



Mohamed Cherif Messaadia University  
Souk Ahras



The Faculty of Science and Technology  
&  
**The Laboratory of Applications, Management, Maintenance and Rehabilitation of  
Urban Infrastructure (INFRA-RES)**

*in collaboration with*

- ✓ Laboratory of Theoretical Physics and Materials Physics. University Hassiba Benbouali of Chlef, Algeria.
- ✓ Laboratory of Control, testing, Measurement and Simulation in Mechanics. University Hassiba Benbouali of Chlef, Algeria.
- ✓ Laboratory of Applied Civil Engineering, Echahid Cheikh Larbi Tebessi University, Tebessa, Algeria
- ✓ Laboratory of Electrical Engineering (LABGET), Echahid Cheikh Larbi Tebessi University, Tebessa, Algeria
- ✓ Laboratory of Electromechanical Systems (LASEM), National Engineering School of Sfax, Sfax, Tunisia.
- ✓ Laboratory of Geological and Hydrological Systems Modeling (GEOMODELE), Faculty of Sciences, University of Sfax, Tunisia.

Organize

**The Doctoral Days**

**on Experimental Practice and Numerical Simulation in Scientific  
Research**

**DDs-2024**

Souk Ahras, Auditorium & Central Library, December 17-18, 2024

*Program*

Tuesday, December 17th

“The Auditorium”

- 08h00 – 08h30: Welcoming participants in the Auditorium.
- 08h30 – 09h15: Official opening.
  - Prof. Abdelmoumene GUEDRI (Director of INFRA-Res Laboratory).
  - Dr. Farida KHAMMAR (Dean of faculty of Science and Technology).
  - Prof. Noura MOUSSA (Rector of Souk Ahras University - MCM).

### 09h15 – 10h00: Plenary conference 1



**Prof. Hacene MAHMOUDI**

National High School of Nano-sciences, Algeria.

#### “Climate change and water”

**Chairs:** Prof. Yacine Djebbar and Dr. Adem HAMROUNI, Souk Ahras University of MCM,  
Prof. Mohammed Hadj Meliani, Chlef University of HBB

### 10h00 – 10h30: Coffee Break

### 10h30– 11h15: Plenary conference 2



**Dr. Mohammed ZIGHED**

Process Engineer at the Skikda Oil Refinery (RA1K-Sonatrach), Algeria

#### “The significance of simulation software in mastering and optimizing industrial processes”

**Chairs:** Prof. Madani SID and Prof. Nedjem-Eddine BENCHOUIA, Souk Ahras University of MCM,  
Dr. Azzedine BELALIA, Chlef University of HBB

Tuesday, December 17th  
"The Auditorium"

### 11h15 – 12h00: Plenary conference 3



**Dr. Rafik BOUFARH**  
Echahid Cheikh Larbi Tebessi University, Tebessa, Algeria

#### "The strengthening of soft soils using the deep soil mixing technique"

**Chairs:** Prof. Meriem Fakhreddine BOUALI, Dr. Salima BOUCHMELLA and Dr. Naoual HANDEL,  
Souk Ahras University of MCM

12h00 - 13h30: Lunch Break

Tuesday, December 17th  
"The central library"

### 13h30 – 14h15: Plenary conference 4



**Prof. Zied DRISS**  
Laboratory of Electro-Mechanic Systems (LASEM),  
National School of Engineers of Sfax (ENIS), University of Sfax, Sfax, Tunisia

#### "Numerical study and experimental validation of the vertical axis wind turbines"

**Chairs:** Prof. Nadjet BOUACHA, Dr. Imed LOUKAM and Prof. Wacila KHOUALDIA,  
Souk Ahras University of MCM

Tuesday, December 17th  
"The central library"

### 14h15 – 16h15: Workshop 01/02



**Prof. Mohammed HADJ MELIANI**  
University Hassiba Ben bouali, Chlef,  
Algeria



**Dr. Abderahim GHERIS**  
University Mohamed Cherif  
Messaâdia, Souk Ahras, Algeria

#### Strain gauge transducers, theoretical and practical concepts.

This workshop will provide an in-depth theoretical and practical understanding of strain gauge transducers.



**Dr. Azzedine BELALIA**  
University Hassiba Ben bouali, Chlef,  
Algeria



**Dr. Tawfik THELAIDJIA**  
University Mohamed Cherif  
Messaâdia, Souk Ahras, Algeria

#### Dimensionality reduction and condition classification based on artificial intelligence: application on fault diagnosis of mechanical and PV solar systems.

16h15 – 16h30: Coffee Break

Wednesday, December 18th

“The central library”

08h30 – 09h00: Plenary conference 5



**Prof. Mohammed HADJ MELIANI**  
University Hassiba Ben bouali, Chlef, Algeria

**“Green inhibitors:  
tendance on the eco-friendly protection of pipelines”**

Prof. Nadjet BOUACHA, Prof. Abdelmoumene GUEDRI and Dr. Reda BOULIFA,  
Souk Ahras University of MCM

09h00 – 09h30: Plenary conference 6



**Prof. Habib ABIDA**  
Laboratory of Geological and Hydrological Systems  
Modeling (GEOMODELE),  
Faculty of Sciences, University of Sfax, Tunisia.

**“Water and Climate Change: Impacts and Mitigation Measures”**

**Chairs:** Dr. Sabri DAIRI, Dr. Sofiane BOUKHARI and Dr. Dounia MRAD, Souk Ahras University of MCM

09h30 – 10h00: Coffee Break

10h00 – 12h30: Evaluation of the progress of doctoral students' work

"Doctoral students present the progress of their research and the challenges encountered facing the doctoral scientific committees, by specialty, in rooms 01 to 04 of the central library."

- **Room 01:** Geotechnics
- **Room 02:** Structures and Materials
- **Room 03:** Hydraulics
- **Room 04:** Electromechanics

12h30-13h00: Closing of the DDs-2024

13h00 - 14h00: Lunch Break