



DAY ON REHABILITATION OF STRUCTURES AND SOIL IMPROVEMENT

RSSI_2025

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STUDY DAY ON
REHABILITATION OF STRUCTURES AND SOIL IMPROVEMENT
 Towards sustainable and environmentally friendly solutions
September 24, 2025, Souk Ahras, Algeria



Democratic and Popular Republic of Algeria
 Ministry of High Education and Scientific Research
 Mohamed Cherif Messaadia University- Souk Ahras



Faculty of Science and Technology

Civil Engineering Department and Laboratory INFRARES

STUDY DAY RSSI_2025

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PROGRAM



STUDY DAY ON REHABILITATION OF STRUCTURES AND SOIL IMPROVEMENT

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RSSI_2025 STUDY DAY PROGRAM**Wednesday September 24th, 2025**

8.00 - 8.45	Welcome and registration of participants Hall of the Auditorium (Faculty of Letters and Languages)	
8.45 - 9.15	Opening Ceremony Auditorium	
9.15 - 10.00	First plenary conference Moderators : Pr. LAOUAR M.S & Pr. BOUZERD H. Auditorium	
	9.15-9.45	Title : Rehabilitation of Reinforced Concrete Structures in a Normative Context By : Pr. GUETTALA Abdelhamid Affiliation: Mohamed Khider University - Biskra
	9.45-10.00	Debate
10.00 - 10.30	Coffee Break 1 Auditorium Hall	
10.30 -11.00	First Poster session Auditorium Hall	
11.00 -11.45	Second plenary conference Moderators : Pr. DERRICHE Z. & Pr. DJEBBAR Y. Auditorium	
	11.00-11.30	Title: "Improving Soil Quality with using of geosynthetics" By: M. KHELIFI Mossedek and M. CHERIFI Farid Affiliation: AFITEX ALGERIE
	11.30-11.45	Debate
11.45 -13.15	Lunch Break	
13.15 - 15.10	Oral Sessions	
	Oral Session 1, Topic 1 and 3 Room	Oral Session 2, Topic 2 Auditorium
15.10 - 15.30	Second Poster session Auditorium Hall	
15.30 -15.50	Coffee Break 1	
15.50 -16.30	Closing Ceremony Auditorium	



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ORAL SESSION N°1, TOPICS 1 AND 3**Oral Session 1. Topic 1 and 3****Moderators: Pr. MERZOUD M. & Pr. BENOUISSA A.**

13.15	Caractérisation par Essais non Destructifs du Béton de Granulats Recyclés Renforcé par Fibres de Palmier Dattier BOUZRED Fateh (University of Tebessa)
13.25	Développement d'un mortier innovant à base de poudres de coquilles d'œufs et de fibres plastiques issues du recyclage DRABLA Ryad (University of Skikda)
13.35	Influence du dosage et de la répartition des fibres métalliques sur le comportement mécanique des bétons de sable à base de fillers de laitier granulé MELAIS Saloua (University of Souk Ahras)
13.45	Renforcement des poteaux en béton armé par des tissu en fibre de carbone KERMICHE Siham (University of Souk Ahras)
13.55	Debate (15min)

ORAL SESSION N°2, TOPIC 2**Oral Session 2 (1st part). Topic : 2****Moderators: Pr. SID M. & Dr. BENMOUSSA S.**

13.15	Valorisation de la poussière de four à chaux LKD dans la stabilisation des sols argileux : Performances mécaniques et durabilité ZEMOULI Samira (University of Annaba)
13.25	Amélioration des propriétés géotechnique du sable de dune par ajout des paillettes en plastique (PET) ZAIDI Lina (University of Guelma)
13.35	Integrated Geotechnical and Structural Lineament Study in the Semi-Arid Region GUERAIDIA Saida (University of Tébessa)
13.45	Engineering Practice of Floating Stone Columns in Compressible Soils Performance and Design for Settlement and Load Challenges CHENCHE Khaoula (University of Souk Ahras)
13.55	Debate (15min)

Oral Session 2 (2nd part). Topic : 2
Moderators: Pr. MESSAST & Pr. BOUALI M.F.

14.10	Stratégie de prévention et amélioration des sols gypseux en zone aride cas de la ville nouvelle de Hassi Messaoud BELLEHACENE Adam (National Laboratory of Housing and Construction LNHC, Algiers)
14.20	Soil Shear Wave Velocity Determination Using Multi-Objective Particle Swarm Optimization (MOPSO) BOUSBIA Badreddine (University of Skikda)
14.30	Étude du Comportement d'un Talus Fondé sur un Sol Compressible BENMOUSSA Samir (University of Batna 2)
14.40	Optimisation du renforcement par géogrilles des chaussées souples en fonction de la rigidité du sol support : une approche numérique BOUACHA Nadjet (University of Souk Ahras)
14.50	Debate (15min)



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LIST OF POSTER SESSION N°1

10.30-11.00

Poster Session N° 1**Topics 1 and 3****Moderators: Dr. KHALDI N. & Dr. GUERGAH C.**

**Simulation numérique du stockage thermique par chaleur latente dans un mur de bâtiment
CHELLOUG Fatima-Zohra (University of Tébessa)**

Impact of Diatomite as a Partial Cement Replacement on the Hydration Process, Mechanical Properties and Microstructural Evolution of Cementitious Composites

BENAYACHE Siham (Research Center in Industrial Technologies (CRTI))

Étude du potentiel pouzzolanique du feldspath pour la fabrication d'un éco-ciment durable

LADJAMA Sabrina (Research Center in Industrial Technologies (CRTI))

The impact of recycled used tire rubber aggregates on concrete performance: a review

ZEGHIDI Atmane (University of Guelma)

Réhabilitation d'un Pont en Béton Armé Dégradé sur Oued Safsaf, Skikda-Algérie

MENDJEL Djenette (University of Skikda)

Évolution des caractéristiques du béton sous l'effet des ajouts du laitier de haut fourneau et de la fumée de silice

BOUMEHRAZ Mohamed-Amin (University of Jijel)

Topic 2**Moderators: Pr. BOUACHA & M. BELLAHCENE A.**

Renforcement de sol par colonnes ballastées sous remblai ferroviaire (Réalisation de la ligne ferroviaire minière « Annaba-Bouchegouf-Tébessa-Djebel Onk-Bled El Hedra »)

KERKAR Slim (KeraTerra Technical Design Office, Blida)

Geosynthetic Reinforced Soil Using Machine Learning

HAMZA Saloua (University of Guelma)

The effect of heat transfer fluid flow rate and heat exchanger installation depth on the performance of low enthalpy geothermal energy

BELHAMIDECHE Kheira (University of Mostaganem)

Assessment of Collapse Susceptibility and Shear Behavior of Reconstituted Soils under Varying Hydromechanical Conditions

CHEGROUCHE Rabab (University of Tébessa)

Stabilisation des Sols par Déchets Plastiques : Vers une Géotechnique durable

MISSAOUI Sabrina (University of El Taraf)

Optimization Techniques for the Estimation of the Factor of Safety in the Analysis of the Slope Stability

KAMOUCHE Houda (University of Guelma)

Impact de l'eau sur l'érosion hydrique des sols côtiers traités par laitier.

ACHI Souad (University of Tébessa)

Influence des matériaux recyclés sur la stabilité d'un remblai argileux

ZELTDNI Aya (University of Guelma)



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LIST OF POSTER SESSION N°2

15.15- 15.40

Poster Session N° 2

Topics 1 and 3

Moderators: Dr . AYEB B. & Pr. MERAD D.

Priorisation de la réhabilitation du réseau de distribution d'eau potable. Cas de la ville de Souk-Ahras (Algérie)

NEDJAR Nizar Hassoun (Training Center, Souk Ahras)

Méthode intégrée AHP-TOPSIS pour hiérarchiser les interventions de réduction des pertes d'eau pour le cas de la ville d'Annaba

RETIMA Nadjib (University of Annaba)

Vers une meilleure évaluation de la résistance du béton : influence conjointe de la géométrie des éprouvettes et des méthodes de mesure

KHALDI Nacera (University of Guelma)

Analyse comparative de la consommation énergétique des bâtiments selon le type d'isolation thermique

BOUACHA Nadjet (University of Souk Ahras)

Valorisation de la boue des stations d'épuration en briques

DORBANI Meriem (University of Guelma)

Topic 2

Moderators: Pr. GOUDJIL & Dr. GHRIS

Contribution de l'indice d'humidité topographique à la modélisation de la susceptibilité aux glissements de terrain dans la wilaya de Skikda

MEBIROUK Nadjib (University of Skikda)

Introducing the particle separation distance in order to predict the effective stress parameter curve

BENCHEIKH Karim (University of Annaba)

Contribution to the Study of the Hydromechanical Behavior of Sudden Collapse Soils in the Metlili Region, Algeria.

FERNANE Ali (University of Tébessa)

Valorization of Blast Furnace Residues for Soil Stabilization

DJOUIMAA Sarah (University of Souk Ahras)

Non-linear dynamic behaviour of a foundation placed on the surface of a compressible soil reinforced with rigid inclusions

BEKAKRA Sofiane (University of Annaba)

Optimisation de l'utilisation durable des sédiments de dragage dans les infrastructures routières

AYEB Nafaa (University of Tébessa)



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Plenary lecture 1

Abdelhamid GUETALLA

Prof. Mohamed Khider University
 - Biskra



Plenary lecture 2

Farid CHERIFI

Ing. AFITEX INDUSTRIE



Plenary lecture 2

Mossedek KHELIFI

Ing. AFITEX INDUSTRIE

DISCUSSIONS AND INSIGHTS

PLENARY LECTURES



- ↳ Rehabilitation of Reinforced Concrete Structures in a Normative Context
- ↳ Improving Soil Quality with using of geosynthetics



ORAL & POSTER SESSIONS

- Study of pathologies and rehabilitation of structures
- Improving soil behaviour
- Integration of Artificial Intelligence and use of Eco-materials in rehabilitation process



24 SEPTEMBER 2025



SOUK AHRAS UNIVERSITY

Auditorium of the Faculty of
 Letters and Languages

