization using Response Surface Methodology (RSM) based on the Central Composite Design (CCD).</p>
<p>15:15– 16:30</p>	<p>THIRD SESSION: NATURAL PRODUCTS AND APPLICATIONS Room 3</p>
	<p>Chair: Prof. A. Melhaoui & Prof. M. Bouklah</p> <p>CO137. ID511:S. Amri, D. Kheira, A. Mostefai, A. Rahmouni, E. Srasra & N. Besbes. Preparation of Tunisian acid activated clays for the synthesis of dioxolanes under the green chemistry conditions.</p> <p>CO138. ID521:A.Boutazamat, H. Hanine, H. Latrache, M. Rakib & L.Bouissane. Phytochemical characterization essay using TLC of extracts of Cannabis Sativa l. seed from five Moroccan morphotypes.</p> <p>CO139. ID531: A. Laaraibi, A. Bennamara, A. Abourriche & M. Berrada. Development and characterization of chitosan nanocomposites with various clays for food applications.</p> <p>CO140. ID538: O. M. Olatokunbo, G. O. Bamigboye & M. Omeje. Application of Palm Ash Self-Compacting Concrete in Construction Works.</p> <p>CO141. ID540:S. S. Mahdei, A. H. Taobi & S. Sh. Al-luaibi. Derived from shrimp shells.</p> <p>CO142. ID555:B. A. Almayahi. Biomarkers of natural alpha particles in cancerous tissue of Iraqi patients.</p> <p>CO143. ID830: K. Elmouaden & L. Bazzi. Chitosan polymer effect on the copper corrosion behavior in sulfides polluted synthetic seawater</p>
<p>15:15– 16:30</p>	<p>FOURTH SESSION: RENEWABLE ENERGIES AND SUSTAINABLE DEVELOPMENT Room 4</p>
	<p>Chair: Prof. Y. Zaghloul, Prof. B. El Kihel & Prof. E. El Boudouti</p> <p>CO144. ID286:H. Zahboun, S. Zouggar, M. El Hafyani & S. Benzaouia. Sizing optimization of off-grid generation options for remote villages in Morocco using Modified Electric System Cascade Analysis.</p> <p>CO145. ID333:A. Karkri, S. E. Elqebbaj, D. Moussaid, A. Chetouani & M. Benaichi. Investigation of tunneling effects modeling in degenerate semiconductors.</p> <p>CO146. ID352:A. Gounni, M.T. Mabrouk, A. Kheiri & M. Alami. The optimal allocation of the building wall insulation: A numerical approach.</p> <p>CO147. ID455:K. Hirech, M. Melhaoui, I. Atmane, K. Kassmi, R. Malek, A.Lamkaddem & S. Talbi. Optimization of lead batteries management strategies for an optimal operation of PV installation based on stand-alone DC system.</p> <p>CO148. ID476:I. T. Tenebe, A. S. Ogbiye, D. O. Omole & P. C. Emenike. Determination of longitudinal Dispersion Using Tracer Studies: A Comparative laboratory assessment of two methods.</p> <p>CO149. ID529:A. Bouzidi, D. Bria, F. Falyouni, H. Berkhli & A. Nougauoi. A biosensor based on one dimensional photonic crystal for monitoring blood glycemia.</p> <p>CO150. ID530: Y. Benali, Z. Tahri, A. Bouzidi, D. Bria, A. Khettabi & A. Nougauoi. Propagation of electromagnetic waves in one dimensional photonic crystal with double planar defects.</p> <p>CO151. ID846:O. El Asri & M. E. Afilal. Potential for green energy production from the anaerobic digestion of chicken droppings in Morocco.</p>

16:30 – 17:00	Coffee break
17:00 – 17:30	Poster Session 2 Chair: Dr. F. Abrigach & Dr. F. Hajjaji
	<p>CP47. ID1: M. El Morhit, M. Yagoubi, S. Mrani & M. Zouhdi. A principal component analysis (PCA) of microbiological pollution level of the Avicenne hospital effluent (Rabat, Morocco).</p> <p>CP48. ID8: A. Sebaa & M. Belhamra. Study of the curative role of "Draas" in evacuating dunes threatening roads in the Lower Algerian Sahara: a reduced physical model study.</p> <p>CP49. ID24: R. Atmani, M. El Kouali, M. Talbi, A. El Brouzi; F. Ouzidan & N. Amardo. numerical studyandsimulationofdiffusion of liquid in a long cylindrical material in one-dimensional.</p> <p>CP50. ID30: A. Benretem, I. Barkat&A. Chebel. Modeling and numerical simulation of wind data for a prediction of wind-generated electrical energy: case of a site in the Annaba region.</p> <p>CP51. ID32: N. Bahammou, O. Cherifi, H. Bouamama, K. Cherifi, & T. Moubchir. Postharvest control of gray mold of tomato using seaweed extracts.</p> <p>CP52. ID33: F. Bouti, M. L. Berkani & S. Doumandji. Biodiversity of apoidea, environmental indicators, in Algeria.</p> <p>CP53. ID35: R. Soulimane, S. Valange, J. Barrault & Z. Gabelica. Elimination of phenol, organic pollutantfrom wastewater, on Fe-ZSM5 materials elaborated by hydrothermal synthesis.</p> <p>CP54. ID36: S.Ben-Aazza, A.Hadfi, M. Belaatar, R. Aba Aaki, N.Hafid & A.Driouiche. Thermodynamic characterization of water's scale-forming power of the region of tiznit through the "I-p-I" method.</p> <p>CP55. ID40: M. El Kolli, H. El Kolli & H. Laouer. Anti-microbial activity of the main component of the essential oil from an apiaceous species: carum montanum compared to the activity of the activity of the whole oil.</p> <p>CP56. ID45: N. Allaoua, H. Hafid, H. Khemmar, R. Hajeb&D. Merzoug. impact of the mineral pollution on water and aquatic fauna of wells and sources of the high plains of eastern algeria region.</p> <p>CP57. ID63: Y. Bahammou, Z. Tagnamas, A. Leknizi, A. Lamharrar, A. Idlimam &M. Kouhila. Water sorption isotherms of Marrubium vulgare leaves at three temperatures.</p> <p>CP58. ID65: N. Chouat, B. Bensafi, M. A. Hasnaoui, M. Sassi & A. Bengueddach. Applying a new eco zincophosphate material for water organic pollutants adsorption.</p> <p>CP59. ID71: R. Ait Akbour, H. Ouchtak, A. Ait Addi, A. Jada, J. Douch & M. Hamdani. Humic Acid Covered Alumina as Adsorbent for the Removal of Organic Dye from Coloured Effluents.</p> <p>CP60. ID74: F. Zahaf, F. Ouadjnia & R. Marouf. Comparative Study for Removal of the Bemacid Yellow E-4G and Procion Yellow MX-4R by pillared clay.</p> <p>CP61. ID76: Zaraq, B. Orayech & A. El Bouari. Synthesis, crystal Structure and vibrational studies of the monoclinically distorted Double Perovskite, Sr₂Mn_{1-x}Ni_xTeO₆.</p> <p>CP62. ID78: A. Menasra &D. Fahloul. Study the effect of convective drying on mass diffusivity and activation energy of Aures oak (Quercus Ilex).</p> <p>CP63. ID87: A. Bennani Karim, B. Mounir, M. Hachkar, M. Bakasse, Z. Rais & A. Yaacoubi. Climate change, wastewater coagulation-flocculation and adsorption treatment on</p>

natural clay to solve the drought problem.

- CP64. ID89:** K. Bekhemas, A. Hachemaoui & A. Yahiaoui. Synthesis of a biopolymer by the Copolymerization of B-pinène with Epichlorydrin in the presence of the maghnite H+.
- CP65. ID97:** D. Ghemati & D. Aliouche. Study of synthetic dyes adsorption onto poly(vinyl alcohol)/glutaraldehyde/ β -cyclodextrin polymer membranes.
- CP66. ID107:** A. Machrouhi, H. Tounsadi, M. Farnane & N. Barka. Biosorption characteristics for the removal of dyes from aqueous solution by Thapsia rods as a low cost natural biomass.
- CP67. ID111:** S. Baississe, H. Bedjaoui, N. Bolouah, N. E. Beloumi, F. Gaziz, M. Mehaoua, L. Reguieg & B. Boussetoh. Study of the drying effect on bioactive compounds and technology properties of the powder Chili Pepper (*Capsicum* spp).
- CP68. ID117:** N. Mahrez, F. Bessaha, K. Marouf-Khelifa & A. Khelifa. Intercalation of Algerian halloysite with an organic compound and adsorption of cationic dye.
- CP69. ID118:** F. Bessaha, N. Mahrez, K. Marouf-Khelifa & A. Khelifa. Removal of anionic dye from aqueous solutions by modified halloysitic clay.
- CP70. ID159:** Boutouil, I. Elazhary, M. R. Laamari, H. Ben El Ayouchia, H. Anane, S. E. Stiriba. Experimental and theoretical investigation of organic compound as inhibitor for mild steel corrosion in sulfuric acid medium.
- CP71. ID165:** R. Idouhli, A. Abouelfida, A. Benyaich, Y. Koumya & A. Aityoub. Inhibitive effect of *Senecio anthephorbium* extract on Hydrochloric acid corrosion of S300 Steel.
- CP72. ID165:** N. E. Bensiradj, A. Saal, A. Dekhira & O. Ouamerali. Theoretical study of tellurium impurities in (ZnO)₆ clusters using DFT and TDDFT.
- CP73. ID173: Chifaa** Ad, M. Benalia, M. Djedi, F. Ben Saffedine, H. Elmsellem & R. A. Amer. Adsorptive removal of Nickel (II) using *Luffa Cylindrica*: effect of NaCl concentration on equilibrium and kinetic parameters.
- CP74. ID174:** H. Boucherit, K. Benabdeli, A. Benaradj & M. Boughalem. Ethnobotanical study of *Hammada scoparia* in the region of Ain Sefra (Naama, Algeria).
- CP75. ID180:** I. M. Hachani, A. Kriker & N. Kebaili. Effects of coarse aggregates shape on the mechanical properties of Hot Mix Asphalt.
- CP76. ID181:** G. O. Bamigboye, D. O. Olukanni, A. A. Adedeji & K. J. Jolayemi. Experimental Study on the Workability of Self-Compacting Granite and Unwashed Gravel Concrete.
- CP77. ID208:** El Arrouji, K. Karrouchi, K. Ismaily Alaoui, Z. Rais, M. Taleb, A. Aouniti & B. Hammouti. Experimental and theoretical study of new pyrazole derivatives as corrosion inhibitors of mild steel in acidic media.
- CP78. ID212:** B. Dechir, N. Guenaoui, M. C. Maazi & A. Chefrour. plant ecology and census of bulbous plants in the region of el tarf north east Algeria;
- CP79. ID213:** S. Boulaadjoul, H. Zemmouri & Z. Bendjama. use of *moringa oleifera* seeds as a biomaterial for surface water treatment.
- CP80. ID214:** F. Agda, M. Taleb & M. Bouachrine. Density functional theory (B3LYP/6-31(d,p)) study of oligomers in their aromatic and polaronic state.
- CP81. ID217:** A. Talbaoui, M. Aneb, A. Bouyahya, H. EL Boury, S. Amzazi, A. Benjouad, N. Dakka & Y. Bakri. In Vitro Cytotoxic effects and antibacterial activity of Moroccan medicinal plant *Marrubium vulgare*.
- CP82. ID218:** F. Z. El Fihri, F. Hmimid, F. Bellali, N. El Khiati, A. Derhem & M. Ramdani. Ultrasound Assisted Extraction of β -carotene from the Moroccan Strain of *Dunaliella*

salina.

- CP83. ID232:**A. P. Aizebeokhai, D. O. Omole & K. D. Oyeyemi. An Overview of the Potential Impacts of Climate Change on Groundwater Resources.
- CP84. ID292:** A. Missouri, M. Zertoubi, D. Benmessaoud Left, A. Irhzo &M. Azzi. Effet des ions chlorure et sulfate sur la corrosion d'une armature en acier dans un milieu béton synthétique : Étude par voltametrie cyclique.
- CP85. ID305:**M. M. Rguiti, A. Baddouh, Lh. Bazzi, M. Hilali, L. Bazzi, A. El Asbahani. Electrochemical oxidation of olive mill wastewaters and degradation of phenolic compounds on Tin Oxide Electrode.
- CP86. ID372:**B. Ba mohamed, K.Yamni, N. Tijani, A. M. Mbarak &D. Talamsamani. Synthesis and Monte Carlo Method for resolution structural of zeolitic materials.
- CP87. ID470:**C. Zorgane, K. Khela & S. Somrani. Kinetic study and optimization of the removal of cadmium from aqueous solutions by a Tunisian natural phosphate using central composite design.
- CP88. ID471:** M. Talbi, A. Hailaf, A. Essamadi, B. Nasser & K. Moustaid. Physicochemical analyzes and antioxidant activity of the cladodes of two species of Opuntia.
- CP89. ID475:**Y. El Jabbar, R. El Ouatib, L. Er-Rakho& M. Benchikhi. Effect of different complexing agents on synthesis of the pigment $CoAl_2O_4$ by sol-gel.
- CP90. ID482:**S. Bakour, A. Guenbour& J. Garcia Anton. Influence of the welding on the corrosion behavior of an austenitic stainless steel in phosphoric acid polluted by chloride and sulphate ions.
- CP91. ID509:** H. Elhaddaj, M. El abassi, Z. Ouabourrane, B. Hanoune & L. El Maimouni. Modeling by SIRANE model of vehicle emissions in urban area: the case of Agadir city (Southwestern of Morocco).
- CP92. ID594:** S. Bouafia-Chergui, M. Chabani & A. Bensmaili. TiO_2 -photocatalyzed degradation of tetracycline: toxicity assessment.
- CP93. ID595:**E. EL KHATTABI& M. Meharzi. The Effect of the Heat Capacity of Construction Materials on the Thermal Behavior Applied to a New Building Design.
- CP94. ID818:** Contribution of automobile emissions to proximity a air pollution in Agadir city (south west of Morocco).
- CP95. ID855:** Y. Rokni, N. Ghabbour, R. Bellaouchi, I. Ghomari, N. E. Chihib, Z. Lamzira & A. Asehrou. Biodegradation of oleuropein by strains of lactic bacteria and autochthonous breeding olives in fermentation.

Saturday, December 3rd

08:30 – 09:45	<p>Plenary Conference 9: Prof.M. Zougagh University La Mancha, Cuidad, Spain</p> <p>The impac of magnetic nanomaterials in sample preparation.</p> <p>Plenary Conference 10: Prof. M. Ebn Touhami Ibn Toffail University, Kenitra, Morocco</p> <p>Electrochimie et traitement de surface.</p> <p>Chairmen: Prof. R. Salghi & Prof. A. Zarrouk</p>
09:45 – 11:00	<p>FIRST SESSION: ORGANIC, INORGANIC AND NANOMATERIALS Room 1</p> <p>Chair: Prof. R. Touzani & Dr F. Jeffali</p> <p>CT6. R. Touzani. Pyrazol: small molecules with big potential.</p> <p>CO152. ID366: M. Mouiya, A. Abourriche, A. Benhammou, Y. El hafiane, Y. Abouliatim, L. Nibou, M. Oumam, H. Hannache, M. Birot & A. Smith. The microstructure and mechanical Properties of porous ceramic based on natural resources.</p> <p>CO153. ID407: Mohammed R., Mustapha H., Tarik E., Abdelkhalek B, Mohammed E. Ghanjaoui, Khalifa T. & Miloudi H. Identification and characterization of novel gadolinium complexes in aqueous solution (composition and stability).</p> <p>CO154. ID431: N. Boumedienne, A. Maaroufi & L. Laanab. Structural optical and electrical properties of epoxy/silver nanoparticle film composites.</p> <p>CO155. ID468: I. Lakehal, S. Lakehal, F. Halaimia & A. Boukhari. Efficient synthesis using the Cerium (III) chloride heptahydrateas a complexing agent and a catalyst for the synthesis of imines and imines complexed.</p> <p>CO156. ID856: M. Selmi, R. Chiriach & S. Somrani. Role of phosphorus groups during ageing of the biomimetic apatites; Biological Implication.</p> <p>CO157. ID504: S. Belouafa, A. Bennamara & A. Abourriche. Low-cost processing technology for the synthesis of calcium phosphates for biomedical applications.</p> <p>CO158. ID565: O. K. Nehar & S. Louhibi. synthesis, characterization, and catechol oxidase activity of Cu(II) complex derived from new dithiooxamide derivative ligand.</p> <p>CO159. ID593: R. Rachidi, B. Elkihel, F. Delaunois & V. Vitry. Microstructure and Microhardness Properties of Flame Thermal Sprayed NiCrBSi Alloy and NiCrBSi-WC Composite Coatings.</p>

	SECOND SESSION: WATER, POLLUTION AND ENVIRONNEMENT Room 2
	Chair: Prof. K. Haboubi & Dr. F. Hajjaji
09:45– 11:00	<p>CO160. ID83: M. Galai, M. El Faydi, K. Dahmani, K. Alaoui, R. Touri, B. Lakhrissi, Y. El Kacimi & M. Ebn Touhami. Synthesis and application of new Quinolines as a corrosion inhibitor of carbon steel in 1.0 M HCl medium: Insight from electrochemical and thermodynamics studies</p> <p>CO161. ID847: R. Benkaddour. Salinity and pollution by nitrates of the groundwater of the Triffa plain.</p> <p>CO162. ID608: N. El Mouraille, M. Belmouden & Y. Ait Ichou. Photo-catalytic efficiency of supported TiO₂ for elimination of a basic dye.</p> <p>CO163. ID609: K. Cherrak, A. Dafali, A. Zarrouk, A. Elyoussefi & B. Hammouti. Corrosion Inhibitor for Mild Steel in hydrochloric acid.</p> <p>CO164. ID610: C. Elmiloud & J. Mohammed. Computational residence time of pollutant within Nador lagoon.</p> <p>CO165. ID823: F. El-Hajjaji, Y. Karzazi & B. Hammouti. Corrosion inhibition of steel by quinoxalines.</p> <p>CO166. ID826: B. Belhani, K. Bechlem, N. E. Aouf & M. Berredjem. A Practical and Green Approach towards Synthesis of novel N-sulfamoy-oxazolidinediones.</p> <p>CO167. ID423: W. Rahiq, T. Kouz, I. Kacimi, M. Hassani Zarrouk, J. Isaad & H. Cherkaoui Dekkaki. Evaluation of intrinsic vulnerability of two different aquifer systems against pollution using per and avi approaches.</p> <p>CO168. ID597: K. Akhrib, A. Bensmaili & S. Bouafia. Oxidation of textile and pharmaceutical waste WATERS by photocatalysis.</p>
	THIRD SESSION: NATURAL PRODUCTS AND APPLICATIONS Room 3
	Chair: Prof. A. Aouniti & Dr. H. Elmsellem
09:45– 11:00	<p>CO169. ID831: M. M. Rguiti, A. Baddouh, L. Bazzi, M. Hilali, L. Bazzi & A. El Asbahani. Electrochemical oxidation of olive mill waste and degradation of phenolic compounds on Tin Oxide Electrode.</p> <p>CO170. ID834: The impact of land use on the edaphic resources of the matorrals with <i>Chamaerops humilis</i> of Tlemcen (Western Algeria).</p> <p>CO171. ID433: Joseph AKINMUSURU, Ayobami BUSARI, Bamidele DAHUNSI and Olatokunbo OFUYATAN. Improving the strength properties of lime stabilized subgrade using mucilage of <i>Puntia ficus-indica</i> cladodes.</p> <p>CO172. ID449: A. Ouarhach, A. Romane & A. Boukir. Chemical composition, Phenolic compounds and antioxidant capacity of two endemic <i>Lavandula</i> species.</p> <p>CO173. ID480: F. Mansouri, A. Ben moumen, M. L. Fauconnie, M. Sindic, H. Serghini Caid & A. Elamrani. Characterization of the aroma profile of Picholine marocaine virgin olive oil produced in the Oriental region of Morocco.</p> <p>CO174. ID62: Z. Tagnamas, Y. Bahammou, A. Lamharrar, A. Idlimam & M. Kouhila. Experimental study and modelling of sorption isotherms of carob seeds.</p> <p>CO175. ID68: F. Boudrahem, F. Aissani-Benissad & A. Soualah. Kinetics and equilibrium adsorption of lead (II) ions on date stones: Effects of acid-basic treatments.</p>

FOURTH SESSION: RENEWABLE ENERGIES AND SUSTAINABLE DEVELOPMENT	
Room 4	
09:45– 11:00	<p>Chair: Prof. A. Dafali & Prof. N. Benchat</p> <p>CO176. ID567: I. Atmane, R. Malek, K. Kassmi & N. Bachiri. Control and remote supervision of photovoltaic water pumping in DouarTghasroute rural town Tafoghal (province of Berkane).</p> <p>CO177. ID570: M. Melhaoui, A. Lemkadem, K. Hirech & K. Kassmi. Design, realization and optimization of discretized architecture of photovoltaic systems for a low cost.</p> <p>CO178. ID577: A. Lamkaddem, S. Talbi, M. Melhaoui, I. Atmani, K. Hirech, K. Kassmi & R. Malek. Energy produced by photovoltaic plants injected on the electric network.</p> <p>CO179. ID614: M. El Hadi, A. El Moussaouy, A. Nougauoui & D. Bria. Simultaneous effect of electric field and temperature on bound exciton states in semiconductor quantum dot.</p> <p>CO180. ID271: H. Jaouani, D. Saifaoui, Y. Jouane & H. Ennamiri. Incorporation of flexible Organic Photovoltaic Cells on smart textiles.</p> <p>CO181. ID278: A. Alami Merrouni, H. Ait Lahoussine Ouali, A. Amrani, M. A. Moussaoui & A. Mezrhab. Linear focusing solar power plant systems and their performance under Moroccan climate. Case study: linear Fresnel technology.</p>
11:00 – 11:30	Coffee break
11:00 – 11:30	<p>Session Poster 3</p> <p>Chair: Dr. F. Mansouri & Dr. F. Jeffali</p> <p>CP96. ID27: D. El khachine, K. ELkharrim & D. Belghyti. Characterization of muds resulting from step TAMUDA BAY.</p> <p>CP97. ID73: Y. Kaddouri, M. Lamsayah, F. Abridach, M. El Azzouzi, A. Zarrouk, B. Hammouti, R. Touzani & H. Sdassi. N, N, N-Pyrazole Ligands: Synthesis, Characterization and Corrosion Inhibition properties with Theoretical investigations.</p> <p>CP98. ID75: S. Maarouf, B. Tazi & F. Guenoun. Effect of Phosphomolibdic acid and Silica on the Characteristics of new Composite Membranes based on Polyvinyl alcohol, Sulfosuccinic acid and Polyvinylpyrrolidone.</p> <p>CP99. ID81: A. Hallaoui, H. Zarrok, M. Assouag, A. Zarrouk, H. Oudda, R. Touzani, M. Allali, B. Hammouti, M. El Hezzat & M. Bouachrine. Quantum Chemical Study on the Corrosion Inhibition of Some Bipyrazoles.</p> <p>CP100. ID94: H. A. Touré, M. Bouatia, B. Y. Koumaré, M. Brahim, B. Dackouo, M. Mariko, H. Benzeid, M. O. B. Idrissi & M. Draoui. Determination of antioxidant activities of two different solvent extracts of green cactus pear (<i>Opuntia ficus indica</i> L. Mill.).</p> <p>CP101. ID115: S. Farres, L. Srata, I. Hamdani, S. Addou, M. Chikri & F. Fethi. Plants analysis using Laser Induced Breakdown Spectroscopy.</p> <p>CP102. ID121: N. Mechbal, Y. Karzazi, F. Abrighach & B. Hammouti. New pyrazolic derivatives as effective corrosion inhibitors for mild steel in 1M HCl: Thermodynamical, electrochemical and theoretical calculations.</p> <p>CP103. ID123: F. Yousfi, M. Ramdani & H. Bendaif. A Comparative Study of Ginger (<i>Zingiber Officinale</i> Roscoe) Essential Oil Extracted by Microwave-Assisted Hydrodistillation (MAHD) and Conventional Hydrodistillation (HD) Method.</p>

- CP104. ID141:**S. Ouahhoud, I. Lahmass & E. Saalaoui. The antioxidant effect of agricultural waste from saffron (*Crocus sativus*).
- CP105. ID167:**Z. El Aslaoui & Y. Karzazi. Molecular design of new aromatic materials for photovoltaic devices: Correlation structure/optoelectronic properties.
- CP106. ID168:**Z. El Aslaoui & Y. Karzazi. New π -Conjugated Materials Based on Thiophen and Oxadiazol Candidates for Organic Solar Cells Application: A DFT Study.
- CP107. ID171:** K. Chatoui, S. Echihi, H. Harhar, M. Azeem Arsad & M. Tabyaoui. The use of *Lepidium sativum* as green inhibitor for corrosion of mild steel in 1M Hydrochloric acid solution.
- CP108. ID186:** H. El-Kouch, L. El-Farh, J. Sayah & A. Challioui. Electronic and Optical Properties of TiS₂ Determined from modified Becke–Johnson and the Local Density Approximation (mBJ-LDA) Study.
- CP109. ID198:** D. Allouss, Z. Iakhal, E. Alilou & M. El Asri. Solubilization of a thin layer of metal for a decorative painting by applying the methodology of experimental designs to optimize the pH and viscosity.
- CP110. ID204:**H. El Ghalia, A. Ouammou & M. Bouachrine. QSAR study of (E)-N-Aryl-2-ethene-sulfonamide analogues as microtubule targeted agents in prostate cancer using statistical methods.
- CP111. ID206:**A. Bendamou, R. Malek & K. Kassmi. Monte Carlo simulation of the early stages of the deposition of thin films: case CdTe/GaAs.
- CP112. ID219:**C. Zannagui, S. El Barkany, A. Elidrissi & H. Amhamdi. Removal of Cu (II) from aqueous solution by modified cellulose: cellulose acetate-EDTA.
- CP113. ID221:**R. Chadli, M. Elazouzi, A. Aouniti, J. Kajima Mulengi & A. M. Elhorri. The study of pyrazole 4-(4,5-dihydro-1H-pyrazol-5-yl)-N,N-dimethylaniline (D) as a corrosion inhibitor for mild steel in 1M HCl.
- CP114. ID226:** I. Djamila, M. Kaid & D. Villemein. Elimination du cobalt (ii) par procede d'extraction liquide – liquide en utilisant l'acide aminododecyl diphosphonique synthetise suivie par spectrometrie uv-visible.
- CP115. ID324:**S. Skal, A. Guenbour, A. Bellaouchou & H. Idrissi. Effect of abrasion on corrosion of stainless steel in phosphoric medium.
- CP116. ID330:** Z. Elafia, M. Y. Messous, B. Belhorma, A. Moussaif, M. Tahri, M. R. Briche & M. Cherkaoui. Yb/Ce-Doped TiO₂: synthesis of nanoparticles powder as photovoltaic cell down converter.
- CP117. ID332:** O. Qabaqous, M. Naciri Bennani & N. Tijani. Elaboration and characterization of microfiltration and ultrafiltration membrane of natural Moroccan clay: application for removal of Chromium.
- CP118. ID337:**S. Karim, A. Aouniti, F. El hajjaji, M. Taleb, C. Belbachir & I. Rahhou. Metallic contamination (Cd, Pb, Cu, Zn, Fe, Co) of the Octopus (*Octopus Vulgaris* Cuvier, on 1797 and *Sardina Pilchardus*) fished in the Mediterranean coast from the north east of Morocco.
- CP119. ID344:**M. El Azzouzi, A. Aouniti, S. Tighadouin, H. Elmsellem, S. Radi, B. Hammouti, A. El Assyry, F. Bentiss & A. Zarrouk. Some hydrazine derivatives as corrosion inhibitors for mild steel in 1.0 M HCl: Weight loss, electrochemical, SEM and theoretical studies.
- CP120. ID379:**I. Hamdani, A. Zarrouk, A. Boujakhrouf, N. Chahboun, A. Bouyanzer, O. Mokhtari, R. V. Santana & B. Hammouti. Antioxidant activity and corrosion inhibitive behavior of *Garcinia cola* seeds on mild steel in hydrochloric medium.

- CP121. ID412:**B. Bouras, A. Mansri, T. Hocine, Z. Redouane & A. Mansri. Turbidity removal from clay suspension by coagulation/flocculation using modified p-phenylenediamine/poly(acrylamide).
- CP122. ID479:**M. Tahiri, J. Aaziz, J.douay, A.Skali &D.Elbekali. Characterization of the liquid discharges of Suerafor and followed by the implemented step.
- CP123. ID483:** O. Mokhtari, I. Hamdani, A. Chetouani, H. El Halouani, A. Aouniti, M. Berrabah & A. Lahrach. Inhibition of Steel Corrosion in 1M HCl by *Jatropha Curcas* oil.
- CP124. ID533:**N. Saidi, M. Ramdani, H. Elmsellem,K. Azzaoui, R. Rmili, F. Yousfi,B. EL Mahi, A. Aouniti & B. Hammouti. A Moroccan *Opuntia Ficus Indica* methanolic flower extract as an eco-friendly antioxidant and anti-corrosion for mild steel in 1 M HCl.
- CP125. ID574:** A. Arroussi, K. Benhamed, H. Riahi, L. Bouklihacene & S. Louhibi. Synthesis and Characterization of MOFs Derivatives Cu (II) and Co (II) benzentricarboxylate.
- CP126. ID827:** C. El Abiad, S. Radi, M. A. F. Faustino, M. G. P. M. S. Neves. Synthesis of (tetraphenylporphyrin-carbaldehyde) modified silica as a new sorbent for the removal of toxic metals from aqueous solutions.
- CP127. ID819:** I. Maftouha, A. Moussaifa, A. Moutaouakkila, A. Iddara, M. Mzibria, A. Mesfiouib & N. El Abbadia. Synthesis of haptens for immunoassay of chlorpyrifos-ethyl as organophosphorus pesticides.
- CP128. ID842:**H. Eddaoui, Z. Belattmania, F. Bentiss, C. Jama, A. Schamel, A. Reani & B. Sabour. Yield, vibrational and resonance spectroscopic analyses of agar polymer from the invasive red alga *Gracilaria vermiculophylla* from Oualidia lagoon (Morocco).
- CP129. ID512:**S. SLASSI, A. Amine & M. AARJANE. Synthesis of novel Imidazole ligands and their complexes and evaluation of their antimicrobial activity.
- CP130. ID514:** J. E. Ouzemou, R. Lhissou& A. Boulli. Forest density characterization in the High Atlas Mountains of Beni Mellal using geomorphological and remote sensing data.
- CP131. ID516:**A. El khlifi, H. Lgaz, R. Salghi, S. Jodeh, H. Oudda, M. Ouhssine. Weight Loss and Electrochemical Studies on the Corrosion Inhibition of Some Coumarin Derivatives on Mild Steel in 1.0 M HCl.
- CP132. ID524:**N. Manasse, A. Guenbour, M. Kacimi, A. Bellaouchou & S. de Cliff. Effect of the mineral compound (CaZn₂ (OH)₆ · 2H₂O) on brass in potable water.
- CP133. ID534:**N. Saidi, M. Ramdani, K. Azzaoui, A. Lamhamdi, R. Rmili, B. EL Mahi, A. Aouniti & B. Hammouti. Adsorption of metals using hydroxyapatite in the presence of *Opuntia cladodes* pectin from Morocco.
- CP134. ID549:**S. Fellak & A. Boukir. Comparative spectroscopic study of hard and soft Moroccan wood: a case of *argania spinosa* and *cedrus atlantica* wood.
- CP135. ID580:**S. Mizani, H. Zerradi, S. Lahlou, S. Ouaskit, A. Dezairi & D. Saifaoui. Anomalous behaviour of hyperbolic heat equation at high frequencies and a very short time interval.
- CP136. ID583:**W. Misrar, M. Loutou, L. Saâdi, O. Cherifi, M. Mansori & M. Waqif. Preparation of porous materials from a mixture of cordierite powder and natural organic matter.
- CP137.** Behavior of 904l stainless steel in contaminated phosphoric acid by Clay as green inhibitor. M. Boudalia, A. Bellaouchou, A. Guenbour, M. Tabyaoui, A. Laqhaili
- CP138. ID566:** S. Louhibi, I. Belfilali, R. Mahboub, L. Boukli, S. El Kadiri, R. Touzani & T. Roisnel. New Biomaterials for Catalytic Applications
- CP139. ID858:** Hameed Saleh Ali YAHYA, A. JILALI, M. ARABI, A. FAHSSI, M. M. M.

MOSTAREH, M. BATTIOUI & A. CHAFI. Heavy metal groundwater contamination at the Triffa aquifer, northeastern Morocco.

CP140. ID857: A. Bouoidina, M. Chaouch, A. Lahkimi, Z. Rais, M. Taleb, A. Abdellaoui, F. El-Hajjaji & B. Hammouti. Study of the antioxidant activity and the anti-corrosion action of the *Foeniculum Vulgare* extract for mild steel corrosion in hydrochloric acid

CP141. ID9: B. Medjahed Bendida, M. Bouzit. Validation Study of the experience Mock Urban Setting Test.

CP142. ID139: M. Bouhrim, H. Mekhfi, A. Legssyer, A. Ziyat, M. Aziz & M. Bnouham. Study of the effect of the seed oil of *Opuntia Dellinni* on experimental hyperglycemia in rats.

CP143. ID598: M. Drissi & M. Fahim. Synthesis and characterization of ligand diimines 1,2-bis(1 phenylethylidene) hydrazine and their complexes of copper and nickel

CP144. ID901: S. Echihi, W. Qafsaoui, N. Benzbiria, M. Tabyaoui, & A. Guenbour. Inhibition of Copper Corrosion in 0.1M Na₂SO₄ Solution by 1.3.4 thiadiazole 2.5 dithiol(DMTD)

FIRST SESSION: ORGANIC, INORGANIC AND NANOMATERIALS	
Room 1	
Chair: Prof. A. Zerrouk & Prof. A. Chetouani	
11:30 – 13:00	<p>CO182. ID46: W. Yassine, S. Akazdam, S. Zyade, B.Gourich & M. Bennani. Batch adsorption of phenol from industrial wastewater using olive Mill Waste by product as a new adsorbent: kinetics, isotherms, and thermodynamics study.</p> <p>CO183. ID817: C. Falaha, Y. Ben Smida, I. Ledoux-Rak & H. Boughzala. Synthesis, structure and optic nonlinear of a new phosphate $K_6Bi_{13}(PO_4)_{15}$.</p> <p>CO184. ID820: M. Hammi, A. Maaroufi & G.Pinto. Phosphate glass/transition metal composites: A new generation of materials with interesting non linear electrical and thermoelectrically properties.</p> <p>CO185. ID821: A. Maaroufi, O. Oabi, B. Lucas & S. Degot. New materials for photovoltaic and thermoelectricity applications: phosphate glasses/metals composites.</p> <p>CO186. ID835: A.Mokadem, B. Benaffane, M.Bousslama, O.Benhelal & D.Raouti. First principles study of the structural, electronic properties of the oxynitride compounds X_2N_2O (X = Ge, Si, and C) with Modified Becke-Johnson Exchange Potential.</p> <p>CO187. ID256: I. Warad & A. A. Baha. Solvatochromism of mono-hydrated Bromo-bis-(1,3-propylene-diamine)copper(II) bromide complexes.</p> <p>CO188. ID257: I. Warad, F. Abu Saleem, S. Musameh & A. Al Ali. Mixed triamine/diamine $[Cu(NNN)(NN)]Br_2$ dicationic complexes single crystal and Hirshfeld surface analysis.</p> <p>CO189. ID258: I. Warad, H. Suboh & A. Al Ali. Physicochemical of pentadentate N_3S_2 ligand and their Cu(II) complexes, DNA-binding evaluation.</p> <p>CO190. ID201: Y. EL Aoufir, H. Lgaz, H. Bourazmi, Y. Kerroum, Y. Ramli, A. Guenbour, R. Salghi, A. Zarrouk & H. Oudda. Quinoxalines Derivatives as Corrosion Inhibitors of Carbon Steel in Hydrochloric Acid Media: Electrochemical, DFT and Monte Carlo simulations studies.</p> <p>CO191. ID860 : O. El Abouti, A. Gueddida, E. Alonso-Redondo, H. Huesmann, E. H. El Boudouti, W. Tremel, B. Djafari-Rouhani & G. Fytas. Dual phononic and photonic behavior of hybrid PMMA-BaTiO₃ nano-layers.</p> <p>CO192. ID899: R. Boyaala, F. Abrigach, Z. Bouanane, M. El Kodadi & R. Touzani. Comparative study of catecholase activities using in-situ transition metal complexes containing Quinoxaline Derivatives</p>
SECOND SESSION: WATER, POLLUTION AND ENVIRONNEMENT	
Room 2	
Chair: Prof. A. Bouyanzar & Prof. M. El Kodadi	
11:30 – 13:00	<p>CO193. ID832: Mariya B., Azzouz B. & Abdelbasset B. Effect of water stress on <i>livistona australis</i> growth.</p> <p>CO194. ID56: I. Merimi, Y. El Ouadi, M. Elfal, A. Bouyanzar, H. Elmsellem, N. Lahhit, H. Bendaif, A. Zarrouk, A. Brahimi & B. Hammouti. Effect of 1,5-dibenzyl-1H-pyrazolo[3,4-d]pyrimidine-4(5H)-thione on inhibition of mild steel corrosion in 1M HCl.</p> <p>CO195. ID833: Mohammed K., Abderrahime B & Noureddine B. Assessment of physicochemical and bacteriological quality of ground water in the triffa plain (north-east Morocco).</p> <p>CO196. ID528: K. Alaoui, Y. El Kacimi, M. Galai, K. Dahmani, R. Tuir, A. El Harfi & M. Ebn Touhami. Poly (1-phenylethene): As a novel corrosion inhibitor for carbon steel / 1.0</p>

	<p>M hydrochloric acid interface.</p> <p>CO197. ID43: E. Mourid, M. Lakraimi, L. Benaziz & M. Berraho. Removal of Remazol Brilliant Blue R from aqueous solution by adsorption using a calcined Layered Double Hydroxides [Zn₂-Al-CO₃].</p> <p>CO198. ID839: M. El Azzouzi, A. Aouniti, I. Belfilali, A. Zarrouk & B. Hammouti. Anticorrosion potential of some new synthesized Schiff bases on mild steel in hydrochloric acid solution: Gravimetric, electrochemical, surface morphological and theoretical investigations.</p> <p>CO199. ID840: F. Fatah & J. Habib. Climate change and its effects on development of the Moroccan economy.</p> <p>CO200. ID841: Z. Belattmania, A. Schamel, F. Bentiss, C. Jama, R. Zrid, A. Reani & B. Sabour. Bioremoval of hexavalent chromium by alginate waste of the invasive seaweed <i>Sargassum muticum</i> harvested from the Atlantic coast of Morocco.</p> <p>CO201. ID390: R. Lamrini El Ouahabi & M. Allouch. Physicochemical treatment of Tangier public landfill leachate by clay powder.</p> <p>CO202. ID350: M. Goumri, P. Gillet, A. Chaouti, N. E. Chouikh, A. Maarouf, M. Cheggour & A. Mouabad. Spatial distribution of the polychaete fauna of intertidal rocky shore of Safi as response to anthropogenic influence (NW Morocco).</p> <p>CO203. ID357: A. Mansri, A. Mansri, B. Bouras & A. Bendraoua. Textile blue basic (BBT) removal from waste water by using modified Bentonite/Polyacrylamide composites.</p> <p>CO204. ID444: A. Sayout & A. Romane. Antioxidant properties of <i>Lavandulastoechas L.</i> collected from different regions of Morocco.</p>
11:30 – 13:00	FOURTH SESSION: RENEWABLE ENERGIES AND SUSTAINABLE DEVELOPMENT Room 4
	<p>Chair: Prof. M. Barbachi & Prof. D. Bria</p> <p>CO205. ID822: M. A. Arshad & A. Maaroufi. A New Kinetic Approach to the Reaction Mechanisms of Thermally Activated Condensed Phase Processes.</p> <p>CO206. ID824: S. Boughaba, Z. Aouf, M. Berredjem & N. E. Aouf. A simple and efficient ultrason-assisted protocol for N-Bz and O-Bz protection of amines and phenols.</p> <p>CO207. ID825: K. Bechlem, B. Belhani, N. E. Aouf & M. Berredjem. A one-pot, three-component and green synthesis of novel sulfamoylureidophosphonates.</p> <p>CO208. ID836: B. Lahfaoui, S. Zouggar, M. L. Elhafyani & M. Seddik. An experimental study of an MPPT control for a hybrid PV Wind system.</p> <p>CO209. ID837: A. Hadri, B. Fares, C. Nassiri, A. El Hat, L. Larbi & A. Mzerd. Investigation of structural, optical and electrical properties of In doped SnO₂ thin films deposited by spray pyrolysis.</p> <p>CO210. ID843: R. Gaamouche, A. El Hasnaoui, A. Redouane & B. Belhorma. Renewable energy from the ocean is an urgent call for research.</p> <p>CO211. ID51: A. Kerkour-El Miad, F. Jeffali, A. Nougouai & B. EL Kihel. Grain shape effect on the elastic-inelastic behavior of polycrystals under cyclic loading.</p> <p>CO212. ID57: Z. M. E. Fahim, S. M. Bouzzine, M. Bouachrine & M. Hamidi. Quantum chemical investigation on optoelectronic properties of triphenylamine based dyes for solar cells applications.</p>
13:00	Closing Ceremony & Lunch