



3MCE'2022

**Tentative program of the
E-Conference on Mechanics, Mechatronics,
Materials and Civil Engineering**



to be held *online* on the 10th and 17th of September 2022
at the National School of Applied Sciences - Tetouan, Morocco

Program

Horary is given according to the actual Moroccan time which is the same as GMT+1 and is equal to ECT minus 1 hour.

Saturday the 10th of September 2022

- 9:30** **Opening ceremony** of the conference and welcome speech
- 9:50** **First keynote lecture by Mohamed Najib Ichchou (France):**
Sandwich Structures
- 10:30** **Second keynote lecture by Antonio Barletta (Italy):**
Convective, Absolute and Spatial Instability in Porous Media
- 11:10** **Third keynote lecture by Qi Sun (China):**
Optimization design of Inlet Guide Vane in centrifugal compressor.
- 11:50** **Fourth keynote lecture by Ikram Feddal (Morocco):**
Buckling of stiffened composite panels as affected by delamination.
- 12:30** Pause
- 13:00** **First series of parallel sessions***

Saturday the 17th of September 2022

- 10:00** **Second series of parallel sessions***

* See the following pages for the program of sessions

First series of sessions

10 September 2022

Session 1:

Chairmen: Mounia Ajdour, Abderrahmane Bakkali, Mariam Achbal

- 13:00 **Amal Igaadi**, Hicham El Mghari, and Rachid El Amraoui, *Numerical Investigation of Heat Transfer Characteristics of Subcooled Flow Boiling in a Vertical Upflow and Downflow Minichannel.*
- 13:20 **Lun Shao**, Lun Shao, Alexandre Saidi, Abdel-Malek Zine, Mohamed Ichchou, *Reliability analysis and prediction of uncertainty structure with machine learning-based surrogate mechanics.*
- 13:40 **Mohamed El Kouri**, Abderrahmane Bakkali, Lahcen Azrar, *Modeling of the effective and macroscopic ageing behavior of viscoelastic composite materials.*

Session 2:

Chairmen: Abdelilah Bannour, Hanafi Issam, Khawla Essassi

- 13:00 **Reda Bouziyane**, Abdelali El-Bakari, *Slope stability analysis following rain fall by the observational method.*
- 13:20 **Nadia El Abbas**, Mohammed Bezzazi, *Dynamics of reinforced concrete buildings as affected by the number of stories, local uplift, soil plasticity and seismic intensity.*
- 13:40 **Safae Ahsissene**, Fatima Zahrae Rhziel, Naoufal Raissouni, *Assessment and Synergy Analysis of Outdoor Thermal Comfort and Thermal Infrared Remote Sensing for Urban Heat Island Studies.*

Session 3:

Chairmen: Mohammed Bezzazi, Abdelali El-Bakari, Zakia Ngadi

- 13:00 **Khadija Annaba**, Houssine Zniker, Settout Hicham, Yasmina Ed-dariy, Hind Khana, Mohammed Khalil elkouifat, Bennaceur Ouaki, Mouha Cherkaoui, *Thermal properties of light-weight concrete utilizing Moroccan Pozzolan.*
- 13:20 **Mohamed Tahiri**, Mohammed Bezzazi, *Influence of the nonlinear behavior of ballast on the dynamics of a simply supported railway bridge.*
- 13:40 **Hanae El Fakiri**, Hajar Lagziri, Abdelmajid El Bouardi, *Phase change materials (PCMs) passive system applications in Building Walls for improving indoor thermal comfort.*

Second series of sessions

17 September 2022

Session 1:

Chairmen: Alia Zakriti, Oussama Mahboub, Hajar Benzeroual

- 13:00 **Fatima Kharchich Fatima**, Abdellatif Khamlichi. *Optimizing design of GaSb based multiple-junction solar cell.*
- 13:20 **Chayma El Mtili**, Loubna Hessissen. *Improving seismic performance of reinforced concrete buildings by using iron based shape memory alloy as reinforcements*

Session 2:

Chairmen: Otman Aghzout, Mustapha Sanbi, Ikram Abarkan

- 13:00 **Ferdaous Tribak**, Othmane Bendaou, Fayçal Ben Nejma. *Impact of orbit inclination on heat transfer in a 1U LEO CubeSat.*
- 13:20 **Jeevitha S.**, Kumar S., Dhandapanisrinivasan S. *Hall Effect, Entropy Optimization on Casson Fluid Flow with Heat and mass transfer.*

Session 3:

Chairmen: Loubna Bounab, Fadoua El Khannoussi, Ikram Feddal

- 13:00 **Bouraida El Yamouni**, Fadoua El Khannoussi, Khamlichi Abdellatif. *Extending Mononobe-Okabe theory to account for arbitrary backfill topography and variable density of surcharge.*
- 13:20 **Siham Bouras**, Sabri Attajkani, *Predicting the ultimate loading capacity curve of RC members externally strengthened by bonded FRP sheets.*