

The 8th Maghreb Conference on
Desalination and Water Treatment
CMTDE 2022

CMTDE 2022
PROGRAMME

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Laboratoires



8th

Maghreb Conference on
Desalination and Water
Treatment

19 - 22 December 2022

Sol Azur Beach Hotel 4^{*}, Hammamet, Tunisia

Organized by



Laboratoire de Recherche "Dessalement
et Traitement des Eaux"

With the collaboration of



European
Desalination
Society



TUNISIAN DESALINATION ASSOCIATION (TDA)

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PROGRAM OUTLINE

MONDAY 19, 2022

15:00-19:00 **Registration**

20:00 **Dinner**

TUESDAY DECEMBER 20, 2022

8:00-9:00 **Registration**

Opening Ceremony

- Prof. Béchir HAMROUNI, Tunisian Desalination Association President.
- Prof. Moez CHAFRA, President of Tunis El Manar University.
- Prof. Nouredine AMDOUNI, Dean of Tuns Faculty of Sciences.

Homage To Professor Miriam BALABAN

- Prof. Miriam BALABAN, General Secretary of European Desalination Society, Editor in Chief of the journal Desalination and Water Treatment.

10:00-10:45 **Conference 1 : Enrico DRIOLI**
"Progresses in Integrated Membrane Systems for fresh water production and minerals recovery from the Sea"

10:45-11:15 **Coffee break & Group Photo**

11:15-11:50 **Conference 2 : Hervé BUISSON**
"Challenges and Opportunities in Translating Science and Innovation to Industry: An Industrial Perspective for Desalination and Wastewater Reuse"

11:50-12:25 **Conference 3 : Núria FIOL**
Elimination of metal ions by microalgae: A research and learning project

12:25-13:00 **Conference 4 : Giuliana MAGNACCA**
A Heterogeneous biocatalyst for wastewater depollution: the system Soybean Peroxidase @ Al₂O₃

13:00-14:30 **Lunch**

Parallel Oral Session 1

Room "1": Desalination processes/ Energy

Room "2": Materials for Water treatment

Room "3": Wastewater Treatment

16:10-17:30 **Coffee break + Posters Session 1**

20:00 **Dinner**

WENSDDAY DECEMBER 21, 2022

9:00-9:35 **Conference 5 : Abdeltif AMRANE**
The coupling of an electrochemical process and a biological treatment for the removal of recalcitrant organic compounds – Case study: nitroimidazole antibiotics family

9:35-10:10 **Conference 6 : Hamza EL FIL**
Desalination of irrigation water: Added values and disadvantages

10:10-10:45 **Conference 7 : Moncef GUEDDARI**
Water salinization in Tunisia: causes, effects and remediation

10:45-11:15 **Coffee break**

11:15-12:55 **Parallel Oral Session 2**
Room "1": Materials for Water treatment
Room "2": Wastewater treatment
Room "3": Water Treatment

13:00-14:30 **Lunch**

14:30-16:15 **Parallel Oral Session 3**
Room "1": Water Treatment
Room "2": Wastewater Treatment 1
Room "3": Wastewater Treatment 2

16:15-17:30 **Coffee break + Poster Session 2**

20:00 **Dinner**

THURSDAY DECEMBER 21, 2022

9:30-10:05 **Conference 8 : Philippe HABERSCHILL**
Intérêt des générateurs thermodynamiques pour le dessalement

10:05-10:40 **Conference 9 : Sadok BEN JABRALLAH**
Evaporation in desalination processes: Mechanisms and recent scientific progress.

11:10 -12:30 **Round Table, General Assembly of the TDA**
Closing session

12:30-14:00 **Lunch**

TUESDAY AFTERNOON
DECEMBER 20, 2022

ORAL SESSION 1

Room 1

Desalination Process / Energy

14:30-14:45	CMTDE 2022_22 : Improving the productivity of a simple and hybrid solar still using nanoparticules HIDOURI Khaoula, ELZEMZMI Ibtissem, AKROUT Hiba, AJARI Han KHALED F., HAMZAOUI A., BENHMIDENE A., CHAOUACHI B.
14:45-15:00	CMTDE 2022_171 : Performance of triangular solar still with different shapes of absorber. BOUDHIAF Ridhaa, KESSENTINI Sameh, DHIEMI Nerimen, DRISS Zied, ABID Mohamed Salah, ATTIA Mohammed El Hadi, AISSA Abederrahmane
15:00-15:15	CMTDE 2022_119 : Removal heavy divalent metals from aqueous solution using polymer supported schiff bases 4-(5-mercapto-1,3,4-thiadiazol-2-ylimino) pentan-2-one. MADANI Salim*, MOKHNACHE Kamel and CHAREF Noureddine
15:15-15:30	CMTDE 2022_172 : Systèmes de dessalement de l'eau par le procédé Humidification-déshumidification : Configurations et performances OUESLATI Adel, and MEGRICHE Adel
15:30-15:45	CMTDE 2022_218 : Experimental evaluation of evaporated and condensed mass flow rates of a solar powered humidification-dehumidification desalination system Sirine SAIDI*, Rym BEN RADHIA, Sadok BEN JABRALLAH
15:45-16:00	CMTDE 2022_219 : Comparison of different configurations to improve liquid film evaporation in a vertical annulus. Rym BEN RADHIA, Sadok BEN JABRALLAH
16:00-16:15	CMTDE 2022_103 : Exergoeconomic analysis of a parallel/ cross feed multi-effect desalination with thermal vapour compression system Z. FERGANI, Z. TRIKI*, R. MENASRI and M. N. BOUAZIZ
16:30-17:30	Coffee break + Poster Session 1

TUESDAY AFTERNOON
DECEMBER 20, 2022

ORAL SESSION 1

Room 2

Materials for Water Treatment

14:30-14:45	CMTDE 2022_141 : Elaboration and characterization of clayey bentonite tubular membrane and its performance in the treatment of effluent from textile dyeing industry followed by adsorption using marine waste. Photochemical regeneration of the adsorbent CHIH R., AYARI F., TRABELSI AYADI M., COMITE A.
14:45-15:00	CMTDE 2022_169 : Preparation and characterization of PVDF/ZnOPb composite ultrafiltration membranes BEN DASSI R., CHAMAM B., MERICQ J. P., Faur C., EL MIR L., TRABELSI I., HERAN M.
15:00-15:15	CMTDE 2022_202 : Synthesis and characterization of PolyVinyl Chloride (PVC) based plasticized polymer membranes: Effects of polymer blend composition on membrane properties. ALYANI I., MAHMOUD H., NCIB S., ELALOUI E., BOUGUERRA W.
15:15-15:30	CMTDE 2022_210 : Effect of Plasticizer Type on polymer inclusion membranes properties and performance. MAHMOUD H., NCIB S., OTHMEN K., LARCHET Ch., DAMMAK L., ELALOUI E., BOUGUERRA W.
15:30-15:45	CMTDE 2022_50 : Parametric study of photocatalytic ceramic membrane for colored wastewater treatment ABED Yakine, ZRELLI Adel and CHAOUACHI Béchir
15:45-16:00	CMTDE 2022_199 : Iron-based MOFs for the sorption of inorganic arsenic species in aqueous media. Isotherm and kinetic studies. AZRI Afef, WALHA Khaled, CONDE-GONZÁLEZ José Elías, PEÑA MÉNDEZ Eladia M., FONTAS Clàudia, and SALVADÓ Victoria
16:00-16:15	CMTDE 2022_95 : Extraction synergique du cobalt (II) par l'acide di-(2-ethylhexyl) phosphorique (D2EHPA) LOUICHAOU T., GHEBGHOUB F. et BARKAT D.
16:30-17:30	Coffee break + Poster Session 1

TUESDAY AFTERNOON
DECEMBER 20, 2022

ORAL SESSION 1

Room 3

Wastewater Treatment

14:30-14:45	CMTDE 2022_193 : Green synthesis of iron oxide nanoparticles using opuntia ficus-indica and application for dye removal ABDEDAYEM Asma*, CHEMINGUI Hajer, NOURI Hanen, BEN AMOR Taissire, OUEDERNI Abdelmottaleb, HAFIANE Amor
14:45-15:00	CMTDE 2022_73 : Gliding arc plasma pre-treatment for the biodegradation of a pharmaceutical pollutant. TRIFI Beyram, MARZOUK TRIFI Ikhlass, ALATRACHE Abir
15:00-15:15	CMTDE 2022_30 : Comparative assessment of ionizing radiation technologies applied for inflammatory drugs degradation in the environment ARIBI Jihene, JAHOUACH-RABAI Wafa, TRABELSI Mohamed Hedi, AZZOUZ Zohra, HAMROUNI Béchir
15:15-15:30	CMTDE 2022_112 : Characterization and treatment of open-dumped solid wastes at Hammam Jedidi barite mine, northern Tunisia TLILI Faouzia, REGAYA Kamel
15:30-15:45	CMTDE 2022_94 : Phytoremediation potential of Quinoa (Chenopodium Quinoa Willd) irrigated with treated greywater FILALI Hanen, SOUGUIR Dalila, and HACHICHA Mohamed
15:45-16:00	CMTDE 2022_74 : Removal of cationic and anionic dyes from aqueous solution by new bio adsorbent. MHADHBI Houda, GAMOUDI Safa, SRASRA Ezzeddine
16:30-17:30	Coffee break + Poster Session 1

WEDESDAY MORNING
DECEMBER 21, 2022

ORAL SESSION 2

Room 1

Materials for Water Treatment

11:15-11:30	CMTDE 2022_147 : Reverse osmosis membrane fouling by iron oxides: Prevention and regeneration of fouled membrane. MELLITI Emna, ELFIL Hamza
11:30-11:45	CMTDE 2022_143 : Elaboration and characterization of clayey bentonite tubular membrane and its performance in the treatment of an effluent from textile dyeing industry followed by adsorption using marine waste. Photochemical regeneration of the adsorbent. CHIHII Rania, AYARI Fadhila, TRABELSI AYADI Malika
11:45-12:00	CMTDE 2022_168 : Enhancement of reactive textile dye removal by synthesized PVDF/ZnOPb adsorptive membranes CHAMAM Baha, BEN DASSI Roua, MERICQ Jean Pierre, FAUR Catherine, TRABELSI Ismail, EL MIR Lassaad, HERAN Marc
12:00-12:15	CMTDE 2022_27 : Behavior of reverse osmosis membrane for removal of dye pollutants from wastewater BNEIDJEG Mohamed Imigine, MNIF Amine, HAMROUNI Béchir
12:15-12:30	CMTDE 2022_118 : Impact of chlorine-based disinfectants on PEHD water pipes performance. TALHI Fatima Zohra, NOUAR Yacine
12:30-12:45	CMTDE 2022_82 : Fabrication and characterization of a novel Lysine-PVA electrospun fibers for gold nanoparticles extraction from water BEN KHALIFA E., CECONE C., MELANDRINO M., MAGNACCA G., BRACCO P.
13:00-14:30	Lunch

WEDNESDAY MORNING
DECEMBER 21 , 2022

ORAL SESSION 2

Room 2
Wastewater Treatment

11:15-11:30	CMTDE 2022_116 : Comparison between four different Al(OH) ₃ coagulant processing for the treatment of the outlet water of urban wastewater treatment Chotrana I plant for agriculture purposes ATTOUR A., TOBOULBI Z., RADDADI H., ELFIL H., AUDONNET F.d, VIAL Ch.
11:30-11:45	CMTDE 2022_146 : Low-cost efficient olive mill wastewater treatment RAISSI Sahar, FAKHFAKH Fatma, NAJAR Hanene
11:45-12:00	CMTDE 2022_108 : Performances of constructed wetland system to treat whey and dairy wastewater during a macrophytes life cycle. MAHMOUDI A., HANNACHI C., MHIRI F., HAMROUNI B.
12:00-12:15	CMTDE 2022_150 : Removal of Dissolved Organic Matter extracted from Tunisian water by adsorption onto modified activated carbon JAOUADI Mouna, HAMZAOUI Ahmed Hichem
12:15-12:30	CMTDE 2022_93 : R Effet de la minéralisation sur l'élimination de la matière Organique azotée par adsorption sur charbon actif. HAMZAOUI Sarra, MERAKCHI Akila, GUERGAZI Saadia et ACHOUR Samia
12:30-12:45	CMTDE 2022_187 : Valorisation des eaux usees epurees dans l'irrigation, Cas du step de Sidi Merouane, wilaya de MILA, Est Algérien. ATHAMENA Ali, BELALITE Halima
12:45-13:00	CMTDE 2022_24 : Study of the retention capacity of Algerian bentonite clay with respect to chromium (VI) for its elimination NIBOU Dj., FAROUK S., DJAWAD F. and AMOKRANE S.
13:00-14:30	Lunch

WEDNESDAY MORNING
DECEMBER 21 , 2022

ORAL SESSION 2

Room 3
Water Treatment

11:15-11:30	CMTDE 2022_213 : Comparative Study of the Elimination of Fluoride, Sulfate and Phosphate Ions by Electrocoagulation: Application to Natural Waters. CHIBANI Amel, NCIB Sana, BARHOUMI Afef, , ELALOUI Elimame, BOUGUERRA Wided
11:30-11:45	CMTDE 2022_110 : Extraction par nanofiltration de mélange "Fer+Cuivre" : Optimisation du procédé DIDI Mohamed Amine, AOUI Boutheyna, DIDI Amel
11:45-12:00	CMTDE 2022_195 : Improvement of tap water quality by domestic filtration systems. KALBOUSSI Nesrine, MELLITI Emna, MEJRI Alma, ELFIL Hamza
12:00-12:15	CMTDE 2022_191 : Separation of metal ions by nanofiltration process. Application of Box-Behnken Design to the modelling of cadmium retention. DIB Nihal Y., BELKHOUCHE Nasr-Eddine*, BENYAHIA N.
12:15-12:30	CMTDE 2022_152 : Cyclops dans les barrages d'eau potable, problématique, solutions possibles Cas de la région de Mostaganem, Algérie DERIET Abdelhamid, OUDINA Hadjer, SEGHOUBANI Nawel, BENDEDDOUCH Badis, MOUFFOK Fawzia
12:30-12:45	CMTDE 2022_120 : I Compréhension de la variation du chlore dans deux points d'eau : cas du barrage Chorfa et eau de dessalement. CHIALI CHARIF K., TROUZINE C., MIMANNE G., RAMEDANI N.
12:45-13:00	CMTDE 2022_215 : Study of seawater desalination brine by Electrolysis process NOUBIGH Ichrak, KHLEIFIA Naima, ABIDI Houda
13:00-14:30	Lunch

WEDNESDAY AFTERNOON
DECEMBER 21 , 2022

ORAL SESSION 3

Room 1
Wastewater Treatment 1

14:30-14:45	CMTDE 2022_196 : Assessment of physicochemical and microbiological quality of the old Port of Bizerta waters affected by lytic phages infecting <i>Salmonella enterica subspecies arizonae</i> . GRAMI Emna, LAADOUZE Imen, HAFIANE Amor, SULLIVAN SEALEY Kathleen and SAIDI Neila
14:45-15:00	CMTDE 2022_131 : Recovery of plastic waste in the fixing of a methylene blue type textile dye. KHODI Kenza, AMOKRANE Samira, REMMOUCHE Hind Asma and NIBOU Djamel
15:15-15:30	CMTDE 2022_164 : Valorization of treated and desalinated wastewater in an aquaponic system. BENMANSOUR Ibtissem*, ROTH Juliane, WEISE Gregor, CHERIF Hayet, ROUIS Sofiene and ELFIL Hamza
15:30-15:45	CMTDE 2022_158 : Performance of a hybrid process integrating coagulation-flocculation with membrane filtration for the treatment of Soap industry wastewater: safe reuse purpose. JAMMELI Linda, LOUHICHI Ghofrane, GHRABI Ahmed and KHOUNI Imen
15:45-16:00	CMTDE 2022_121 : Adsorption and optimisation of a basic dye methylene blue on a NaX zeolite. HAMMOUDI HADDA Aya, FERHAT Djawad, NIBOU Djamel, AMOKRANE Samira
16:00-16:15	CMTDE 2022_97 : Study of leaks with piezometric analysis of the Beni Haroun DAM. ZEKKARI Nesrine, LABADI Abedallah sedik
16:15-17:30	Coffee break + Poster Session 2

WEDNESDAY AFTERNOON
DECEMBER 21 , 2022

ORAL SESSION 3

Room 2
Wastewater Treatment 2

14:30-14:45	CMTDE 2022_205 : Ion Exchange Equilibrium between DOWEX 50X8 Resin and Electrolyte Solution: Selective Removal of Copper (II) ions from Wastewater. CHAABANI Nabila, NCIB Sana, BOUGEURRA Wided, ELALOUI Elimame
14:45-15:00	CMTDE 2022_206 : Separation of copper (II) and nickel (II) ions from wastewater by polymer inclusion membrane containing di(2-ethylhexyl) phosphoric acid. NCIB Sana, CHIBANI Amela, BARHOUMI Afef, OTHMEN Kemla, DAMMAK Lasaad, ELALOUI Elimem, BOUGUERRA Wided
15:15-15:30	CMTDE 2022_112 : Characterization and treatment of open-dumped solid wastes at Hammam Jedidi barite mine, northern Tunisia TLILI Faouzia, REGAYA Kamel
15:30-15:45	CMTDE 2022_194 : Modelling and optimization of polluted water treatment processes using ionizing technologies and estimation of energy consumption JAHOUACH-RABAI Wafa, ARIBI Jihene, TRABELSI Mohamed Hedi, AZZOUB-BERRICHE Zohra, HAMROUNI Bechir
15:45-16:00	CMTDE 2022_138 : Etude de l'efficacité de certaines méthodes de désinfection sur une eau contaminée par les légionelles. BENABBOU A, MOUFFOK F, MAHIDDINE S, RAHAL K, HAMROUNI
16:00-16:15	CMTDE 2022_36 : Apport en polluants organiques persistants (HAPs, PCBs) des rejets telluriques au proche littoral d'Annaba, Algérie. KHALED-KHODJA Soumeja
16:15-17:30	Coffee break + Poster Session 2

WEDNESDAY AFTERNOON
DECEMBER 21, 2022

ORAL SESSION 3

Room 3
Water Treatment

14:30-14:45	CMTDE 2022_222 : Capacitive de-ionization with reduced graphene-based electrodes for cadmium removal A. AOUNI*, A. HAFIANE
14:45-15:00	CMTDE 2022_35 : Mechanisms fluoride removal from Mévlaoui tap water by electro coagulation DHIFALLAH Sirin, ATTOUR Anis ⁴ , VIAL Christophe, AUDONNET Fabrice, ELFIL Hamza, ZAGROUBA Fethi
15:15-15:30	CMTDE 2022_92 : Inhibition of CaCO ₃ scale formation in hard water using magnetic fields. BEN LATIFA Sirine, CHEAP-CHARPENTIER Hélène, PERROT Hubert, BEN AMOR Yasser*
15:30-15:45	CMTDE 2022_149 : Fluoride removal from wastewater by electrocoagulation. BEN SALHA Ghada, MISSAOUI Khaoula, HAMROUNI Béchir
15:45-16:00	CMTDE 2022_100 : Optimisation scenario of a treated textiles effluents. MZAHEMA Sourour, SOUGUIR Dalila, BEN AMAR Raja, DUPLAY Joelle, and HACHICHA Mohamed
16:00-16:15	CMTDE 2022_223 : Electroflocculation ballested a new technology for water treatment in isolated regions. BRAHMI Khaled, BOUGUERRA Wided, HAMROUNI Béchir
16:15-17:30	Coffee break + Poster Session 2

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Poster Session 1

CMTDE 2022_1	Études de la photodégradation de Rouge Congo avec ZnAl ₂ O ₄ synthétisé S. BOUDIAF*, N.NASRALLAH, M. MELLAL, M.A.DJILALI, B. BRAHIMI
CMTDE 2022_4	Evaluation of organochlorine pesticides in surface water from Madjerda river Tunisia NECIBI Mouna, MZOUGHY Nadia
CMTDE 2022_6	Conceptual DFT elucidation of the reaction mechanism in polysulfone PSF and polyethylene glycol PEG membranes HADJOU BÉLAID Z.*, GOMRI A., BENHABIB L., ABDOUNE F.Z
CMTDE 2022_7	Public landfill leachate characteristics and treatment by ozonation for the removal of pollutants RAMDANI Nadia, KHEDDAOUI Abdelkrim, NEMMICH Said, NASSOUR Kamel, TILMATINE Amar
CMTDE 2022_8	Synthesis and structural study by ray diffraction of the Schiff base N-[(E)-(2,4-dihydroxyphenyl) methylidene]-4H-1-2-4 triazol-4-amine and its Silver complex BOUALIA B CHEROUANA A BOUHIDEL Z
CMTDE 2022_9	Determination of pore size distribution (PSD) using the adsorption isotherms on the activated carbon of the RES adsorbate OUESLATI K.*, BEN LAMINE A.
CMTDE 2022_10	Experimental study of a coupled unit for space cooling and water desalination MISSAOUI Sami, DRISS Zied, BEN SLAMA Romdhane and CHAOUACHI Bechir
CMTDE 2022_11	Electrochemical treatment in aqueous solution of oxytetracycline by electroFenton using an activated carbon doped by zinc oxide AYADI Ameni*1, JAOUADI Mouna1, SCIALDONE Onofrio2, PROIETTI Federica, HAMZAQUI Ahmed Hichem
CMTDE 2022_12	Immobilization of heavy metals in wastewaters by apatitic calcium phosphate JEBRI Sonia, FERREIRA José Maria da Fonte, KHATTECH Ismail
CMTDE 2022_15	Structural study and biological properties of new triazole-based ligands and their Silver complexes. BOUALIA B., CHEROUANA A., BOUHIDEL Z.

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Poster Session 1

CMTDE 2022_16	Kinetic study of degradation of antraquinonic dye, C.I. acid blue 25, in aqueous solution by hydrogen peroxide using dawson-type heteropolyanions as CATALYSTS GHODBANE Houria, HAMDAROU Oualid
CMTDE 2022_17	Optimization of separation phases of activated carbon by hydrocyclone process on using response surface methodology BARRAK Nizar*, MILED Wafa, MANNAI Rabeab, BEN RJAB Intissar, HELAL Ahmed Nouredine
CMTDE 2022_18	Performance evaluation of the “MD ORYX” autonomous desalination solar-driven membrane distillation plant in Kairouan, Tunisia MEJBRI Sami, ZHANI Khalifa
CMTDE 2022_20	Analysis of the exergy efficiency of a solar humidification-dehumidification desalination unit FRIKHA Nadera,b, GABSI Slimane,b,c, CHAOUACHI Béchira
CMTDE 2022_21	Study of the productivity of a vacuum membrane distillation system coupled to different types of solar collector GABSI Slimane, FRIKHA Nadera, CHAOUACHI Béchir
CMTDE 2022_25	Somatic coliphages: indicators of viral and fecal contamination for water reclamation and index of wastewater treatment process. JEBRI Sihem, YAHYA Mariem, RAHMANI Faten and HMAIED Fatma
CMTDE 2022_26	Application of response surface methodology for the removal of cationic and anionic dyes by adsorption onto activated biosorbent BOUMAIZA Fatma, MARZOUK TRIFI Ikhlass, MNIF Amine, HAMROUNI Béchir
CMTDE 2022_29	Study of chromium removal by adsorption on activated carbon synthesized from pomegranate peels AZAIEZ S., BEN KHALIFA E., MAGNACCA G., HAMROUNI B
CMTDE 2022_31	Evaluation of effectiveness of electrocoagulation: heavy metals and organic matter removal Barhoumi A., Chibani A., Ncib S., Elaloui EL., Bouguerra W.
CMTDE 2022_32	Removal of naproxen from aqueous solutions by orange peel and activated carbon JMAI Sana*, GUIZA Sami, BAGANE Mohamed

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16 : 30 – 17 : 30

Poster Session 1

CMTDE 2022_33	Adsorption of naproxen from aqueous solution using lemon peel waste JEMAI L., JMAI S., GUIZA S., BAGANE M.
CMTDE 2022_34	Effect of inorganic anions and temperature on natural iron oxide/Oxalate Mediated Photocatalytic Degradation of Organic Compound under UV and solar irradiation BELAIDI Sihem, BELAHLLOU Khalida, REMACHE Wassila, BELATTAR Sara, SERAGHNI Nassira, SEHILI Tahar
CMTDE 2022_42	Treatment of water contaminated by a pharmaceutical residue, by adsorption, on a bio material FEDDAL Imene*, BENT ALI Imen, MIMANNE Goussem, TALEB Safia
CMTDE 2022_51	Insights into the physicochemical properties of Sugar Scum as a sustainable biosorbent derived from sugar refinery waste for efficient cationic dye removal KACIM. M.*, ATMANI F., AKKARI I., SOUKEUR A., YEDDOU-MEZENNER N. and NAVIO J.A
CMTDE 2022_57	Application of the ultrafiltration membrane for treatment of dye wastewater discharge from textile industries. BNEIDJEG Mohamed I., MNIF A., HAMROUNI B.
CMTDE 2022_58	Removal of dyes by adsorption onto activated biosorbent: isotherm and kinetics studies. BOUMAIZA Fatma, MARZOUK TRIFI Ikhlass, MNIF Amine, HAMROUNI Béchir
CMTDE 2022_62	Preparation and characterization of an activated carbon based on PVC plastic waste. Application in the recovery of Cu ²⁺ ions ZIANE Fella, AMOKRANE Samira and NIBOU Djamel
CMTDE 2022_66	Treatment of aqueous solutions polluted by Fe ²⁺ , Zn ²⁺ , Cu ²⁺ ions by ion exchange process using a zeolite type A BENSAFI Soumia, AMOKRANE Samira and NIBOU Djamel
CMTDE 2022_69	Removal of Nitrate by Biosorption using Eucalyptus Leaves. ZENDAH Houda, MAHJOUB Mohamed Amine, MARZOUK TRIFI Ikhlass
CMTDE 2022_71	Study of textural, structural and adsorbent properties of aerogel and xerogel nanostructured zirconia: defluoridation of drinking water. KAMOUN Nesrine*, KADRI YOUNES Mohamed and ELFIL Hamza

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Poster Session 1

CMTDE 2022_72	Removal of Oxytetracycline an Emerging Pollutant from aqueous solution by Electrocoagulation KHOUMATIA Mohamed, GUESMI Sondos
CMTDE 2022_74	Removal of cationic and anionic dyes from aqueous solution by new bio adsorbent. MHADHBI Houda, GAMOUDI Safa, SRASRA Ezzeddine
CMTDE 2022_78	Dégradation de la côte Est de Bizerte (Région de Ghar El Melh) par érosion et intrusion marine : Application du SIG. TLILI Faouzia et REGAYA Kamel
CMTDE 2022_79	Removal of tramadol hydrochloride, an emerging pollutant, from aqueous solution using NF270 nanofiltration membrane. GHAZOUANI Sabrine a,b, BOUJELBANE Faten c, JELLOULI ENNIGROU Dorra, BRUGGENE Bart Van Der and MZOUGHNI Nadia
CMTDE 2022_81	Synthesis and characterizations of Carbon Xerogels from Resorcinol and formaldehyde and modeling. SOUALHIA Amel et ELALOUI Elimame
CMTDE 2022_82	Fabrication and characterization of a novel Lysine-PVA electrospun fibers for gold nanoparticles extraction from water BEN KHALIFA E., CECONE C., MELANDRINO M., MAGNACCA G., BRACCO P.
CMTDE 2022_83	Kinetics of hydrolytic degradation of carbamates pesticides. BAKHTI Hayet, BEN HAMIDA Najib
CMTDE 2022_84	Mineralization and degradation of carbamates pesticides by electro Fenton process and the study of their biodegradation. BAKHTI Hayet, BEN HAMIDA Najib b, HAUCHARD Didier
CMTDE 2022_85	Study of the behavior of innovative materials based on NaY zeolites doped with CuO, Fe ₂ O ₃ and ZnO semiconductors in the adsorption and reduction of Cr(VI) from aqueous solution. NIBOU Djamel, BENHINDA Roufeida, KHOUDI Kinza and AMOKRANE Samira
CMTDE 2022_92	Inhibition of CaCO ₃ scale formation in hard water using magnetic fields. BEN LATIFA Sirine, CHEAP-CHARPENTIER Hélène, PERROT Hubert, BEN AMOR Yasser*

TUESDAY December 20, 2022

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CMTDE 2022_93	Effet de la minéralisation sur l'élimination de la matière Organique azotée par adsorption sur charbon actif. HAMZAOUI Sarra, GUERGAZI Saadia et ACHOUR Samia
CMTDE 2022_95	Extraction synergique du cobalt (II) par l'acide di-(2-ethylhexyl) phosphorique (D2EHPA) LOUICHAOU T., GHEBGHOUB F. et BARKAT D.
CMTDE 2022_96	Photomineralization of 2,5-dihydroxybenzoique acid: formation of light induced secondary oh• (lis-oh•) precursors. TAFER Radia, BOULKAMH Abdelaziz, SLEIMAN Mohamad, RICHARD Claire
CMTDE 2022_98	Kinetic study of degradation of antraquinonic dye, C.I. acid blue 25, in aqueous solution by hydrogen peroxide using dawson-type heteropolyanions as catalysts. GHODBANE Houria, TELLI Samiya, NESSAIBIA Maroua, HAMD AOUI Oualid
CMTDE 2022_99	Electrochemical oxidation of Allura Red AC in low and high solution conductivity using SPE system and conventional flow cell by borne doped diamond electrode. BEN KACEM Sabrinea , CLEMATIS Davideb, PANIZZA Marcob, CHAABANE ELA OUD Sourour
CMTDE 2022_100	Scénario d'optimisation des effluents textiles. MZAHEMA Sourour, SOUGUIR Dalila, BEN AMAR Raja, DUPLAY Joelle, and HACHICHA Mohamed
CMTDE 2022_101	Application of response surface methodology for chromium removal by adsorption on date stalks. MAALAOUI Imen, GUESMI Fatma, HANNACHI Chiraz, HAMROUNI Béchir
CMTDE 2022_102	An effective standalone solar air gap membrane distillation unit for brackish water desalination. A case study of Ghardaïa region. MIBARKI N., TRIKI Z. *, BELHADJ A. and HENINI N.
CMTDE 2022_104	Energy and exergy analyzes of a PWR type nuclear power plant coupled with ME-TVC-MED desalination MENASRI R TRIKI Z *, BOUAZIZ M. Nand HAMROUNI B.
CMTDE 2022_135	Synthesis and characterization of multilayer ceramic membranes. BOUZERARA Ferhat*; KADIRI Cheikh

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CMTDE 2022_105	Prévalence des Legionella dans les réseaux d'eaux chaudes sanitaires et les tours aéroréfrigérantes de quelques établissements en Algérie. BENABBOU A SAIBI N., SAADI S., MOUFFOK F., RAHAL k., HAMROUNI B.,
CMTDE 2022_106	Comparative analysis of various nuclear desalination computation KHAN Salah Ud-Din *, ALSHARIF Mothanna , ORFI Jamel
CMTDE 2022_107	Salting-Out Assisted Liquid-Liquid Extraction (SALLE) for the separation of 2-methylaziridine from aqueous stream: Phase equilibrium, solubility and Data Correlation MERZOUGUI Abdelkrim*, BEN AOUNE Saliha, CHAKER Laiadi
CMTDE 2022_109	Sol, Eau et Agriculture « Cas de la Medjerda » KHOUALDIA Wassila
CMTDE 2022_111	Extraction of heavy metals by clay intercalated by crown ethers CHRAYT I.* et MEGANEM F.*
CMTDE 2022_115	Cadmium retention by Nigella Sativa Magnetised. DIDI Amel, FEDDANE Souad, DIDI Mohamed Amine
CMTDE 2022_117	Synthèse et caractérisation d'un charbon actif produit à partir des coquilles de noix : Application au traitement d'une eau polluée par un résidu médicamenteux. BOUGHERIOU Fatima et GHOUALEM Hafida*
CMTDE 2022_122	Study of the adsorption of a basic blue cationic dye 41 on raw clay. FERHAT D., HAMMOUDI H. A., NIBOU D., AMOKRANE S., SEBATI F.
CMTDE 2022_123	Fabrication and test of an autonomous solar photoreactor applicable for water treatment using BiFeO ₃ - [Bi] ₂ O ₃ FAICAL Djani*, SOLTANI Anouar, MAZOUZI Djamel Eddine

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CMTDE 2022_124	Numerical Investigation of Natural convection of non-Newtonian Nanofluid in a Square Cavity Filled with a Porous Medium. LOUNIS Selma*, REBHI Redha, HADIDI Nouredine and OULD LARBI Amina
CMTDE 2022_126	The removal of Rodamine B from industrials effluents by Acid activated pillar bentonite. BERREZEG A.
CMTDE 2022_127	Comparative study on the efficiency of the desalination process case of the desalination plants of Ain temouchent and Mostaganem - Algerian coast - WESTERN ALGERIA- RAMDANI N., CHIALI CHARIF K., NEMMICH S., NASSOUR K., TILMATINE A., MIMANNE G.
CMTDE 2022_128	Hopf bifurcation in double diffusion convection through a shallow horizontal layer saturated by non-Newtonian fluid KEZRANE M. and REBHI R.
CMTDE 2022_130	Removal of Ibuprofen from water using an adsorbent prepared from sawdust by zinc chloride activation. BOUSBA Salim*, ALLAM Malek Dorsaf, BOUGHERARA Safia, SAADI Ahlem Sara
CMTDE 2022_133	Bio-dessalement : Perception et Durabilité. YAHIAOUI Fatma Zohra, TIGRINE Zahia, TASSALIT Djilali
CMTDE 2022_134	Solubilisation of dye using anionic and nonionic surfactants. RAHAL Soufiane, MOULAI-MOSTEFA Nadji
CMTDE 2022_136	Modelling the full-scale reverse osmosis system using new computational modelling technique. LAIDI Maamar, HANINI Salah,
CMTDE 2022_137	Modélisation de l'adsorption du chlorobenzène sur la bentonite modifiée. BOUGDAH Nabil*, BOUSBA Salim, MESSIKH Nabil

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CMTDE 2022_139	Exergy and Economic Analyses of a Novel MED-TVC Distillation System with thermal Vapor Compression System of Al-Jubail Thermal Power Plant. MENASRI Yahiaa, MENASRI Rabahb*, TRIKI Zakariab, HAMROUNI Béchirc
CMTDE 2022_140	Tertiary treatment of secondary wastewater by saturated vertical constructed wetland CHERIF Hayet*, BENMANSOUR Ibtissem, RIËE Henry, ELFIL Hamza
CMTDE 2022_141	Fabrication and properties of novel ferric and bentonite ceramic membranes. CHIH Rania, AYARI Fadhila, TRABELSI AYADI Malika, COMITE Antonio
CMTDE 2022_142	Determination of storm water quality in the algeries area. Physico-chemical characterization. Reutilization. BENREJDAL F., HADDAD H. et GHOUALEMH.
CMTDE 2022_143	Elaboration and characterization of clayey bentonite tubular membrane and its performance in the treatment of an effluent from textile dyeing industry followed by adsorption using marine waste. Photochemical regeneration of the adsorbent. CHIH Rania, AYARI Fadhila, TRABELSI AYADI Malika
CMTDE 2022_144	Caractérisation physico-chimique de l'effluent de la station d'épuration de Tizi-Ouzou. F. TEDJANI, H. GHOUALEM
CMTDE 2022_148	Diagnosis, monitoring and enhancement of geothermal waters in southern Tunisia (Gabes, Kebili and Tozeur) ANAYED Naima, BENHMIDÈNE Ali, DHAWADI Latifa, TOUNSI Wafa, SADOKBELKADHI Mohamed
CMTDE 2022_151	Evaluation of physico-chemical and bacteriological pollution of Temacine Lake in south east of Algeria. OUSTANI Mabrouka, MEHDA Smail
CMTDE 2022_153	Response surface methodology for dyes removal by adsorption onto alginate calcium MARZOUK TRIFI Ikhlass*, TRIFI Beyram, BEN SOUISSI Emna, HAMROUNI Béchir

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CMTDE 2022_154	Response Surface Methodology for Boron Removal by Donnan Dialysis: Doehlert Experimental Design. MARZOUK TRIFI Ikhlass, CHAABANE Lobna, DAMMAK Lasâad*, BAKLOUTI Lassaad, HAMROUNI Béchir
CMTDE 2022_156	Novel zeolite prepared using Tunisian raw clay: Study of C ₃ H ₆ breakthrough dynamic adsorption onto zeolite material. OULED LTAIEF Olfa*, FAKHFAKH Nadim, DAMMAK Nesrine, SIFFERT Stéphane, BENZINA Mourad
CMTDE 2022_157	Photocatalytic properties of TiO ₂ supported on MCM-41: effect of the incorporation methods. NAJAR Hanene, YOUNSI Rahma, FAKHFAKH Fatma, RAISSI Sahar, KSIBI Zouhair
CMTDE 2022_159	Removal of Fluconazole from Aqueous Solution via Adsorption onto Modified Domestically Waste. GHERBI Naima, BELKHARCHOUCHE Djanet, LEHAM Imane, MEKROUD Sarra, MENIAI Abdeslam-Hassen
CMTDE 2022_160	Investigation on using electromagnetic water technology for salt leaching and mineral usage in potatoes. AKRIMI Rawaa*, HAJLAOUI Hichem
CMTDE 2022_161	Effect of PGPR and biostimulant supply on agro-physiological behavior of pepper grown under saline conditions. HAJLAOUI Hichem, AKRIMI Rawaa*
CMTDE 2022_162	Adsorption of Erythromycin from aqueous solution using Tunisian clay materials- Effect of operating parameters. AISSAOUI Yousra, TRABELSI-AYADI Malika, GHORBEL-ABID Ibtissem
CMTDE 2022_163	Effect of PSS concentration on physico-chemical characteristics and performance of CTA-based membranes. BENSAADI Sofiane*; AROUS Omar; AMARA Mourad
CMTDE 2022_165	Agro-physiological responses in pistachio (<i>Pistacia vera</i> L.) cultivars as induced by saline water irrigation. ABIDI Walid, *, AKRIMI Rawaa
CMTDE 2022_166	Photocatalytic activity of Fe/TiO ₂ -SiO ₂ NPs for anionic dye degradation FAKHFAKH Fatma, NAJAR Hanene, RAISSI Sahar, KSIBI Zouhair

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CMTDE 2022_167	Modelling the onset of thermosolutal convective instability in a non-Newtonian -saturated porous medium layer. OULD LARBI Amina*, REBHI Redha, LAIDI Maamar and LOUNIS Selma
CMTDE 2022_173	Pretreatment of seawater by commercial and synthesized membranes. BERBAR Yassine, AMARA Mourad
CMTDE 2022_175	Pollution biologique des eaux souterraines dans la région aride bibans Nord-Est d'Algérie : croissance et survie des espèces procaryotes aquatiques lors du captage et stockage aquatique. MERIBAI Abdelmalek, BOUGUERRA Asma, HIMA Belkis, GAHFIF W., DIAFAT A., SAIDI A. & BAHLOUL A.
CMTDE 2022_176	Réutilisation des eaux usées issues de la station de traitement de la wilaya de bordj bou argeridj, nord-est d'Algeire : prospection en aval et en amont, évaluation du rendement épuratif impact sur l'irrigation agricole. MERIBAI A., BOUGUERRA A., GAHFIF W., DIAFAT., SAIDI A. & BAHLOUL A.
CMTDE 2022_177	The distribution of Tuta absoluta population in a greenhouse heated by geothermal energy. HAMROUNI ASSADI B.*, CHOUIKHI S., BENHMIDENE A., ANAYED N., ABED N. and BELKADHI Mohamed S.
CMTDE 2022_178	Modelling and performance analysis of a fully of a solar - multi-effect distillation desalination system with thermal vapor compression for coastal households of the city of Algiers (Algeria). MENASRI R., FERGANI Z., TRIKI Z., HAMROUNI B.
CMTDE 2022_179	Batch and dynamic studies for removal of triphénylméthane dye on root of solid waste as a novel biosorbent: Modelling. GUECHI El Khamssa, OUETTAR Lamia, FERTIKH Nadia
CMTDE 2022_180	Effect of ultrasound on biosorption of basic dye from aqueous media by using Typha as biosorbent. GUECHI El Khamssa, HAOU Sana, HAMDAOUI Oualid

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CMTDE 2022_181	Assessment of geothermal water quality for irrigation purpose in the experimental station of technical center of protected and geothermal crops. ELABED Nadia*, ANAYED Naima, ASSADI Besma and SADOK BELKADHI Mohamed
CMTDE 2022_182	Adsorption performance of tartrazine dye from agro-food wastewater by raw and modified biomaterial: Equilibrium, isotherms, kinetics, thermodynamics and regeneration studies. RZIG B.*, KOJOK R., BEN KHALIFA E., MAGNACCA G., HAMROUNI B., BELLAKHAL N.
CMTDE 2022_183	Elimination des effluents aqueux par des bioadsorbants à faible coût. DJELLOULI A., BERREDJEM Y., HATTAB Z.r, KHECHAI M.
CMTDE 2022_184	2-nitrophenol is adsorbently removed from aqueous solution using date palm waste-based activated carbon. KHECHAI M.*, DJELLOULI A., BEN SALEM D., HECENI L.
CMTDE 2022_185	Application of the response surface methodology for the elimination of a micropollutant from water by bioadsorption on biomass. KALBOUSSI Chayma, GUESMI Fatma
CMTDE 2022_186	UV-visible assisted Photocatalytic degradation of dye pollutant using biosynthesis nanoparticles of TiO ₂ . BOUKEZZOULA Manel, RTIMI Sami, BAGHRICHE Oualid
CMTDE 2022_188	Gestion intégrée des eaux souterraines sous un climat semi-aride, Cas de la plaine Zana-Gadaïne (Est Algérien). BELALITE Halima, ATHAMENA Ali
CMTDE 2022_189	Preparation and characerization of PVDF flat sheet membranes using DMF solvent for the water treatment by membrane distillation. SELMi A., OUNIFI I., SAIDI S., GUESMI F., HANNACHI C., HAMROUNI B.
CMTDE 2022_190	Preparation and characterization of membrane for membrane distillation : application for water treatment BEN ABED Rokaya, SELMI Amira, SAIDI Safa, GUESMI Fatma, HANNACHI Chiraz, HAMROUNI Béchir

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CMTDE 2022_192	Development of a new adsorbent from biomass material treated by basic solution to remove naphtol blue black dye Karima HAMOUCHE *, El-Khamssa GUECHI
CMTDE 2022_198	Towards a CFD model to predict hydrodynamics and optimize operation in aeration basins. BESBES Sonia*, DHRIOUA Mariem, BEN RJOB Intissar, BEN AISSIA Habib
CMTDE 2022_200	The effect of geometry and reactor design on Electrocoagulation performance for heavy metal removal. BARHOUMI Afef, CHIBANI Amel, NCIB Sana, ELALLOUI Elimame, BOUGUERRA Wided
CMTDE 2022_201	Evaluation of Dowex 5×8 ion-exchange resins for the removal of Ni (II): Application water treatment CHAABANI N., NCIB S., ELALLOUI E., BOUGEURRA W.
CMTDE 2022_203	Selective extraction of cobalt (II) ions through polymer inclusion membrane containing Aliquat 336 and D2EHPA as a carriers. ALYANI Ibtissem, MAHMOUD Hayet, NCIB Sana, ELALLOUI Elimem, BOUGUERRA Wided
CMTDE 2022_204	Removal of humic acid by combining electrocoagulation process and activated carbon as absorbent. ABBES M., BARHOUMI A., BRAHMI K., ELALLOUI E., BOUGUERRA W.
CMTDE 2022_207	Numerical and Analytical Study of double diffusion Convection of non-Newtonian fluids in Shallow Porous rectangular cavity uniformly heated and massed from below BENSILAKHAL Sarah, REBHI Redha, HADIDI Noureddine and Lounis Selma
CMTDE 2022_208	Effect of polymer membrane composition on metallic ions recovery OTHMEN Kemla, NCIB Sana, ALYANI Ibtissem, DAMMAK Lasaad, ELALLOUI Elimem, BOUGUERRA Wided

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CMTDE 2022_209	Preparation and characterization of polymer inclusion membrane (PIM) for the recovery and separation of zinc (II) ions MAHMOUD Hayet, NCIB Sana, OTHMEN Kemla, LARCHET Christian, DAMMAK Lasaad, ELALLOUI Elimem, BOUGUERRA Wided
CMTDE 2022_211	Separation of nickel and copper ions using supported liquid membrane and ion-exchange resin. Sana NCIB, Kemla OTHMAN, CHAABANI Nabila, Elimame ELALLOUI, Wided BOUGUERRA
CMTDE 2022_214	Photo-catalytic processes for efficient reduction of an inorganic pollutant under different light sources Mohamed Amine DJILALI*, Mounir MELLAL, Elhadj MEKATEL, Salim BOUDIAF, Billal BRAHIMI.
CMTDE 2022_217	Optimization of operating conditions of a conventional treatment process of wastewater. L.LARBI, N.FERTIKH
CMTDE 2022_220	Removal of losartan and methocarbamol two emerging pollutants from aqueous solution using gamma irradiation Amira ZAOUAK, Habib CHOUCANE and Haikel JELASSI
CMTDE 2022_221	Environmental Effect Of Characterization Of Water Ressources In Algiers Watershed H. HADDAD, F. BENREJDAL and H. GHOUALEM