

تحت الرعاية السامية لصاحب الجلالة الملك محمد السادس نصره الله  
UNDER THE HIGH PATRONAGE OF HIS MAJESTY KING MOHAMMED VI

7<sup>TH</sup> EDITION

INTERNATIONAL CLIMATE CHANGE CONFERENCE  
CI2C - 2026

# FINANCE, RESEARCH AND NATURE FOR JUST AND SUSTAINABLE CLIMATE SOLUTIONS



**OCTOBER 29 – 31, 2026**  
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# **CI2C 2026 — ORAL SESSIONS PROGRAMME**

**Programme of Presentations • Parallel Sessions**  
**Scientific Programme of Oral Presentations**

## SESSION 01 : Artificial Intelligence, Remote Sensing and Climate Intelligence

(Salle ARGANA)

**Moderators:** Mr Ahmed KHADRA (Multidisciplinary Faculty of Safi, Cadi Ayyad University)

**Mr Elmahdi ERRAJI** (Higher School of Technology, Essaouira)

29 October 2026 | 14:00–15:15 | Sessions simultanées maintenues en parallèle

### **01. Artificial Intelligence and Remote Sensing for Spatiotemporal Drought Monitoring in the Semi-Arid Marrakech–Safi Region (Morocco)**

Auteurs : Houssam AYT OUGOUGDAL; Fadoua EL QORCH; Mohamed IKANBANE; Mohammed YACOUBI KHEBIZA

### **02. Density Mapping of Argan Trees in Essaouira Province, Morocco : An Integrated Remote Sensing and YOLOv8-Based Deep Learning Approach**

Auteurs : Dounia AZWAQ; Tarik BELGHAZI; Elmahdi ERRAJI; Mouad ERRAJI; Kholoud KAHIME

### **03. A Multi-Source Remote Sensing and Machine Learning Framework for Aboveground Carbon Stock Mapping in Mediterranean Reforested Forests**

Auteurs : Youssef HARDA; Mohamed EL MDERSA; Jamal IBIBIJEN; Laila NASSIRI

### **04. Machine Learning for Evapotranspiration Prediction in Water Resources Management: Recent Advances, Challenges, and Future Perspectives**

Auteurs : Mohamed IKANBANE; Chaimaa EL KIHAL; Kholoud KAHIME

### **05. Machine learning versus conventional allometric equations for improving forest carbon quantification in Argania spinosa ecosystems under climate change**

Auteurs : Youness NACIRI; Younes ABBAS; Abdelali BOULLI; Mohamed EL MDERSA; Abderrahim ETTAQY; Jamal IBIBIJEN

### **06 Evaluation of Epidemiological Forecasting Models for Potato Late Blight under Moroccan Semi-Arid Conditions: Towards a Hybrid Machine Learning-Based Decision Support System**

Auteurs : Meryem GHANEM; Tarik BENABDELOUAHAB; Saloua Bensiali; Hafsa HOUMAIRI; Sanae KRIMI BENCHEQROUN

### **07. Coastal Flood Susceptibility Mapping in Essaouira, Morocco: An Integrated GIS and Machine Learning Approach**

Auteurs : Chaimaa EL KIHAL; Mohamed IKANBANE; Kholoud KAHIME

### **08. From Carbon Assessment to Climate Action: Unlocking Renewable Energy Potential for a Low-Carbon Essaouira**

Authors: Chaimaa EL KIHAL, Mustapha ZAHIR, Mohamed HADACH, Mohamed IKANBANE, Khadija OUKNINE, Kholoud KAHIME

### **09. Desalination and Artificial Intelligence**

Auteurs : Samiha EL-HANSAR; Mohammed BOUKENDIL; Sofyan SBAHI

**Discussion et échanges**

## SESSION 02 : Climate Change, Health and Epidemiological Resilience

(Salle MOGADOR)

29 October 2026 | 14:00–15:15 | Sessions simultanées maintenues en parallèle

**Moderators: Mr Omar EL HIBA (Faculty of Science, El Jadida, ChouaibDoukkali University)**

**Mr Hicham CHATOUI (ISPITS Marrakech)**

**01. Type 2 Diabetes in the Era of Climate Change: Interaction Mechanisms, Territorial Vulnerabilities and Implications for Public Health in Morocco**

Auteurs : Zakaria KAOUKAB; Abdellatif EL MALLOUSSY; Kholoud KAHIME

**02. Climate Change and the Health of Older Adults in the MENA Region: A Narrative Review**

Auteurs: Abdellatif EL MALLOUSSY; Abdelmohcine AIMRANE; Zakaria KAOUKAB; Omar ELHIBA; Kholoud KAHIME

**03. Zoonotic cutaneous leishmaniasis dynamics: Climate–disease interactions in Highly Endemic Provinces of Morocco**

Auteurs: Chaymaa HARKAT; HICHAM HAFIANE; Denis SERENO; Kholoud KAHIME

**04. Cutaneous Leishmaniasis in an Endemic Moroccan Setting: Implications for Epidemiological Surveillance**

Auteurs : Hicham HAFIANE; Denis Seren; Mounia AMANE; Chaymaa HARKAT; Kholoud KAHIME

**05. Plasticité du Venimeux face au Changement Global : Évolution de la Toxicité des Scorpions et Défis Thérapeutiques de l'Envenimation.**

Auteur : Adil EL HOUSSEINI

**06. Neurotoxicité centrale et dynamique physiopathologique de l'envenimation scorpionique.**

Auteur : Adil EL HOUSSEINI

**07. Résilience des systèmes de santé face au changement climatique : analyse des déterminants des intentions de migration internationale des médecins au Maroc**

Auteur : Housni ABDELAZIZ

**Discussion et échanges**

## **SESSION 03 : Green Finance, Climate Risk and Corporate Transition**

**(Salle ATLANTICA)**

**29 October 2026 | 14:00–15:15 | Sessions simultanées maintenues en parallèle**

**Moderators: Mr Boujemaa JOUAY ((Higher School of Technology, Essaouira))**

**Mr Sidi Mohamed RIGAR (Faculty of Economics and Management, Marrakech)**

**01. Decarbonizing Socio-Economic Systems: Analyzing the Impact of Green Finance on Industrial Transition and Renewable Energy**

Auteur : Mouhssine SAIB

**02. Spatial Characterization of Municipal Solid Waste in the Essaouira Landfill (Morocco)**

Auteurs : Khadija OUKNINE; Ahmed KHADRA; Kholoud KAHIME

**03. Climate Risk and Stock Market Performance in Morocco: Evidence from the Casablanca Stock Exchange**

Auteurs : Oumaima DOUADA; Salah EDDINE KARTOBI

**04. Is Cashless Always Greener? Payment Digitalization and Sustainable Finance in Morocco**

Auteurs : Abdessamad EJJIAR; Salah EDDINE KARTOBI; Leila BENSLIMANE

**05. La finance verte comme levier de la résilience climatique des entreprises marocaines**

Auteur : AYOUB SLIMAN

**06. Finance verte et décarbonation dans les économies émergentes africaines : une analyse économétrique en données de panel (2010–2023)**

Auteurs : Lalla Nezha LAKMITI; Mustapha ZAHIR

**07. Risques climatiques et transformation des business models bancaires : une analyse bibliométrique et thématique des mécanismes de transmission**

Auteur : Touria BENCHEKROUN

**08. Du soutien entrepreneurial à l'impact climatique : évaluer l'efficacité des programmes d'accompagnement des entreprises d'énergie verte au Maroc**

Auteur : Amal BOUIZZEM

**09. A Sovereign No-Code, Natural-Language-Driven Automation Platform: Enabling Green Finance Innovation in Moroccan Fintech**

Auteurs : Abderrahmane SAMALI; Omar BENCHAREF

**10. TRANSFERT DE CONNAISSANCES ET INNOVATION : UNE REVUE DE LITTÉRATURE SYSTEMATIQUE**

Auteurs : Youssef Mantour, Mustapha Zahir

**11. Résilience territoriale et solutions intégrées : vers un modèle de gouvernance territoriale fondé sur l'intégration des pratiques financières, communicationnelles et numériques au Maroc**

Auteurs : **TAHA EL GHAJOUANI**

**Discussion et échanges**

## **SESSION 04 : Decarbonisation, Renewable Energy and Green Transition**

(Salle ARGANA)

**Moderators:** Mr Mohamed ERRAKI (Higher School of Technology, Essaouira)

**Mr Abderrahim BAZGAOU** (Higher School of Technology, Essaouira)

**01. Effect of Assisted Natural Regeneration through Exclosure on Argan Tree (*Argania spinosa* L.) Dynamics under Pedoclimatic Stress in Essaouira Province (Morocco)**

Auteur : Youssef SANDAD & Kholoud KAHIME

**02. Solar Power-to-Liquid SAF Production for Morocco's Aviation Sector: A National Scenario Analysis (2030-2050)**

Auteurs : Asmae EL BOUKILI; Najat OUAALINE

**03. Transient numerical parametric study of a PCM-integrated solar water heater with an adaptive-conductivity photo-thermal absorber**

Auteurs : zakaria BAJDOU; Mohammed BOUKENDIL; Lahcen EL MOUTAOUAKIL; Ayoub ABIDAR

**04. Coupling Green Hydrogen Power-to-X Pathways with the National Grid: A Modelling Framework for Electricity Demand Forecasting and Investment Planning in Tunisia**

Auteurs : Amira BRAHMI; Essia ZNOUDA; Chiheb BOUDEN

**05. Optimizing Cost and Environmental Impact of Biomass to Electricity Supply Chain**

Auteurs : Rakia BOUALLEGUI; Essia ZNOUDA; Chiheb BOUDEN

**06. Performance Analysis of a Photovoltaic–Thermal (PVT) Collector Incorporating a Nano-Enhanced Phase Change Material (Nano-PCM)**

Auteurs : Othmane TAZMAITE; Mohammed ER-RAKI, Abderrahim BAZGAOU, Safae HASNAOUI, Mohammed HASNAOUI

**07. Isolation and Pectinase Production Potential of *Coniochaeta pulveracea* from Moroccan Argan Forest under Submerged Fermentation**

Auteurs : Assmaa CHOUKRI, Aayah HAMMOUMI, Tilila Baganna, Mohamed SBAHI, Williams TURPIN, Khalid FARES, Ahde EL IMACHE, Lahcen OUAHMANE, Halima CHERNANE

**08. Concentration Ratio Optimization of a CPVT–ORC Hybrid System: An Exergy-Based Assessment**

Auteurs : MALIKA BOU FKRI, Abdelfattah EL MANSOURI, Abdelkhalek AMAHMID, Mohammed HASNAOUI

**Discussion et échanges**

## SESSION 05 : Education, Society and Human Dimensions of Climate Resilience

(Salle MOGADOR)

29 October 2026 | 15:15–16:30 | Sessions simultanées maintenues en parallèle

**Moderators:** Mr lissaneddine abdelilah (Higher School of Technology, Essaouira)

**Mr Youssouf EL AZIZI** (Higher School of Technology, Essaouira)

### **01. Climate-Health Literacy in a Warming Morocco: Universities, Youth Citizen Science, and Territorial Adaptation**

Auteur : Rachid ED-DALI

### **02. Social acceptability, territorial justice and Younger generations in the energy transition: the case of the East Naples biogas plant**

Auteurs : Antonella BERRITTO; Fabio CORBISIERO; Carmine Urciuoli

### **03. Analyse terminologique des solutions fondées sur la nature, quels effets sur le territoire ? Le cas de Paris**

Auteur : Cedissia ABOUT

### **04. Politiques d'adaptation au changement climatique au Maroc, stratégies d'acteurs et contraintes de mise en œuvre**

Auteur : Abdelaziz YAHYAOU

### **05. Circular valorization of chitin-rich biomass into chitosan: a nature-based solution for crop drought resilience**

Auteurs : Fadoua ABOU EL KOUSSINE; Abdelghani CHAKHCHAR; Asma MAKLOUL

### **06. Mission: Decide! Public Space Decision-Making under Climate and Social Pressures**

Auteurs : Thara KIRRESH; Fatina HUSSEINI; Hiba SALAH AL-DIN ISELAH

**Discussion et échanges**

## SESSION 06 : Oceans, Coastal Ecosystems and Marine Biodiversity

(Salle ARGANA)

**Moderators:** Mrs Ibtissam SETTI (ibn zohr university)

**Mr. Azeddine SEDKI** (Fssm, Cadi ayyad)

**30 October 2026 | 08:30–10:00 | Sessions simultanées maintenues en parallèle**

### **01. Extremophile Microalgae from Extreme Ecosystems: Nature-Based Solutions for Marine Biodiversity Conservation and Climate Change Mitigation**

Auteur : Lamia TRABELSI

### **02. L'océan dans les politiques d'adaptation au Maroc: du littoral au système marin**

Auteurs : Chaymae KAOURI; Marie BONNIN; Samira IDLLALENE

### **03. Seasonal Environmental Gradients Shape Phytoplankton Community Dynamics in a Moroccan Atlantic Coastal Ecosystem : Insights from Imessouane Bay**

Auteurs : Afaf AMAZZAL; Hasnae SABRI; Zahra OKBA; Kholoud KAHIME

### **04. Sea Level Rise In Africa: From Science To Impacts**

Auteurs : Samira IDLLALENE; Alexander KOLKER

### **05. Updated checklist and ecological assessment of green seaweeds from Essaouira coastline (Morocco)**

Auteurs : Hasnae SABRI; Afaf AMAZZAL; Kholoud KAHIME; Ouafa CHERIFI; Asmae MANSORI

### **06. Reproductive Biology and Fecundity of the Atlantic Spider Crab *Maja brachydactyla* from the Atlantic Coast of Safi, Morocco**

Auteur : Oumayma KHALIL

### **07. Artificial Intelligence in Flood Management under Climate Change: A Review and Decision-Support Framework Applied to the Tensift Watershed, Morocco**

Auteurs : Ouissal CHAMCHATI; Fatiha AIT EL HAJ; Abdelaziz LAHMILI

### **08. roalgae-Based Industrial CO<sub>2</sub> Utilization for Climate Change Mitigation: Biological Stability and Scale-Up Performance of *Microchloropsis gaditana***

Auteurs : ABDELOUAHED AKHMISS; Kholoud KAHIME

### **09. Analyse géospatiale de l'évolution pluridécennale et saisonnière de la plage d'Essaouira (Maroc)**

Auteur : Jaouad AMAGHYOUZ

**Discussion & échanges**

## SESSION 07 : Water Security, Desalination and Climate-Smart Water Management

(Salle ATLANTICA)

30 October 2026 | 08:30–10:00 | Sessions simultanées maintenues en parallèle

**Moderators:** Mr Mohamed Merzouki (Faculty of Science and Technology, Sultane Moulay Slimane, BeniMellal)

**Mr Ahmed KHADRA** ( Multidisciplinary Faculty of Safi, Cadi Ayyad University)

### **01. Evaluation of the Genotoxicity of Desalination Brine Using the Vicia faba Micronucleus Assay**

Auteur : Ikram ZHIRI

### **02. Water Equity and the Causal Impact of Desalination in Morocco: A Gini Decomposition and Synthetic Control Analysis**

Auteur : Boutayna CHERKAoui

### **03. Le transfert de l'eau de mer dessalée de Safi vers Marrakech : enjeux juridiques et financiers dans un contexte de changement climatique**

Auteur : Mohamed MOUCH

### **04. Feasibility Assessment of Treated Wastewater Reuse for Agricultural Irrigation: A Case Study of the Melloussa Wastewater Treatment Plant, Tangier Province, Morocco**

Auteur : Youssef ELKABDANI

### **05. Treated Urban Wastewater Reuse in Semi-Arid, Non-Coastal Regions: A Smart and Sustainable Water Management Framework**

Auteur: Radouane SOUJOURD

### **06. Flood Risk and Territorial Resilience in the Rheris Watershed (South-Eastern Morocco): An Integrated Approach to Climate Change Adaptation**

Auteurs : Abdelmoumen BENCHATTOU; Mohamed EL GHACHI

### **07. Advancing Climate-Resilient Watershed Management: A GIS-Based Assessment of Water Erosion in the Ourika Watershed (High Atlas, Morocco)**

Auteur : Khaoula JAMMAT

### **08. دراسة هيدرولوجية وهيدروليكية لتقدير تدفقات الفيضانات ومحاكاة السلوك الهيدروليكي لمجرى واد الخض بالاطلس الكبير، المغرب**

### **Hydrological and Hydraulic Assessment of Flood Discharges and Hydraulic Behavior Simulation of the Oued Lakhdar Channel, High Atlas, Morocco**

Auteur : Omar EL AROUSSI

### **Discussion et échanges**

## SESSION 08 : Climate-Resilient Cities, Urban Planning and Sustainable Mobility

(Salle MOGADOR)

30 October 2026 | 08:30–10:00 | Sessions simultanées maintenues en parallèle

**Moderators:** Mr Rachid ED-DALI (Faculty of Letters and Human Sciences in Marrakech)

### **01. AI-Driven Smart Traffic Intelligence Infrastructure for Climate-Resilient Urban Mobility**

Auteurs : Hamza ELOUIAAZZANI; Mohamed AIT BABRAM; Ahmed LAATABI; Nicolas MARILLEAU; Tri NGUYEN-HUU

### **02. Co-designing climate-resilient water-energy-food systems in Morocco: A participatory approach for Bouchane Agricultural Communities**

Auteurs : Marie-Blanche ROUDAUT; Auja BYWATER

### **03. Is shade all there is to it? Quantifying the contribution of tree transpiration to cooling cities**

Auteurs : Yakir PREISLER; Ron LINDER

### **04. Parisian eco-districts: low energy and affordable housing?**

Auteur : Elise MACHLINE

### **05. Techno-economic and environmental feasibility of rooftop and garden vertical farming across residential building typologies in Casablanca, Morocco**

Auteurs : Lina BENNANI; Hicham BAH

### **06. Urban Heat, Socio-Spatial Inequalities, and Climate Vulnerability in the Marrakesh-Safi Region. A Longitudinal Assessment of the Social Gradient of Thermal Exposure, 1984–2023**

Auteurs : Badr ABOUFARASSE; Mohamed AIT BABRAM; Abdelhafid EL ALAOUI EL FEL

### **07. Urbanization-Induced Changes in Temperature, Carbon, and Hydrology Across Morocco**

Auteur : Mohamed Amine LACKHAM

### **08. A Holistic Research Approach to Soil Health in Urban Greenery Ecosystems**

Auteurs : Lonia FRIEDLANDER; Elise MACHLINE; Uri NACHSHON; Yakir PREISLER; Rina Kamenetsky Goldstein

**Discussion et échanges**

## SESSION 09 : Climate-Smart Agriculture, Soil and Sustainable Food Systems

(Salle ARGANA)

30 October 2026 | 14:30–15:30 | Sessions simultanées maintenues en parallèle

**Moderators:** Mr Ahmed KHADRA (Multidisciplinary Faculty of Safi, Cadi Ayyad University)

**Mr Lahcen OUAHMANE** (Multidisciplinary Faculty of Safi, Cadi Ayyad University)

### **01. Soil-Plant System Responses to Fractionated OMWW Application and Microbial Inoculation**

Auteurs : Oumaima DAHBANE; Mohamed HAFIDI; Mohammed RHAZI; Youness BOUHIA

### **02. Effect of organo-mineral fertilizers on soil properties under salinity stress in Durum Wheat cultivation**

Auteurs : Ibtisam AABIDALLAH; Youness BOUHIA; Mohamed HAFIDI

### **03. Microbial Inoculation Drives Rock Phosphate Solubilization, Community Diversification, and Production of Stable Organo-Mineral Phosphorus Fertilizers**

Auteur : Youness BOUHIA

### **04. Pasta fortification with edible insects and snail**

Auteur : Nouhaila SAHILI

### **05. Alginate-Based Smart Biofertilizers for Climate-Resilient and Sustainable Agriculture**

Auteurs : Asma MAKLOUL; Fadoua ABOU EL KOUSSINE; Abdelghani CHAKHCHAR

### **06. Coupling biochar-enhanced constructed wetlands and satellite-based precision irrigation: a circular bioeconomy strategy for treated wastewater reuse in Moroccan olive orchards**

Auteurs : CHAIMAE MALDOU; Dominique COURAULT; Tonni AGUSTIONO KURNIAWAN; Naaila OUZZANI; Faissal AZIZ

### **07. Repenser les catégories de planification urbaine pour intégrer les paysages hydro-productifs historiques dans les politiques d'adaptation climatique**

Auteur : Widad AMELAL

### **Discussion et échanges**

## SESSION 10: Climate Governance, Environmental Law and Justice

(Salle ATLANTICA)

30 October 2026 | 14:30–15:30 | Sessions simultanées maintenues en parallèle

Moderators Mr Rachid ED-DALI (Faculty of Letters and Human Sciences in Marrakech)

### 01. From Science to Governance: How Can African Countries Cope with Sea Level Rise Impacts?

Auteur : Samira IDLLALENE

### 02. One Shock, Three Trajectories: Law, Justice and Diplomacy in Africa's Fragmented Response to the 2026 Strait of Hormuz Crisis

Auteurs : Yassine BOUCHFAR; Intissar BENSBIH

### 03. La gouvernance urbaine à l'épreuve de la mobilité : Coordination institutionnelle et exclusion socio-spatiale entre Tamansourt et Marrakech

Auteurs : Loubna ELHOUCINE; Fatima GEBRATI

### 04. Treatment of olive mill wastewater using microalgae: Polyphenol removal and sustainable agronomic valorization of microalgal biomass

Auteurs : Khaoula BENBNIDAK; Zineb LAKOUAM; Abdelilah EL ABBASSI; Laila EL BOUZIDI; Kha...

### 05. Treatment of olive mill wastewater using microalgae: Polyphenol removal and s...

Auteurs : Asmae EL FATMI; Hiba ZEGROUD; Sara EL HAMJI; Karim SBIHI; Faissal AZIZ

### 06. Économie circulaire des déchets de construction et de démolition : état des lieux et voies de valorisation comme ressources secondaires

Auteur : Kaoutar OUHALLI

### 07. Infrastructure as Dignity: Women's Labor, Forced Eviction, and Climate Displacement in Lagos, Abuja, and Dadaab

Auteur : Fabienne HOELZEL

### 08. العمل عن بعد بين متطلبات الاستدامة المناخية وضمان حماية الحياة الخاصة للأجير: نحو نموذج قانوني للمقاولة الرقمية المستدامة

Auteur : Idris EL YOUSFI

Discussion et échanges

## SESSION 11 : Sustainable Tourism, Entrepreneurship and Business Innovation

(Salle ARGANA)

31 October 2026 | 08:00–09:00 | Sessions simultanées maintenues en parallèle

**Moderators:** Mr Zouheir MSETAFA (Higher School of Technology, Essaouira)

**Mr Khalid EL HOUSNI** (Higher School of Technology, Essaouira)

**01. Tourisme sportif et développement territorial durable au Maroc : analyse des enjeux de l'organisation de la Coupe d'Afrique des Nations 2025 et de la co-organisation de la Coupe du Monde de la FIFA 2030 ,à de Marrakech.**

Auteur : Ali SAAD

**02. Sustainable Tourism Destinations as Catalysts for Entrepreneurship and Biodiversity Conservation: Managing for Financial Sustainability in Eastern Ethiopia**

Auteurs : IBSA ALIYI USMANE; Lelisa Shamshadin Mohammed; KEMAL KASIM AHMED

**03. Is Geotourism Inherently Low-Carbon? Theoretical Arguments and Territorial Evidence**

Auteurs : Safaa CHARDI; Kholoud KAHIME

**04. L'apport de la Fintech basée sur la Blockchain pour une meilleure intégration de la Responsabilité Sociétale des Entreprises au Maroc : Cas des crypto-actifs**

Auteur : ABDELLAH EL AIDER

**Discussion et échanges**

## SESSION 12 : Sustainable Materials and Environmental Technologies

(Salle ATLANTICA)

31 October 2026 | 08:00–09:00 | Sessions simultanées maintenues en parallèle

**Moderators:** Mr. Mr Abderrahim BAZGAOU (Higher School of Technology, Essaouira)

**Mr Mohamed ERRAKI (Higher School of Technology, Essaouira)**

**01. Green-Synthesized Zinc Oxide Nanoparticles Incorporated into Electrospun PVDF HFP/Gelatin Nanofibers for Active Food Packaging**

Auteurs : Salma AYADI; Ghizlane AKHOUY; Jamila SABYH; Faissal AZIZ

**02. Phytochemical Composition and Antioxidant and Antibacterial Activities of Seaweed Extracts from the Moroccan Atlantic Coast**

Auteur : Abdelhak ADLI

**03. Hybrid Cooling of Electronic Components via Phase Change Materials and PID-Driven Forced Convection**

Auteurs : Ayoub ABIDAR; Zakaria BAJDOU; Mohammed BOUKENDIL; Lahcen EL MOUTAOUAKIL

**04. From Waste to Climate-Resilient Building Materials: Thermal Performance, Material Safety and Climate Co-Benefits from Circular Valorisation of Paper and Textile Waste**

Auteurs : Myriam LAROUSSI; Nour SGHAIER; Maher BEN CHIEKH

**05. Biomass-Derived Graphene Oxide from Catalytically Graphitized olive pomace: green synthesis and structural characterization**

Auteurs : Jamila SABYH; Faissal AZIZ; Naaila OUZZANI

**06. From Waste to Resource: Valorization of Post-Consumer Plastic Waste into Sustainable Construction Materials**

Auteurs : Hajar SKIRI; Nabil SAFFAJ; Rachid MAMOUNI

**Discussion et échanges**

## SESSION 13: Forests, Biodiversity and Ecosystem Resilience

(Salle MOGADOR)

**Moderators:** Mr Abderazzak CHAHBOUN (Mr Abderazzak CHAHBOUN)

Mr Lahcen OUAHMANE (Multidisciplinary Faculty of Safi, Cadi Ayyad University)

**31 October 2026 | 08:00–09:00 | Sessions simultanées maintenues en parallèle**

**01. Application of Machine Learning and Geostatistics for Forest Fragmentation Analysis in the Larache and Ouezzane Provinces (Northern Morocco): Implications for Forest Resources and Climate Change Vulnerability**

Auteurs : Fouad MOUNIR; Amadou KONARE

**02. Modeling the Current and Future Distribution of *Vachellia tortilis* subsp. *raddiana* Under Climate Change Scenarios in the Southeastern Region of Morocco**

Auteur : Ismail AITHSAIN

**03. Carbon and nitrogen stocks and soil organic matter stabilization in a tropical coffee agroecosystem: A 15-year study on phosphogypsum and brachiaria intercropping**

Auteurs : Kaoutar BOUFOUS; Luis Carlos COLOCHO HURTATE; Nicolas Gustavo DA CRUZ DA SILVA; Lilian Angelica MOREIRA; Malak ELMEKNASSI; Paulo SERGIO PAVINATO; Luiz ANTONIO MARTINELLI; Matheus SAMPAIO CARNEIROO BARRETO; Hudson WALLACE PEREIRA DE CARVALHO

**04. Medicinal Plant Use among Diabetic Patients in Morocco: Regional Ethnobotanical Diversity and Implications for Biodiversity Conservation under Climate Change**

Auteurs : Hajar EL BOUAZZAOUJ; Nissrine LAKHSSIM; Fatima Ezzahraa EN-NAJDI; Samia BELLA; Ibtissam BOUCHANE; Mohammed ELATIQUI; LAILA EL BOUZIDI; Khalid Bekkouche; Abdelilah EL ABBASSI

**Discussion & échanges**

# PROGRAMME DES COMMUNICATIONS EN LIGNE

**Samedi 31 octobre 2026 | 09h00 – 11h56**

22 communications • 8 minutes par communication • Sans pause

Moderators: Yassine ZEGZOUTI; Research Associate, KASS-REMENA - Expert in Climate Change, Energy Security, and Environmental Sustainability

**Mrs Ouassila RIOUCHI (Higher School of Technology, Essaouira)**

**Mrs Fatimazahra AIT BALLAGH (Higher School of Technology, Essaouira)**

01.

**Solar Pumping, Drip Irrigation, and Climate Finance in Morocco: A Triple Co-Benefit Framework for Agricultural Decarbonization and Water Conservation**

*Auteurs :* Mey EL MOUSTAPHA; Najat OUAALINE

02.

**A Local LLM Based Multi Agent Simulation Framework for Comparing Sustainable Tourism Governance Mechanisms: A Case Study of Essaouira, Morocco**

*Auteurs :* Youssef ETAFSSAOUI; Omar BENCHAREF

03.

**Climate Change and Socioeconomic Cohesion: A Bibliometric Analysis of the Scientific Literature (1978–2025)**

*Auteurs :* Khalid AGBALU; Jamal Eddine EL ABDELLAOUI

04.

**Résilience des systèmes de santé et stratégies d'adaptation sanitaire face au changement climatique : enjeux et perspectives pour le Maroc**

*Auteurs :* BEN MHAMED BELHAFIDI

05.

**Les programmes éducatifs sur les énergies renouvelables et les changements climatiques au Maroc : cas des Sciences de la vie et de la Terre (SVT).**

*Auteurs :* Hanane ACHAQ; Omar AMAHMID; Said CHAKIRI; Youssef EL GUAMRI; Raja MOUSSAOUI

06.

**Wastewater treatment reuse as a climate change adaptation strategy in a water-scarce region: Performance of sand filtration coupled with UV disinfection at Agadir WWTP, Morocco**

*Auteurs :* ABDELLAH EL BOULANI; Khaddouj Amzil; Nour Eddine Chaouky; Fatima Hamadi

07.

**L'exploitation minière des grands fonds marins à l'ère du BBNJ : entre exploitation des ressources et protection de la biodiversité marine**

*Auteurs :* Bilal BAHAJJI

08.

**Scientific Valorization of Endemic Moroccan Argan Honey: A Sustainable Approach to Enhance Argan Forest Conservation under Climate Change.**

*Auteurs* : Zineb LAKOUAM; Khaoula BENBNIDAK; Houssam LAKHMILI; Abdelilah EL ABBASSI; Laila EL BOUZIDI; Khalid BEKKOUCHE

09.

**Sustainable Alginate–Pozzolan Biosorbent for Phenolic Compound Removal from Olive Mill Wastewater**

*Auteurs* : Khadija ZIDAN

10.

**Structure du capital à l'épreuve de la transition climatique : effets de la divulgation environnementale, des investissements durables et de la pression réglementaire sur les choix d'endettement des entreprises marocaines non financières cotées**

*Auteurs* : Mounir EL MRABIT; Nabil BOUAYAD AMINE

11.

**Gouvernance territoriale adaptative face au stress hydrique**

*Auteurs* : Ahmed ZYAT KHALID

12.

**Inter-annual dynamics of mycorrhizal symbioses in endemic Moroccan thyme: implications for the climate resilience of ecosystems**

*Auteurs* : sara joual; Hiba BOUQUOROU; Lahcen OUAHMANE; Abdelaziz BOUIZGAREN; Hanane DOUNAS

13.

**Comparative Evaluation of Natural and Synthetic Additives on the Physicochemical and Microbiological Stability of Functional Processed Foods**

*Auteurs* : Loubna JRHAIDER; El Mostapha TACE; Youssef NAIMI

14.

**Valorisation énergétique des boues issues des stations d'épuration**

*Auteurs* : Laila TAKI

15.

**From biosynthesis to environmental applications: redox chemistry and electrochemical properties of pyocyanin from \*Pseudomonas aeruginosa**

*Auteurs* : Jalaldine SAKTINE; Abir CHAREF; Mohammed BOUKENDIL; lahcen Elmoutaouakil; Younes BAHAMMOU

16.

**From biosynthesis to environmental applications: redox chemistry and electrochemical properties of pyocyanin from \*Pseudomonas aeruginosa**

*Auteurs* : Farah ELHANDOUR; Youssef NAIMI; Ilham ZERDANI

17.

**Arbuscular Mycorrhizal Fungi Associated with the Genus Thymus in the Moroccan Middle Atlas: Influence of Temporal Variability and the Host Plant**

*Auteurs* : Hiba BOUQUOROU; Sara JOUAL; Hanane DOUNAS; Lahcen OUAHMANE

18.

**Burundian edible insects as functional ingredients for cassava paste fortification: nutritional, safety, and culinary perspectives**

*Auteurs* : Jean Marie NSHIMIRIMANA

19.

**01. Sustainable Treatment of Olive Oil Mill Wastewater Using Microalgae: Biomass Recovery for Bioenergy Applications**

*Auteurs* : Hiba ZEGROUD; Asmae ELFATMI; Karim SBIHI; Faissal AZIZ; Sara ELHAMJI

20.

**Toward climate-resilient coastal urban planning: A GIS-based multi-criteria decision framework for territorial governance in the global south**

*Auteurs* : Hiba SETFANE; Naoual Ouazzani Touhami

21.

**Decarbonizing the Built Environment: AMAR-TECH as a Catalyst for Climate Resilient Arab Communities**

*Auteurs* : Hazem KHATTAB

22.

**Beyond Majority Voting: Game-Theoretic Assurance against False Consensus in Multi-Agent Climate Intelligence**

*Auteurs* : Abdessamad IMIDER; Omar BENCHAREF

# CI2C 2026 - PROGRAMME DES COMMUNICATIONS POSTERS

*Présentations par affiche • Classement thématique*

**Mrs Afaf AMAZZAL (Higher School of Technology, Essaouira)**

**Mrs Hasnae SABRI (Higher School of Technology, Essaouira)**

**01. Évaluation numérique d'un échangeur air-sol dans un pavillon rural en climat semi-aride aux environs de Marrakech**

Auteurs : Abderrahim BRAKEZ; Ayman LAHBABI

**02. Forest dieback in native and reforestation species: Retroanalysis, predictive modelling and early warning through the integration of ecological approaches and machine learning**

Auteurs : Yacine LAIDI; Mohamed EL MDERSSA

**03. INTEGRATED APPROACH TO WATER AND SOIL CONSERVATION AND THE DEVELOPMENT OF A GIS: CASE STUDY OF THE OUARZAZATE REGIONAL OFFICE FOR AGRICULTURAL DEVELOPMENT (ORMVAO)**

Auteurs : Houda NASSAH

**04. Tourism, Psychological Well-Being, Emotional Regulation and Coping Strategies: A Systematic Review**

Auteurs : Anna Lisa AMODEO; SEBASTIANO CACEFFO; Erica ALFIERI; Veronica GIAQUINTO; Miriam BELLUZZO

**05. MHD Double-Diffusive Natural Convection of a Water-NEPCM Suspension in a Wavy Porous Cavity with Partial Cooling and Internal Cylindrical Sources**

Auteurs : Layla FOURA; Youssef DAHANI; Abdelkhalek AMAHMID; Ayoub NABBAGUI; Mohammed HASNAOUI; MALIKA BOUFRKI

**06. Path-Dependent Flow Behaviour in Double-Diffusive Convection with Internal Heat Generation: A Hybrid LBM-FDM Approach**

Auteurs : Safae HASNAOUI; Othmane TAZMAITE; Mohammed ER-RAKI; Abderrahim BAZGAOU; Mohammed HASNAOUI

**07. Biochar in Hydroponics: A Bibliometric assessment of its role in sustainable substrates, nutrient management, and water remediation**

Auteurs : Hajar BENALI; Mohamed EL MDERSSA

**08. Valorization of organic waste into biofertilizers for climate-resilient pepper growth under drought conditions**

Auteurs : Wiam YACOUBI; Abdelghani CHAKHCHAR

**09. Microbial Diversity in a Climate-Vulnerable Coastal Wetland: Halophilic Actin...**

Auteurs : Ahmed NAFIS; Brahim SABOUR; Abdellatif CHAOUTI; Elmostapha OUTAMAMAT; Anas RAKLAMI

**10. Environmental conditions shape molluscan assemblages in intertidal *Mytilus galloprovincialis* beds of northwestern Morocco: Trophic guilds and spatiotemporal variability**

Auteurs : Zakaria EL-AZZOUZI; Abdallah DAHBI; Amal NADRI; Brahim SABOUR; Abdellatif CHAOUTI