



ROYAUME DU MAROC
MINISTÈRE DE L'ENSEIGNEMENT
SUPÉRIEUR, DE LA RECHERCHE
SCIENTIFIQUE ET DE L'INNOVATION



المملكة المغربية
وزارة التعليم العالي
والبث العلمي و الابتكار



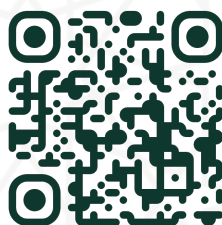
Université Mohammed Premier
Faculté des Sciences Oujda

Centre de l'Oriental des Sciences et Technologies de l'Eau et de l'Environnement

2^{ème} Colloque international

Bioressources, Biotechnologies et Développement Durable

Programme du colloque



Lieu

Université Mohammed Premier Oujda - Maroc
Campus du savoir (Technopole)

Contacts

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Date

19 -21 Juin 2025

Programme du 2^{ème} Colloque International :
Bioressources, Biotechnologies et Développement Durable,
Université Mohammed Premier, Oujda, Maroc
19-21 Juin 2025 (Campus du Savoir : Technopole)

Mercredi 18 Juin 2025

15:00 – 18:00

Accueil et inscription des participants / Affichage des posters

- **Lieu :** au niveau du COSTEE (à côté de la présidence de l'Université Mohammed premier d'Oujda, UMPO).

Jeudi 19 Juin 2025

09:00 – 09:30

Mots d'ouverture :

- Président de l'Université Mohammed Premier - Oujda
- Doyen de la Faculté des Sciences - Oujda
- Doyen de la Faculté Polydisciplinaire - Nador
- Directeur de l'École Supérieure de Technologie - Oujda
- Directeur de l'École de Commerce et de Gestion - Oujda
- Comité d'organisation

09:30 – 09:50

Conférence inaugurale :

Cinzia CAGGIA, University of Catania, Italy:

« Microbial biotechnology for food chain sustainability: beyond the limits of fermentation ».

Local : Salle A (Salle de conférences)

Modérateurs : Pr. Abdeslam ASEHRAOU, Pr. Jamal HADADI

Rapporteur : Dr Amine EL BOUZIDI

09:50 – 10:00

Discussions

10:00 – 10:30

Pause-café + visite des posters et stands d'exposition

Session I : Production primaire innovante et durable intégrant l'Analyse du Cycle de Vie (ACV) :

(préservation des ressources en eau, lutte biologique et biopesticides, biostimulants des plantes...)

- **Local :** Salle A (Salle de conférences)
- **Modérateurs :** Pr. Nouredine MEZRIOUI, Pr. Ennouamane SAALAOUI
- **Rapporteur :** Pr. Redouane BENABBES

10:30 – 10:50

Conférence introductive 1 :

Brahim SABOUR, Université Chouaib Doukkali, El Jadida, Maroc :

« Algues marines et algoculture : Une filière émergente répondant aux objectifs d'une économie bleue durable au Maroc ».

10:50 – 11:10

Conférence introductive 2 :

Nouredine EL MTILI, Université Abdelmalek Essaadi, Tétouan, Maroc :

« A la recherche des gènes cachés pour contrer l'érosion génétique »

11:10 – 11:20

Discussions

Sous-session T1-A : Biotechnologies et pratiques innovantes pour une agriculture durable

(Biocontrôle, biofertilisation, biochar, valorisation de résidus agricoles, amélioration de la productivité végétale)

- **Local :** Salle A (salle de conférences)
- **Modérateurs :** Pr. Mohamed ADDI, Pr. Brahim BOUIZGARNE
- **Rapporteur :** Pr. Redouane BENABBES

- **CO11 – Advancing Sustainable Agriculture: Biocontrol of Tomato Root Rot Caused by *Rhizoctonia solani* Using Antagonistic Microorganisms**
Oumaima BENAÏSSA, Zineb BELABESS, Dina AKROUTE, Abderrahim LAZRAQ, Rachid LAHLALI

11:20 - 12:50	• CO12– Evaluation of seaweed biostimulatory effects on Durum Wheat (<i>Triticum durum L.</i>) growth, physiology, and antioxidant System Ismail EL BZAR, Oumaima OUALA, Mohammed HAIDA, Hamza SABIR, Yasser ESSADKI, Brahim OUDRA, Fatima EL KHALLOUFI • CO13– Impact of Biochar on the Physico-Chemical Properties of Soils Under Water Stress: A Comparative Study H'anane Sahil, Zaina Idardare, Hakima Assendal, Chafia Hajji, Lamia Yakkou, Fatima El Aamri d, Mohamed Lamsaih, Laila Bouqbis • CO14– Isolation and Characterization of Actinobacteria from Moroccan Arid Zones and Their Role in Seed Germination Omama MARHANE, Badra BANANE, Mohamed BAKKI and Brahim BOUIZGARNE • CO15– Biofertilizing potential of Sargassum muticum for improving <i>Capsicum annuum L.</i> plant growth Oumaima Ouala, Yasser Essadki, El Mahdi Redouane, Ouafa Cherifi, Fatima El Khalloufi and Brahim Oudra • CO16– Agricultural Waste-Based Biochar: Enhancing Sandy Soil Properties and Tomato Growth Under Water Stress Hakima Assendal, Laila Bouqbis, H'anane Sahil, Lamia Yakkou, Chafia Hajji, Idardare Zaina • CO17– Alternative de lutte contre les ennemis des cultures : Contribution à l'étude des potentialités des bio pesticides à base d'extraits d'algues pour une valorisation en protection des plantes Khadija Shahou, Reda Bellaouchi, Idrissi Yahyaoui Meryem, Lamyae Mehane, Sara Moumnassi, Amine Elbouzidi, Mohamed Taibi, Bouaiadi El Bachir, Hammada Abdelilah, Talha Mohamed, Abdeslam Asehraou, Zouhir Chafik • CO18– Valorization of essential oil waste of two medicinal and aromatic plants as bioactive compounds Salahddine Chafiki, Soumaya El Assri, Redouan Qessaoui, Abdelmalek Mahroug, Hasna Lahchimi, Abdallah Oukarroum, Mohamed Alouani, Hicham El Arroussi, Rachid Sabbahi and Rachid Bouharroud • CO19– Endemic Bacillus from the Souss region: biopesticides and PGPR against fungal diseases of tomato (<i>Botrytis, mildew, Oidium and Alternaria</i>) Hasna Elhjouji, Redouan Qessaoui, Khadija Dari, El Hassan Mayad, Hinde Aassila
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Sous-session T1-B : Gestion durable des ressources naturelles et des milieux aquatiques
(Qualité de l'eau, contamination, biodiversité aquatique, valorisation des écosystèmes marins)

- **Local** : Salle B
- **Modérateurs** : Pr. Brahim OUDRA, Pr. Anouar OUIZGANE
- **Rapporteur** : Dr. Mounir HADDOU

11:20 - 12:50	• CO110– Potentially Toxic Elements Contamination in Surface Water of Moulouya Estuary (Northeastern, Morocco) BASRAOUI Nour-Elhouda, BEN-TAHAR Rihab, BOUKICH Oualid, MIMOUMI Yassine, EL GUERROUJ Bouchra, CHAFI Abdelhafid • CO111– Impact des caractéristiques sédimentaires sur la répartition de la faune associée aux herbiers marins de la lagune de Nador Bouaiadi El Bachir, Zidane Hakima, Rezzoum Nor-Eddine, Idrissi Mohamed, Ouztato Tariq, Elhaddaoui Marwa, El Fatehy Fath Allah, Akodad Mustapha, El Ouamari Najib, Fadili Mohamed, Makaoui Ahmed, Abid Abdeslam, Oujidi Bouchra, Skali Ali • CO112– Biologie des populations du merlu européen (<i>Merluccius merluccius</i>, Linnaeus, 1758) dans la mer Méditerranée marocaine SLIMANI Douaa, ABDELLAOUI Souad, KADDOURI Nassir, MOUEDDEN Rajae, KASMI Khaoula, EL OUAMARI Najib, CHAABANE Khalid • CO113– Desalination Brine: Characterization, Management Strategies, and Environmental Impact Zarzoun Hind And Bitar abdelali • CO114– Assessment of Pyrethroid Resistance in a Moroccan field population of <i>Cydia pomonella</i> (Lepidoptera: Tortricidae) Dina Akroute, Muhammed Baala, Rachid Benkiran, Abdelaziz Alaoui, Rachid Lahlali, Ahmed El Bakali And Salma El Iraqui El Houssaini • CO115– Investigation study of physicochemical properties of Schiff bases (SF) complexes and their innovative applications in heterogeneous catalysis Ayoub Badi, Mohamed Azzouzi, El Hassan El Majidi, Abdeslam Mouadili, Mohamed Abboud, Adyl Oussaid, Abdelouahad Oussaid
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	• CO116– Assessment of mineral oils, black soap, and essential oils for controlling <i>Dactylopius opuntiae</i> (Cockerell. 1929) (Hemiptera: Dactylopiidae) Asmae Azzouzi, Hamza Anejjar, Aicha Id-M'hamed, Mustapha Ait Chitt, Abdelmalek Boutaleb Joutei, Rachid Lahlali and Taoufiq Benziane • CO117– Seasonal Dynamics and Stocking Density: Key Factors Influencing the Growth of <i>Gracilaria gracilis</i> in the Nador Lagoon, Morocco Rajae Mouedden, Douaa Slimani, Souad Abdellaoui, Nassir Kaddouri, Khaoula Kasmi, Amira Kharkhache, Najib El Ouamari, Khalid Chaabane • CO118– Analyse et simulation du transfert des éléments traces métalliques issu des activités minières vers les eaux superficielles Yassine Mimouni, Abdelhafid Chafi, Nour-Elhouda Basraoui, Bouchra El guerrouj and Jean Francois Deliege
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Sous-session T1-C : Agroécologie, systèmes intégrés et résilience climatique

(Aquaponie, désertification, stress abiotiques, interactions sol-plante, lutte bio, économie circulaire)

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- **Local** : Salle C
 - **Modérateurs** : Pr. Mohammed YACOUBI-KHEBIZA, Pr. Mohamed BOURIOUG
 - **Rapporteur** : Dr Fatima Zahra EDDABBEH

11:20 – 12:50	• CO119– Rhizobia-soybean (<i>Glycine max</i>) varietal interaction and substrate preferences under controlled conditions Noura Bechtaoui, Mohammed Onli, Anas Raklami, Muhammad Kabir Rabi, Alfred Balenor, Khalid Oufdou, Mohamed Hafidi and Martin Jemo • CO120– Introduction of Aquaponic systems in the Oriental region in the face of desertification challenges Mohamed Amine Elouerdani, Legsseyer Bouchra, Souad Ben El Mostafa, Mariam El Bakali • CO121– Antifungal potential of <i>Warionia saharae</i> essential oil against <i>Botrytis cinerea</i> Soumaya El Assri, Salahddine Chafiki, Anouar Bouanga, Redouan Qessaoui, Rachid Bouharroud, Rachid Sabbahi • CO122– Assessment of Nitrogen Fertilizer Strategies for Wheat Cropping Systems Under Semi-Arid and Sub-Humid Climatic Zones in Morocco Under Semi-Arid and Sub-Humid Climatic Zones in Morocco Mohamed Boullouz, Mohamed Louay Metougui, Ngonidzashe Chirinda • CO123– Influence de la composition du milieu de culture sur la multiplication in vitro de deux variétés de <i>Cannabis sativa L.</i> cultivées au Maroc TAHTAH Meryem, IBRAHIM Toufik, SAMIR Karima, NORDINE Aicha • CO124– Drought- and Salinity-Tolerant PGPR Actinomycetes: Effects on Date Palm Seed Germination and Antagonism of Date Palm Bayoud Disease Agent BANANE Badra, MARHANE Omama., BAKKI Mohamed & BOUIZGARNE Brahim • CO125– Bacteriological Quality Assessment of Drinking Water in the Rural Region of Ouichane Tarik Moubchir, Sanae Rezouki, Aimad Allali, Nouredine Eloutassi, and Ilham Zahir • CO126– Diversité des champignons endomycorhiziens et ectomycorhiziens dans la rhizosphère d'<i>Helianthemum ledifolium</i> dans la zone de Bni Guil (Maroc oriental) Halima Bouchentouf, Wissame Chafai, Elhassane Rejmil, Abdelmajid bechchari, Khalid Ahmed • CO127– Molecular and morphological identification of indigenous arbuscular mycorrhizal fungi (AMF) associated with <i>phoenix dactylifera L.</i> in the Figuig Oasis, Morocco Elmostafa Gagou, Claire Guérin, Halima Bouchentouf, Khadija Chakroune, Mahmoud Abbas, Mondher El Jaziri, Abdelkader Hakkou
12:50 – 13:00	Discussions
13:00 – 14:30	Pause-déjeuner

Session II : Transformations post récolte : lutte contre les altérations et les pertes :

(1) défis des fermentations, (2) voies de valorisation des protéines alternatives, (3) antimicrobiens, (4) emballages (actifs, biosourcés, intelligents), (5) approches innovantes dans le nettoyage et désinfection, (6) métabolites secondaires des plantes aromatiques et médicinales, (7) stratégies innovantes pour la biopréservation des aliments ...

- **Local** : Salle A (Salle de conférences)
- **Modérateurs** : Pr. Fouad MALEK, Pr. Abdeslam ASEHRAOU
- **Rapporteur** : Pr. Houssam ABOULOIFA

14:30 – 14:50	Conférence introductive 1: Ramzi KHIARI , Higher Institute of Technological Studies of Ksar Hellal, Department of Textile, Tunisia: « Polysaccharide Nanomaterials »
14:50 – 15:10	Conférence introductive 2: Tuba ESATBEYOGLU , Leibniz University Hannover, Germany: « Influence of fruit juices on Antioxidant activity and Bioavailability »
15:10 – 15:20	Discussions
15:20 – 16:00	Pause-Café + Posters & visite des Stands d'exposition

Sous-session T2-A : Valorisation des sous-produits agricoles et extraits bioactifs :

Exploitation de résidus de cultures, feuilles, pépins, racines, etc. pour des usages alimentaires, pharmaceutiques ou agricoles...

- **Local** : Salle A (salle de conférences)
- **Modérateurs** : Pr. Hassan LATRACHE, Pr. Yahya ROKNI
- **Rapporteur** : Pr. Houssam ABOULOIFA

16:00 - 18:00	• CO21– Anticancer activity of macroalgal proteins treated with cold plasma and ultraviolet radiation applications Aysun Yücestepe, Emine Şükran Okudan, Susanne Neugart, Tuba Esatbeyoğlu • CO22– Biotechnological strategy for functional table olives production Irene M. Zingale, Amanda Vaccalluzzo, Giacomo Antonio Calandra Checco, Vita Maria Marino, Margherita Caccamo, Cinzia L. Randazzo, Dilara Nur Dikmetas, Tuba Esatbeyoglu, Esra Capanoglu, Cinzia Caggia • CO23– Biotechnological Stimulation of Phenolic Biosynthesis in Geranium (<i>Pelargonium graveolens</i> Hort.): Elicitor Strategies, LC-MS/MS Phytochemical Profiling, and Bioactivity Exploration Amine Elbouzidi, Mohamed Taibi, Abdellah Baraich, Mounir Haddou, Yousra Hammouti, Francois Mesnard, Mohamed Addi • CO24– Valorisation des sous-produits du safran (<i>Crocus sativus</i> L.) : l'application foliaire d'extraits aqueux de tépales stimule la croissance et améliore les propriétés antioxydantes des plants d'aubergine en conditions sous serre Amine Khoulati, Said Ezrari, Ennouamane Saalaoui, Adil Maleb • CO25– Involvement of Characterized Polysaccharides Extracted from ginger in Food Applications Sirine Ben Slima, Imen Trabelsi, · Mohamed Amine Taktak, Sami Bouf, · Riadh Ben Salah, Naourez Ktari • CO26– Composition phénolique et activité antibactérienne de trois variétés d'avocats (<i>Persea americana</i>) cultivées au Maroc Jihane LAARIFI, Asmaa AOUBIHI, Fatima-Zahra MEKAOUI, Douae EL MERABET, Fatima Zahra RHEBBAR et Youness TABOZ • CO27– Assessing the Volatile Composition by GC/MS-MS and Biological Efficacy of <i>Rosa damascena</i> Essential Oil: Examining its Antimicrobial and Antioxidant Capabilities Nezha Lebkiri, Ghizlane Diria, Fatima Gaboun, Karim Saghir, Driss Iraqi, Maha El Hamdani, Taha El kamli, Aouatif Benali, Hasna Yachou, Rabha Abdelwahed, Younes Abbas • CO28– Antioxidant and Antimicrobial Activities of <i>Olea europaea</i> Leaf Extracts: A Study on Food Preservation Kaouthar El Bekkali, Fatima El Lamti, Wail Afroun, Nouredine El Mtili, Mohammed Mrani Alaoui
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- **CO29**– Optimized Formulation of a Three-Component Extract Mixture from *Crocus sativus* L. (Stigmas, Leaves, and Tepals) for Enhanced Antioxidant Activity
Abdellah Baraich, Amine Elbouzidi, Mohamed Taibi, Mounir Haddou, Samira Mamri, Reda Bellaouchi, Ramzi A. Mothana, Mohamed Addi, Redouane Benabbes, Mohammed Choukri, Abdeslam Asehraou, Bassem Jaouadi, Ennouamane Saalaoui
- **CO210**– Antioxidant and Antimicrobial Activities of Argan Leaf Extracts: A Study on Food Preservation
Wail Afroun, Fatima El Lamti, Kaouthar El Bekkali, Nouredine El Mtili, Mohammed Mrani Alaoui
- **CO211**– Antioxidant and Antimicrobial Properties of *Ramalina canariensis*: HPLC-UV Identification of Usnic and Divaricatic Acids
Othmane Erradi, Nedeljko Manojlović, Muhammad Usman, Zahira Belattmania, Brahim Sabour
- **CO212**– Evaluation of Key Quality Parameters in Honey from Different Moroccan Regions
A.Beenmehdi, H. Loukili, E.Garayev, B.Baghdikian, M.Ramdani.

Sous-session T2-B : Extraction verte, stimulation métabolique et valorisation médicinale :

(Approches durables pour enrichir les extraits végétaux, phytothérapie, stimulation des composés secondaires...)

- **Local** : Salle B
- **Modérateurs** : Pr. Nadia GSEYRA, Pr. Khalida MOKHTARI
- **Rapporteur** : Pr. Khadija CHAKROUNE

16:00 – 17:40

- **CO213**– Antimicrobial Potential of the lichen *Pseudevernia furfuracea* Volatile Compounds from Morocco
Yasser Essadki, Adel Hilmi, Mariana Girão, El Mehdi Darrag, Rosário Martins, Abderrahmane Romane, Soukaina El Amrani Zerrifi, Richard Mugani, Zakaria Tazart, El Mahdi Redouane, Vitor Vasconcelos, Alexandre Campos, Fatima El Khalloufi, Brahim Oudra, Mustapha Barakate, Maria de Fátima Carvalho
- **CO214** – Phytochemical Profiling and Bioactivity of *Petroselinum crispum* Hydroethanolic Extract
Ibrahim SADOUGUI, Meryem IDRISSE YAHYAOU, Mohamed TAIBI, Mohamed Amine MEZIANE, Lamyae MEHANE, Amine Elbouzidi, Alexandre NOIRIEL, Reda BELLAOUCHI, Bouchra EL GUERROUJ, Ennouamane SAALAOUI, Abdeslam ASEHRAOU
- **CO215** – Phytochemical, antioxidant, and antimicrobial insights into *Cuminum cyminum* L. essential oils
Lamyae MEHANE, Ibrahim SADOUGUI, Mohamed Amine Meziane, Meryem Idrissi Yahyaoui, Mohamed Taibi, Reda BELLAOUCHI, Rachid SABBAHI, Mounir Haddou, Amine Elbouzidi, Aleksandar Széchenyi, Bouchra El Guerrouj, Abdeslam ASEHRAOU
- **CO216** – Exploring the multifaceted bioactivities of *Lavandula pinnata* L. essential oil: promising pharmacological activities.
Mounir Haddou, Amine Elbouzidi, Mohamed Taibi, Abdellah Baraich, El Hassania Loukili, Tarik moubchir, Aimad Allali, Reda Bellaouchi, Ennouamane Saalaoui, Abdeslam Asehraou, Mohamed Addi, Bouchra El Guerrouj, and Khalid Chaabane
- **CO217** – Impact of Xylooligosaccharides on Metabolic Activity of *Lactiplantibacillus plantarum* S61: Generation of Bioactive Metabolites with Antioxidant and Antimicrobial Activities.
Meryem Idrissi Yahyaoui, Nour Eddine Bentouhami, Sara Moumnassi, Amine Elbouzidi, Mohamed Taibi, Doha Berraouan, Reda Bellaouchi, Lamyae Mehane, Ibrahim Sadougui, Mohamed Amine Meziane, Mounir Haddou, Bouchra El Guerrouj, Bassem Jaouadi, Abdelkarim Abousalham, Ennouamane Saalaoui and Abdeslam Asehraou
- **CO218** – Enhanced production of secondary metabolites in medicinal plant cell cultures: effects of melatonin and salicylic acid on bioactive compounds
Yousra HAMMOUTI, Amine ELBOUZIDI, Soukaina TERROUFI, Francois MESNARD, Mohamed ADDI
- **CO219**– Valorization of polysaccharide from *Laurus nobilis* leaves: Structural analysis and in vitro and in vivo biological applications
Imen Trabelsi, Naourez Ktari, Wafa Gargouri, Sirine Ben Slima, Sana Bardaa, Amina Maalej, Lobna Jlaiei, Mohamed Chamkha and Riadh Ben Salah
- **CO220**– Exploration of Moroccan medicinal plants traditionally used in the treatment of infectious diseases
OUASTI Imane, OUASTI Mohammed and ELACHOURI Mostafa
- **CO221**– Prise en charge du stress et des états anxieux par phytothérapie
Salah-Eddine El Jabiry, Bouchra Oneib
- **CO222**– Effect of Moroccan Saffron By-Product Extracts Against Some Pathogenic and Multidrug-Resistant Bacteria
Ikram BERAOUZ, Assya AHARRAR, Khadija LACHGUER, Mohamed BEN EL CAID, Fatima HAMADI and Mohammed Amine SERGHINI

Sous-Session T2-C : Matériaux biosourcés, composites et procédés durables de transformation

(Transformation post-récolte en matériaux ou ingrédients durables, textiles, emballages, bioplastiques, additifs)

- **Local** : Salle C
- **Modérateurs** : Pr. Abderrahmane EL IDRISSI, Pr. Mohamed JABRI
- **Rapporteur** : Pr. Tarik HARIT

16:00 – 18 :00

- **CO223**– A Green Approach to Synthesizing Flame Retardant and Antifungal Materials by Phosphorylation of Allyl Cellulose via a Radical-Mediated “Click” Reaction
Ayoub Abarkan, Nafea Achalhi, Ridouan El Yousfi, Brahim Elmekeoui, Sara Moumnassi, Meryem Idrissi Yahyaoui, Abdeslam Asehraou, Abderahmane El Idrissi
- **CO224**– Physicochemical Characterization of Celluloses Extracted from “Quinoa” stems of eastern Morocco
Nafissa Benchellal, Nafea Achalhi, Ridouan El Yousfi, Ayoub Abarkan, Abderahmane El Idrissi
- **CO225**– Synergistic Effects of PCL and PBS in Biodegradable Polyurethanes: Impact on Properties and Biodegradation Rate.
Chaimae Kheddar, Nafea Achalhi, Abderrahmane El Idrissi
- **CO226**– Study of new composites based on cellulosic fibers
Ahmed RAMDANI, Chakib MOKHTARI, Fouad MALEK
- **CO227**– Isocyanate-and phosgene-free routes to polyfunctional cyclic carbonates from castor oil
Chakib MOKHTARI, Ahmed RAMDANI, Fouad MALEK
- **CO228**– Eco-Extraction of Phenolic Compounds from Moroccan Olive Fruits, Leaves, and their Potential use as Antimicrobial Agents
Wafa LAABOUDI, Meriame RTEL BENNANI, Meryem MRANI ALAOUI and Hanae NACEIRI MRABTL
- **CO229**– Optimization of the post-harvest process for Moroccan dates and valorization of the sorting residues
MISBAH Asmae, EL ANSARI Meryeme, AIT-NOUNOU Safae, BENAMAR Houria, BENAJI Chaimaa, MOUTAOUKIL Ayoub, AIT HIDA Mehdi, AZIZ Siham, ZYADI Fatimzehra, EL AMMARI Hajar, ESSARIOUI Adil, NOUTFIA Younes
- **CO230**– Cumin and Sustainable Development: An Innovative Agroecological Model to Address Climate Challenges
BOUAKKA CHOUKRI
- **CO231**– Advances in Bioplastics for Ecological Transition and Sustainable Development
Chaimae MERIMI, Rachid TOUZANI, TADEUSZ SZUMIATA, Mohamed SIAJ, Belkheir HAMMOUTI
- **CO232**– Cosmetic valorization of acid-hydrolyzed extracts from cladodes and fruit by-products of *Opuntia* species resistant to *Dactylopius opuntiae*
Abderrahmane Hadini, Amine El Bouzidi, Mouhamaddine Moumou, Tayebi Amani, Imane Mokhtari, Mourad Bendada, Reda Bellaouchi, Solimane Amrani, Khalid El Bakkaye, Hicham Harnafi.
- **CO233**– Synthesis and Antimicrobial Evaluation of Novel Pyrazole-Based Ligands
Islam QORRI, EL Mehdi HAILY, Aziz BOULOUIZ, Rachid TOUZANI, Ismail OZDOMIR.
- **CO234**– Antimicrobial Potential of Pyrazole Derivatives: Biological Evaluation, Pharmacokinetic Prediction, and Molecular Docking Insights
Zakariae Abbaoui, Hüseyin Karci, İsmail Özdemir, Rachid Touzani

18:00 – 18:10

Discussions

Vendredi 20 juin 2025

Session III : Qualité, Sécurité, Nutrition, et Santé : un engagement pour l'avenir

(pathogènes, xénobiotiques, antimicrobiens, probiotiques, nutraceutiques, ...)

- **Lieu** : Salle A (Salle de conférences)
- **Modérateurs** : Pr. Rachid SABBAHI, Pr. Samir ANANOU
- **Rapporteur** : Pr. Reda BELLAOUCHI

09:00 – 09:20	Conférence introductive 1: Riadh BENSALAH, Centre de Biotechnologie de Sfax, Tunisia: « New insights on probiotic lactic acid bacteria activities ». (prebiotics, probiotics, postbiotics) »
09:20 – 09:40	Conférence introductive 2: Aleksandar Széchenyi, University of Pécs, Hungary: « Targeted Delivery of Natural Antimicrobials ».
09:40 – 09:50	Discussions
09:50 – 10:30	Pause-Café + Posters & visite des Stands d'exposition

Sous-session T3-A : Prévention et traitement des maladies : nouvelles approches thérapeutiques et alternatives naturelles

(Couvre les stratégies innovantes, extraits naturels, probiotiques, molécules bioactives ou synergies pour la santé humaine)

- **Local** : Salle A (salle de conférences)
- **Modérateurs** : Pr. My Mustapha ENNAJI, Pr. Abderrazak SADDARI
- **Rapporteur** : Pr. Reda BELLAOUCHI

10:30 – 12:20	• CO31: A Green Weapon Against Antibiotic Resistance: Silver Nanoparticles to Eradicate Klebsiella Infections Assya Aharrar, Elmahdi Blalouz, Soufiane Elmegdar, Oussama Aboulkassim, Asma Laktib, Fouad Msanda, Hassi Mohamed, Fatima Hamadi • CO32: Advancing the Fight Against Antimicrobial Resistance of Pathogenic Bacteria: Unleashing the Power of Alternative Combinational Therapies Through Drug Repurposing Approach: Case of <i>Staphylococcus aureus</i> Multidrug Resistant Strains. Zaineb Chagra, Wessal Ouedrhiri, Rachid El Fatimy, Reda Ben Mrid • CO33: Study of the Cytotoxic Activity of <i>Pyrethrum Anacyclus</i> Against Cancer Cells Aziza El Baz • CO34: Synthesis, Biological Evaluation, and Computational Docking Analysis of Novel 1,2,3-Triazole-8-quinolinol Derivatives M. El Faydy, L. Lakhrissi, B. Lakhrissi, K. Ounine, B. Tüzün, A. Zarrouk, Dafali • CO35: <i>Fusobacterium nucleatum</i> in Colorectal Cancer: Diagnostic and Therapeutic Implications Messaoudi Meryem, Bennani Amal • CO36: Innovative Bacteriocin OF71 Based Hydrogel for Targeted Treatment of Mycobacterial Skin and Mucosal Infections Meryem Bouraqqadi, Ghita Benkirane, Zoubir Oumaima, Laila Manni, Samir Ananou • CO37 : Rôles des nutraceutiques dans la prévention des effets négatifs associés à la consommation de la viande rouge ZAKI RABAB • CO38: The Role of Probiotics in the Management of Biofilm-Associated Infections: A Promising Therapeutic Strategy Oussama Grari, Said Ezrari, Imane Elyandouzi, Mohammed Karim Elazzouzi, Mohammed Lahmer, Abderrazak Saddari, Adil Maleb. • CO39: Optimization of Therapeutic Strategies Against Multiresistant <i>Acinetobacter Baumannii</i>: New Challenges and Future Prospects Imane El Yandouzi, Said Ezrari, Oussama Grari, Mohammed Lahmer, Abderrazak Saddari, Adil Maleb • CO310: Anti-inflammatory Potential of <i>Pistacia lentiscus</i> L. Seed Extract: A Natural Alternative with Comparable Efficacy to Indomethacin Sara Seddoqi, Ghizlane Nouioura, Ouahiba Laout, Nadia Gseyra • CO311: Extraction, Purification, Characterization, and Wound Healing Effects of Novel Prickly Pear (<i>Opuntia ficus-indica</i> (L.) Mill.) Heteropolysaccharides Naourez Ktari, Wafa Gargouri, Lobna Jlaiel, Imen Trabelsi, Sirine Ben Slima, Sana Bardaa, Farida Bendali, and Riadh Ben Salah
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Sous-session T3-B : Nutrition, antioxydants et ingrédients fonctionnels pour la santé

(Miels, huiles, extraits végétaux, nutraceutiques et analyses de la qualité nutritionnelle...)

- **Local** : Salle B
- **Modérateurs** : Pr. Samir ANANOU, Pr. Reda BELLAOUCHI
- **Rapporteurs** : Dr. Nouredine BENTOUHAMI

10:30 – 12:10

- **CO312:** Polyphenol-Rich Honey from Northern Morocco: A Potential Source of Antioxidant and Antibacterial Agents
Achtoun Omaymaa, Elmtili Nouredine, Mennane Zakariaa
- **CO313:** *Ceratonia siliqua* L. Pulp from the Middle Atlas of Morocco: Biochemical Composition, Antioxidant and Antimicrobial Activities
Fatima-Ezzahra Eddabbeh, Sabir Ouahhoud, Sara Moumnassi, Ayoub Ainane, Meryam Idrissi Yahyaoui, Salma Kadda, Anas Ziani, Sanae Baddaoui, Reda Bellaouchi, Bouchra El Guerrouj, Ennouamane Saalaoui, Abdeslam Asehraou, Tarik Ainane.
- **CO314:** The Effect of Drying Modes on the Chemical Composition and Bioactivities of *Cannabis sativa* L. Seeds Oil from Morocco
O. Boussetta, M. Idrissi Yahyaoui, A. Asehraou, M. Ramdani.
- **CO315:** Newly Synthesized Benzimidazole Derivatives: Synthesis, Characterization and Theoretical Investigation
Nouhayla Riadi, Mohamed Azzouzi, Israe Aiadi, Walid Daoudi, Abdelouahad Oussaid, Adyl Oussaid
- **CO316:** Unveiling the Differential Antioxidant Activity of Maslinic Acid in Murine Melanoma Cells and Rat Embryonic Healthy Cells After Sodium Nitroprusside (SNP) Treatment
Khalida Mokhtari, Amalia Pérez-Jiménez, Leticia García-Salguero, Cristina E. Trenzado, José A. Lupiáñez And Eva E. Rufino-Palomares
- **CO317:** Evaluation of the Interaction Between Menthol and Camphor, Major Compounds of *Clinopodium nepeta* Essential Oil: Antioxidant, Anti-inflammatory and Anticancer Activities Against Breast Cancer Cell Lines
Mohamed Taibi, Amine Elbouzidi, Mounir Haddou, Abdellah Baraich, Meryem Idrissi Yahyaoui, Reda Bellaouchi, Amine Khoulati, Abdeslam Asehraou, Mohamed Addi, Bouchra El Guerrouj, And Khalid Chaabane
- **CO318:** Synergistic Effects of *Ormenis multicaulis* and *Carum carvi* in Preventing Hepatobiliary Calcifications and Microlithiasis in Sprague Dawley Rats: A Histopathological Study
El Mahdi Wakrim, Abderrahman Chait, Brahim Bouizgarne
- **CO319:** Valorisation des Métabolites Secondaires de l'Arganier (*Argania spinosa* L.): Analyse du Taux de Polyphénols et de l'Activité Antioxydante
Hachimi Fatehelah, Ibrahim Toufik, Oudija Fatiha, Ilham Belkoura.
- **CO320:** Co-production of Enzymes and Biosurfactants for Eco-friendly Biodetergent Formulation
Slaoui Chaymae, Bahafid Wifak, Bouraqqadi Meryem, Zaazoui Nouhaila, Ananou Samir Et Manni Laila
- **CO321:** The Microencapsulation Effect on *Lactobacillus plantarum* S61: Enhancing Viability and Gastrointestinal Stability
Moumnassi Sara, Gharsallaoui Adem, Brahmi Mohamed, Idrissi Yahyaoui Meryem, Bentouhami Nour Eddine, Bellaouchi Reda, Dumas Emilie, Saalaoui Ennouamane, Asehraou Abdeslam
- **CO322:** Phytochemical Study and Evaluation of the Antioxidant and Antimicrobial Activities of an Aqueous Extract Obtained by Reflux Heating of Piper nigrum Seeds
Nouhaila AMRANI, Meryem IDRISSE YAHYAOU, Abdeslam ASEHRAOU, Mohammed RAMDANI

Sous-session T3-C : Santé environnementale, sécurité et nouvelles technologies pour la santé

(Pollution, microbiologie environnementale, intelligence artificielle, évaluation des risques et biotechnologies)

- **Local** : Salle C
- **Modérateurs** : Pr. Khalid OUFDU, Pr. Wafae MRABTI, Pr. Elmiad KERKOUR,
- **Rapporteur** : Dr. Mohamed TAIBI

10:30 – 12:30

- **CO323:** Impact de la pollution sur les eaux de la nappe phréatique de Sidi Allal Tazi Gharb, Maroc
Noura Ait Said, Noura Lmoudn
- **CO324:** Effect of Fabric Dyes on the Physicochemical Characteristics of Cloth Facemasks
Chennoufi Ikhlas Hani, El Louali Mostafa, Zahir Hafida, Latrache Hassan
- **CO325:** Physicochemical Characterization of Gallstone Surfaces and Their Influence on *Salmonella Typhi* Adhesion
Fadoua LOUGLALI, Abdeslam JAAFARI, Souad LEKCHIRI, Iman MEFTAH, Hafida ZAHIR, Mostafa EL LOUALI And Hassan LATRACHE
- **CO326:** Effects of Road Leaching on Lake Water Quality: An Analysis of Health Risks Linked to Heavy Metals
Ihsane Ougrad, Zahra Ellassassi, Abdessamad Mrabet, Ibrahim Mssillou, Adrian Lim, Abdelaaty Abdelaziz Shahat, Sanae Rezouki, Tarik Moubchir
- **CO327:** Age, Growth and Exploitation of *Chamelea gallina* (Bivalvia: Veneridae) on the Eastern Mediterranean Coast of Morocco
Amira Kharkhache, Souad Abdellaoui, Douaa Slimani, Imane Khamlichi, Rajae Mouedden, Nassir Kaddouri, Mohamed El Yaakoubi, Youssef Smiri
- **CO328:** The Impact of PECS in the Context of AAC in Individuals with ASD
Lamiaie Hajji, Pr Fatima El Ghazouani
- **CO329:** Commercial Fish as a Bioindicator of Microplastic Pollution in Morocco
Maryam Ouهدdou, Mohamed Rida Abelouah, Mohamed Ben-Haddad, Nour.Eddine Laaraj, Karim Sahla, Aicha Ait Alla.
- **CO330:** Temporomandibular Joint and Machine Learning: Systematic Review
Oussama Abali, Aissa Kerkour Elmiad, And Abdlekrim Daoudi
- **CO331:** Biocontrol Potential of Olive Mill Wastewater (OMWW) as a Sustainable Approach to Mitigate *Pseudomonas savastanoi* Adhesion
Soukaina Mitro, Taoufik Hakim, Chorouk Zanane, Mostafa El Louali, Hassan Latrache, Hafida Zahir.
- **CO332:** Machine Learning Applications in Biofilm Research: A Bibliographic Review
Yasser Chouhari, Iman Meftah, Fadoua Louglali, Soukaina Mitro, Chaima Oujaba, Hassan Latrache, Hafida Zahir.
- **CO333:** Contamination of Irrigation Water with Microcystins: Assessment of Their Bioaccumulation and Related Health Risk, Case Study Lalla Takerkoust Lake, Marrakech, Morocco
Majida Lahrouni, Khalid Oufdou, El Mahdi Redouane, Brahim Oudra, Alexandre Campos, Vitor Vasconcelos
- **CO334:** Search for metabolomic signatures to determine the exposome of honey bees (*Apis mellifera*), a colony health indicator.
Safae Ouali, Serena Giuliano, Anne Claire Martel, Sabine Lindenthal, Thierry Pourcher, Veronique Duquesne, Sonia Dagnino.

12:30 – 12:40

Discussions

12:40 – 14:30

Pause-Déjeuner

Session IV : Coproduits et économie circulaire : vers une gestion responsable des bioressources
(dessalement, traitement et réutilisation des eaux usées, bioremédiation, biotransformation, bioénergie,...)

- **Lieu** : Salle A (Salle de conférences)
- **Modérateurs** : Pr. Nour Eddine CHIHIB, Pr. Nabil GHABOUR
- **Rapporteur** : Pr. Khalida MOKHTARI

14:30 – 14:50	Conférence introductive 1 : Jaouadi BASSEM, Centre de Biotechnologie, Sfax, Tunisie : « Advancing Extremozymes Discovery: Exploiting Next-Generation Sequencing for Sustainable Industrial Innovation through Genomic and Metagenomic Approaches ».
14:50 – 15:10	Conférence introductive 2 : Abdelkarim ABOUSALHAM, Université de Lyon 1, France : « Structure-Function Relationships of Fungal Lipases/Phospholipases isolated from extreme environments »
15:10 – 15:20	Discussions

Sous-session T4-A : Valorisation énergétique, bioénergies et traitement des effluents
(coproduits, sous-produits, déchets, énergie et bioremédiation)

- **Local** : Salle A (Salle de conférences)
- **Modérateurs** : Pr. Mustapha BARAKATE, Dr. Hassan ERRAJI
- **Rapporteur** : Dr. Sanae BADDAOUI

15:20 - 17:30	• CO41: Extraction and Characterization of Maltenes from a Bio-Oil Produced via Hydrothermal Liquefaction of Olive Mill Wastewater: Towards Bioenergy Valorization Basaoud Soumaya, Ouahouah Zineb, Miftah Amine, El Harfi Khalifa, Aboulkas Adil • CO42: Hydrothermal Carbonization of Wood Sawdust: Process Optimization and Material Characterization Amine Miftah, Leila Azaryouh, Zineb Ouahouah, Soumaya Basaoud, Khalifa El Harfi, Adil Aboulkas • CO43: Preparation and modification of Nanocellulose for wastewater treatment: A review Israe Aiadi, Nouhayla Riadi, Mohamed Azzouzi, Adyl Oussaid, • CO44: Comparative Study of Bacterial Consortia for the Simultaneous Degradation of Synthetic Dyes and Hexavalent Chromium Nouhaila Zaazoui, Naima Elghachtouli, Meryem Bouraqqadi, Chaymae Slaoui And Wifak Bahafid • CO45: Optimization of Dye Adsorption in Aqueous Solutions: A Kinetic and Thermodynamic Study of Mechanically Treated Biochar Zineb Ouahouah, Amine Miftah, Soumaya Basaoud, Khalifa El Harfi, Adil Aboulkas • CO46: Enhanced Biomethane Production from Olive Mill Wastewater through Co-Digestion with Cow Dung, Fruit, Vegetable, and Fish Wastes: An Experimental and Kinetic Study Hassan Erraji, Essadek Abdessadek, Anas Tallou, Abdeslam Asehrou • CO47: Exploring the Potential of Treated Dairy Factory Wastewater Reuse (Whitewater) in Agriculture: A Comprehensive Analysis of Its Viability for Crop Irrigation in the Meknes Region Oulaya Zoui, Mustapha Barodi, Aziz Abouabdillah, And Mohamed Bouriou • CO48: Isolation of a Chromium-Resistant Bacterial Strain from Oued Martil, Morocco for Environmental Bioremediation Hafsa Zlali, Khay El Ouardy, Samira Bouhdid • CO49: Impact of Microcystins-contaminated water on Strawberry (<i>Fragaria vulgaris</i>) hydroponic culture: Phytotoxic effects, antioxidant defense, microcystins transfer and health risk assessment Fatima El Khalloufi, Mohammed Haida, Yasser Essadki, Richard Mugani, Alexandre Campos, Vitor Vasconcelos, And Brahim Oudra • CO410: Plants-beneficial microorganisms-nature bioremediation of mine tailing's sites Tarik Sahlaoui, Anas Raklami, Stefanie Heinze, Bernd Marschner, Adnane Bargaz, Khalid Oufdou • CO411: Biochemical profiling and seasonal trends of Alginates in <i>Cystoseira humilis</i> (Phaeophyceae): Implication for Potential Commercial Harvesting Strategy Khaoula Khaya, Khansae Kamal, Fouad Bentiss, Charafeddine Jama, Zahira Belattmania, Brahim Sabour • CO412: Biochar: An innovative solution for CO₂ capture and environmental remediation Afaf El Idrissi, Dalia Allouss, Ines Esma Achouri, Bouflja Bouammali, Rachid Touzani. • CO413: Microbial Fuel Cells performances using a Photocathode for Energy Production and Wastewater Treatment Fatima Ezzahra Al Azhari, Noureddine Touach, Fouzia Allali, Abdellah Benzouak, El Mostapha Lotfi
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Sous-session T4-B : Valorisation matière et extraction de composés bioactifs à partir de coproduits, sous-produits, déchets, matériaux et extraits bioactifs...

- **Local** : Salle B
- **Modérateurs** : Pr. Houssam ABOULOIFA, Pr. Rachid SABBAHI
- **Rapporteur** : Dr. Meryem IDRISSE YAHYAOU

15:20 – 17:30	• CO414: Discovery, Purification, and Functional Analysis of Two Novel Thiol Peroxidases (TP24p15 and TP37m5) Uncovered via Metagenomic Library Screening Nadia ZARAI JAOUADI, Rihab AMERI, Monia MEZGHANI and Bassem JAOUADI • CO415: Evaluation of Total Phenolic and Flavonoid Content, and Antioxidant Activity of Clove Extracts Ziani Anas, Baddaoui Sanae, Eddabah Fatima Zahra, Sabir Ouahhoud, Amine Khoulati, Samira Mamri, Iliass Lahmass, Redouane Benabbes, Abdeslam Asehraou, And Ennouamane Saalaoui. • CO416: Production of a thermal endo-polygalacturonase from <i>Aspergillus niger</i> HO32: Purification, characterization, and application Nour Eddine Bentouhami, Meryem Idrissi Yahyaoui, Sara Moumnassi, Reda Bellaouchi, Houssam Abouloifad; Nabil Ghabbourz, Abdelkarim Abousalham, Ennouamane Saalaoui, Loubna Firdaous, Bassem Jaouadi, Abdeslam Asehraou • CO417: Biotechnological Valorization of Olive Leaf Extracts Through Fermentation: Enhancing Antimicrobial, Antioxidant, and Bioremediation Potential Mohamed Amine Meziane, Jean-François Delège, Abderrahim Boughrara, Ibrahim Sadougui, Meryem Idrissi Yahyaoui, Lamyae Mehane, Mohamed Taibi, Amine Elbouzidi, Reda Bellaouchi, Bouchra El Guerrouj, Ennouamane Saalaoui, Abdeslam Asehraou • CO418: Valorization of olive by-products in the Tangier-Tetouan-Al Hoceima, Fez and Rabat regions: case of olive and argan tree grignons Mennane Zakaria, Zinedine Mohamed, Mrani Alaoui Mohammed, Elmtili Nourredine • CO419: History of microalgae: from their origin to modern applications Soukaina Terroufi, Yousra Hammouti, Abderrahmane Belkasm, Eva E. Rufino-Palomares, Amalia Pérez-Jiménez, Cristina E. Trenzado, José A. Lupiáñez, Said Ezrari, Adil Maleb, Hosam M. Safaa, Abdeslam Asehraou, Reda Bellaouchi, Redouane Benabbes, David Correa-Galeote, Alejandro González-Martínez, Jesús González-López And Khalida Mokhtari. • CO420: Sustainable valorization of shrimp by-products in the region of Laayoune-Sakia El Hamra: Potential for chitin and chitosan production Anouar Bouanga; Soumaya El Assri; Mounsef Neffa; Naima Boumezrague; Rachid Sabbahi • CO421 : <i>Crocus sativus</i> (le safran) et ses sous-produits : éléments préventifs, thérapeutiques et génoprotecteurs Ben Mbarek Soufiane, Asabir Ouahhoud, A Iliass Lahmass, A Abdellah Baraich, Aanas Ziani, Bamine Elbouzidi, Asanae Baddaoui, Aamani Teybi, Aghorbal Khadija, Aredouane Benabbes, And Aennouamane Saalaoui. • CO422: Multi-residue methods for the analysis of priority organic micropollutants in aqueous environmental matrices A.Azzal, B. Elguerrouj, A. Ouasrhir, H. Madani, Y. Smiri • CO423: Towards eco-friendly alternatives to prevent CaCO₃ scale formation in brackish water demineralization processes Ilham Karmal, Sara Darbal, Mustapha Nassiri, Jamila El Gaayda, M'barek Belattar, Said Ben-Aazza, Naima Hafid, Abdelaziz Ait Addi, Rachid Ait Akbour, Ali Driouiche • CO424: Chemical Characterization of Biodiesel Derived from <i>Jatropha curcas</i> for Use in Combustion Engines Imane Elkhamlichi, Ouafae Mokhtari, Fatima Brahmi, Amira Khachkhach, Chaymae Himri, Youssef Smiri. • CO425: 3D-QSAR, ADMET and Molecular Docking Study of a Series of 2-Substituted 1H-Benzimidazole-4-Carboxamide Derivatives Inhibitors Against Enteroviruses Nidal Naceiri Mrabti, Hanae Naceiri Mrabti, Mouna Mekkaoui, Jamal Sayah, Yassir El Ouadi, Mohamed Er-raji, Abdelhakim Bouyahya, Menana Elhallaoui. • CO426: Exploring alginate potential in benthic and newly encountered pelagic <i>Sargassum</i> species (Brown Seaweeds) on the Moroccan Atlantic Coast Khansae Kamal, Khaoula Khaya, Fouad Bentiss, Charafeddine Jama, Zahira Belattmania, Brahim Sabour
17:30 – 17:40	Discussions
17:40 – 17:50	Pause-Café + Posters & visite des Stands d'exposition
17:50 – 18:20	Remise des prix (meilleures communications : orale et poster)

Samedi 21 Juin 2025

Workshop : Biotechnologies et intelligence artificielle :

Opportunités pour l'Entrepreneuriat, le Développement Durable et l'Économie Circulaire

- **Local** : Salle A (Salle de conférences)
- **Modérateurs** : Pr. Saad IBNSOUDA, Pr. Bouchra EL GUERROUJ
- **Rapporteur** : Pr. Redouane BENABBES

09:00 – 09:20	Noureddine CHIHIB, Université de Lille, France : « Enzymatic and Microencapsulated Terpenes-Based Hurdle Approach to Target pathogenic bacterial Biofilms ».
09:20 – 09:40	Adem GHARSALLAOUI, Université de Lyon 1, France : « Microencapsulation of natural bioactive molecules and microorganisms: an innovative approach for food preservation».
09:40 – 09:50	Discussions
09:50 – 10:15	Pause-café
10:15 – 10:35	Mohamed CHIKHAOUI, IAV Hassan II, Rabat, Maroc: « Intelligence Artificielle au service de la gestion durable des ressources naturelles »
10:35 – 10:55	Jabir CHAOUI, Entreprise GLOBAL DIAGNOSTIC DISTRIBUTION (GDD), Témara, Maroc : « Sur la trace des gènes : la PCR digitale QIAcuity vers une nouvelle ère de précision en biotechnologie »:
10:55 - 11:15	Mohamed BOUDCHICHE & Mohamed ADDI, Université Mohammed Premier, Oujda, Maroc: « Cultures hors sol: smart farm »
11:15 - 11:30	Témoignages (entreprises , coopératives) : • Entreprise TRIFFA Conserves, SARL : « Production des olives de table » • Coopérative « Oulad Meryem » : « Valorisation des coproduits du cactus » • Coopérative « Oriental Gold » : « Production de produits cosmétiques »
11:30 - 11:50	Table ronde : Recherche scientifique en biotechnologies et Intelligence artificielle au service de la société. ----- • Modérateurs : Saad IBNSOUDA, Bouchra EL GUERROUJ, Abdeslam ASEHRAOU, Pr. Elmiad KERKOUR, Pr. Wafae MRABTI • Rapporteurs : Nabil GHABOUR, Redouane BENABBES
11:50 - 12:15	Cérémonie de clôture du 2 ^{ème} Colloque International de Bioressources, Biotechnologies et Développement Durable
12:15 - 20:00	Excursion : Dans la région de Saïdia

SESSION POSTERS

Session I : Production primaire innovante et durable intégrant l'Analyse du Cycle de Vie (ACV) : (préservation des ressources en eau, lutte biologique et biopesticides, biostimulants des plantes...)

CA11	Evaluating the Efficacy of Rhizobium Isolates as Biological Control Agents Against and <i>Clavibacter michiganensis subsp. Michiganensis</i> (Bacterial Canker) in <i>Solanum lycopersicum</i> (Tomato) Firaoui Abderrahim, Bouharroud Rachid, Aidi Huo, Chafiki Salahddine, Chabbi Naima, Mahroug Abdelmalek, El Assri Soumaya, Aberkani Kamal And Qessaoui Redouan
CA12	Assessment of Ultrasonic Processing Effects on the Stability and Therapeutic Potential of Bioactive Compounds in Mastic Gum (<i>Pistacia lentiscus</i>) Beraich Abdessamad, Burak Dikici, Krastena Nikolova, Daniela Batovska, Belbachir Yousra, Asehraou Abdeslam, and Talhaoui Abdelmoneam
CA13	Le contexte des changements globaux et leur impact sur la distribution d'herbiers marins et de la faune associée dans la lagune de Nador Bouaiadi El Bachir, Skali Ali, Rezzoum Nor-Eddine, Akodad Mustapha, El Ouamari Najib, Fadili Mohamed, El Bouch Mohammed, Oujidi Bouchra, Zidane Hakima
CA14	Valorization of Strawberry Tree Leaves from Tazekka Natural Park through nutritional and phytochemical assessments Fatine ELHLOU, Najat ASSEM, Nabil GHABBOUR, Mohammed EL HAOUARI
CA15	Dynamique Spatio-Temporelle des Communautés Benthod-Demersales Capturées par Chalutage de Fond le Long de la Côte Méditerranéenne Marocaine en Relation avec les Conditions Environnementales : Implications pour la Gestion des Pêcheries Slimani Douaa, Abdellaoui Souad, Kaddouri Nassir, Mouedden Rajae, Kasmi Khaoula, El Ouamari Najib, Chaabane Khalid
CA16	Biotransformation of <i>Crocus sativus L.</i> By-products: Evaluation of Enzymatic, Antioxidant, and Antimicrobial Activities after Microbial Fermentation EL GICH Oussama, Abdellah Baraich, Ennouamane SAALAOUI, Abdeslam Asehraou
CA17	Optimizing Cultivation Depth for Enhanced Biomass and Agar Production in <i>Gracilaria gracilis</i> from the Nador Lagoon Rajae Mouedden, Douaa Slimani, Souad Abdellaoui, Nassir Kaddouri, Khaoula Kasmi, Amira Kharkhache, Najib El Ouamari, Khalid Chaabane
CA18	Assessment of groundwater contamination with heavy metals and risks to human health - Case of the Angads plain, Morocco Oualid BOUKICH, Rihab BEN-TAHAR, Nour-elhouda BASRAOUI, Bouchra EL GUERROUJ, Youssef SMIRI
CA19	Development of biopesticides against fungal diseases Ouassila Missaoui, Meryem Idrissi Yahyaoui, Lamyae Mehane, Ibrahim Sadougui, Mohamed Amine Meziane, Mohamed Taibi, Bouchra El Guerrouj, Reda Bellaouchi, Abdeslam Asehraou
CA110	Harnessing Rhizospheric Pseudomonas Isolates to Control <i>Botrytis cinerea</i> on Tomato Qessaoui Redouan, Salahddine Chafiki, Abdelmalek Mahroug, Soumaya El Assri, Abderrahim Firaoui and Rachid Bouharroud
CA111	Exploring Pseudomonas Siderophores: Production, Spectrophotometric Detection, and Botrytis Inhibition Qessaoui Redouan, Salahddine Chafiki, Abdelmalek Mahroug, Soumaya El Assri, Abderrahim Firaoui, Mohamed Alouani and Rachid Bouharroud
CA113	Evaluation of Safety and Antibiotic Resistance Profiles of Lactic Acid Bacteria for Biocontrol Applications Haitam Lahmamsi, Samir Ananou, Abdessalem Tahiri

CA114	The influence of the BG11 culture medium on the growth rate of <i>Scenedesmus</i> and <i>Chlorella</i> under the same culture conditions for bioenergy, industrial, and environmental valorization BOUMALIK DOHA
CA115	Artificial Intelligence and Water Resource Management: A Synthesis of Recent Work ELKADI Meryem, CHAFI Abdelhafid, KERKOUR ELMIAID Aissa
CA116	Health risks associated with heavy metals in <i>Sardina pilchardus</i> from Betoya Bay, Morocco Rihab BEN-TAHAR, Oualid BOUKICH, Nour-elhoua BASRAOUI, Bouchra EL GUERROUJ, Youssef SMIRI
CA117	Effet du stress salin sur la germination et la croissance in vitro des variétés de <i>Cannabis sativa L.</i> : Beldia et Khardala TAHTAH Meryem, IBRAHIM Toufik, SAMIR Karima, NORDINE Aicha
CA118	Calibration of an Artificial Nose Designed for Food Quality Control LECHAEI Dhoha, BENABDELLAH Nihad, TAIBI Mohamed, MEHANE Lamyae, BELLAOUCHI Reda, ASEHRAOU Abdeslam

Session II: Transformations post récolte : lutte contre les altérations et les pertes :

(1) défis des fermentations, (2) voies de valorisation des protéines alternatives, (3) antimicrobiens, (4) emballages (actifs, biosourcés, intelligents), (5) approches innovantes dans le nettoyage et désinfection, (6) métabolites secondaires des plantes aromatiques et médicinales, (7) stratégies innovantes pour la biopréservation des aliments ...

CA21	Optimized Formulation of a Three-Component Extract Mixture from <i>Crocus sativus L.</i> (Stigmas, Leaves, and Tepals) for Enhanced Antioxidant Activity Abdellah Baraich, Amine Elbouzidi, Mohamed Taibi, Mounir Haddou, Samira Mamri, Reda Bellaouchi, Ramzi A. Mothana, Mohamed Addi, Redouane Benabbes, Mohammed Choukri, Abdeslam Asehrou, Bassem Jaouadi, Ennouamane Saalaoui
CA22	Phytochemistry and Pharmacological properties of <i>Portulaca oleracea L</i> Ayoub Farihi, Noufel Hachimi, Mohammed Roubi, Youness Mahdi, Bruno Eto and Nadia Gseyra
CA23	Microbial lipases: A promising tool for dermatological applications Ibrahim Sadougui, Bouchra El Guerrouj, Alexandre Noiriel, Mohamed Taibi, Noureddine Bentouami, Mohamed Amine Meziane, Lamyae Mehane, Amine Elbouzidi*, Reda Bellaouchi, Abdelkarim Abousalham, Bassem Jaouadi, Adem Gharsallaoui, Ennouamane Saalaoui, Abdeslam Asehrou
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Session III : Qualité, Sécurité, Nutrition, et Santé : un engagement pour l'avenir (pathogènes, xénobiotiques, antimicrobiens, probiotiques, nutraceutiques, ...)

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CA33	Évaluation des paramètres physico-chimiques et bactériologiques de la nappe phréatique des Béni Amir, région de Béni Mellal-Khénifra, Maroc : Perspectives pour une gestion durable de l'eau souterraine Noura Lmoudn, Noura Ait Said, Radouane Al Amri
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CA36	Novel clean label approach: Assessment of antimicrobial potential of combined use of aromatic and medicinal plants and bacteriocin <i>against Salmonella enterica</i> , <i>Bacillus cereus</i> and <i>Staphylococcus aureus</i> in model sausages MERYEM BOURAQQADI, ABDELJALIL AIT ARBAIN, LAILA MANNI, SAMIR ANANOU
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CA311	Biochemical composition, antioxidant and antimicrobial activities of carob pulp (<i>Ceratonia siliqua</i> L.) from Khenifra province (Morocco). Fatima-Ezzahra Eddabbeh, Sabir Ouahhoud, Sara Moumnassi, Ayoub Ainane, Meryam Idrissi Yahyaoui, Salma Kadda, Anas Ziani, Sanae Baddaoui, Reda Bellaouchi, Bouchra El Guerrouj, Ennouamane Saalaoui, Abdeslam Asehrou, Tarik Ainane.
CA312	The Role of Artificial Intelligence and the Dietary Microbiota in Colorectal Cancer Pathogenesis. MESSAOUDI Maryam, BENNANI AMAL
CA313	Machine Learning Applications in Biofilm Research: A Bibliographic Review Yasser Chouhari, Iman Meftah, Fadoua Louglali, Soukaina Mitro, Chaima Oujaba, Hassan Latrache, Hafida Zahir.
CA314	Physicochemical investigation of human gallstones from Beni-Mellal region, Morocco Fadoua Louglali, Abdeslam Jaafari, Souad Lekchiri, Iman Meftah, Hafida Zahir, Mostafa El Louali and Hassan Latrache
CA315	Anti-biofilm potential of clove essential oil for continuous glucose monitoring medical devices: toward an innovative strategy for preventing healthcare-associated infections Markaoui Ikram, Idrissi Yahyaoui Meryem, Asehrou Abdeslam, Daoudi Abdelkrim, Housni Brahim.

Session IV : Coproduits et économie circulaire : vers une gestion responsable des bioressources (dessalement, traitement et réutilisation des eaux usées, bioremédiation, biotransformation, bioénergie,...)

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CA43	Biotechnological Valorization of Carob (<i>Ceratonia siliqua</i> L.) Seed Powder via Microbial Fermentation Essamhi Aymane, Fatima-Ezzahra Eddabbeh, Meryem Idrissi Yahyaoui, Abdellah Baraich, Mohamed Taibi, Lamyae Mehane, Ibrahim Sadougui, Mohamed Amine Meziane, Nour Eddine Bentouhami, Sara moumnassi, Bellaouchi Reda, Ali berraaouan, El Guerrouj Bouchra, Ennouamane Saalaoui, Asehrou Abdeslam

CA44	The valorization of flavedo's biological properties through bioconversion via lactic acid bacteria. Rihab Benmeryeme, Meryem Idrissi Yahyaoui, Mohamed Taibi, Lamyae Mehane, Ibrahim Sadougui, Mohamed Amine Meziane, Amine Elbouzidi, Reda Bellaouchi, Abdeslam Asehraou, Bouchra El Guerrouj
CA45	Characterization of immobilized <i>endo</i> -polygalacturonase PGC-AN64 forms from <i>Aspergillus niger</i> HO32 with potential biotechnological interest Nour Eddine Bentouhami, Sara Mounnassi, Meryem Idrissi Yahyaoui, Reda Bellaouchi, Houssam Abouloifa; Nabil Ghabbour, Abdelkarim Abousalham, Ennouamane Saalaoui, Loubna Firdaus, Bassem Jaouadi, Abdeslam Asehraou,
CA46	The Valorization of Low-Quality Date Fruits for Microbial Enzyme Production Kaoutar Eljari, Reda Bellaouchi, Mohammed Taibi, Meryem Idrissi Yahyaoui, Ibrahim Sadougui Mohammed Amine Meziane, Bouchra El Guerrouj, Abdeslam Asehraou, Khadija Chakroune.
CA47	Isolement, identification et criblage de souches bactériennes productrices de bioplastiques biodégradables : Cas des polyhydroxyalcanoates (PHA) Karima AMGHAR, Maryam Fathi, Meryem Idrissi Yahyaoui, Mohamed TAIBI, Lamyae Mehane, Amine ELBOUZIDI, Ibrahim Sadougui, Mohamed Amine Meziane, Abdellah BARAICH, Mounir HADDOU, Bouchra EL GUERROUJ, Abdeslam ASEHRAOU, Reda BELLAOUCHI
CA48	Biomedical potential of nanoparticles produced by sustainable biosynthesis methods Nada Al Moudani, Ibtissam Ouahidi, Lotfi Aarab
CA49	Exploring microbial mechanisms for sustainable remediation of heavy metal pollution Mohamed Amine Meziane, Jean-François Delège, Ibrahim Sadougui, Meryem Idrissi Yahyaoui, Lamyae Mehane, Mohamed Taibi, Amine Elbouzidi, Reda Bellaouchi, Bouchra El Guerrouj, Ennouamane Saalaoui, Abdeslam Asehraou
CA410	Assessment of the Phytotoxicity of Dairy Wastewater Using the Lettuce Plant (<i>Lactuca sativa</i>) and Duckweed Plant (<i>Lemna minor</i>) as Bioindicators Oulaya Zoui And Mohamed Bourioung
CA411	Impact of submerged fermentation on the bioconversion of <i>Crocus sativus</i> corms Rofaida Bouhalga, Sanae Baddaoui, Abdellah Baraich, Samira Mamri, Meryem Idrissi Yahyaoui, Anas Ziani, Reda Bellaouchi, Bouchra El Guerrouj, Abdeslam Asehraou, Ennouamane Saalaoui.
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CA414	Bioleaching of metallic pollutants in mining residues by an indigenous strain: <i>Aspergillus niger</i> . Tarik Moubchir, Jihan Faouzi, Nouredine Eloutassi, Amal Lahkimi And Ilham Zahir

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