



Programme of the

International Conference on Non Destructive
Evaluation of Composite Structures
(NDECS'2017)

Tetouan, Morocco on 25th November 2017

**National School of Applied Sciences, Abdelmalek Essaadi University,
Tetouan, Morocco**

Programme

- 9:00** Registration of attendees, payment of fees at the reception desk
- 9:30** Welcome speech
- 9:40** First keynote lecture by **Bakkali Abderrahmane:**
Micromechanical modelling of multifunctional composite materials
- 10:10** Second keynote lecture by **Mounia Ajdour:**
Multi-scale analysis of composite materials having coupled behaviour
- 10:40** Third keynote lecture by **Mouahid Abdelaziz:**
Non-Destructive Control based on Thermography
- 11:10** Coffee break
- 11:30** Parallel sessions
- 14:30** Lunch

Programme of sessions

Session 1: Room 002

Chairmen: Loubna Bounab and Abderrahmane Bakkali

- 11:30 **Sabri Attajkani**, Abdellatif Khamlichi and Bouras Siham. *The building performance of lateral load resisting systems in reinforced concrete buildings.*
- 11:50 **Nadia El Abbas**, Abdellatif Khamlichi and Mohammed Bezzazi. *Effect of local uplift and plastic soil behavior on the seismic response of a slender reinforced concrete structure.*
- 12:20 **Siham Bouras**, Abdellatif Khamlichi and Sabri Attajkani. *Jacketing of existing reinforced concrete structures with regards to targeted seismic performance state.*
- 12:40 **Farid Bakadi**, Mohamed Rouai, Abdelilah Dekayir and Elmehdi Benyassine. *Ultrasonic non destructive testing applied to earthen historical ramparts of Meknes (Morocco): preliminary results.*
- 13:00 **Bouraida El Yamouni** and Abdellatif Khamlichi. *Effect of the backfills cohesion on the dynamic pressure applied to a reinforced concrete retaining wall.*
- 13:20 **Naoufal Touil** and Abdellatif Khamlichi. *Soil liquefaction as affected by the stochastic nature of pore pressure surge.*
- 13:40 **Mohamed Tahiri**, Abdellatif Khamlichi, Mohammed Bezzazi. *Vehicle-bridge dynamic interaction as affected by discrete vehicle and bridge beam models.*

Session 2: Room 003

Chairmen: Abdellah Driouach and Sabri Attajkani

- 11:30 **Zoubaida Mechbal** and Abdellatif Khamlichi. *Inverse problem solution for detection of circular buried objects in a homogeneous and isotropic dielectric medium by using GPR.*
- 11:50 **Zoubaida Mechbal** and Abdellatif Khamlichi. *A fast Hough transform based procedure for estimating rebars characteristics in concrete structures by using GPR.*
- 12:20 **Aye Mint Mohamed Mostapha**, Gamil Alsharahi and Abdellah Driouach. *Simulation the influence of the orientation of objects on the propagation of GPR waves.*
- 12:40 **Tahar Bachiri**, Mohammed Bezzazi and Abdellatif Khamlichi. *Inspection of bridge decks including the corrosion of steel rebars using the Ground Penetrating Radar.*
- 13:00 **Anissa Zejli**, Abdellatif Khamlichi, Sabri Attajkani and Koutaiba Ameziane. *Crack detection in concrete structures by using acoustic emission technique.*
- 13:20 **Ahajjam Younes**, Otman Aghzout, José Manuel Catala-Civera, Felipe Peñaranda Foix and Abdellah Driouach. *High power and compact ultra-wideband monocycle generator design with enhanced output waveform for non-destructive radar sensor measurements.*

Session 3: Room 200

Chairmen: Fadoua El Khannoussi and Zineb Achegaf

- 11:30 **Zineb Yamlahi Alami**. *Structural, optical and electrical characterizations of ZnO/PS heterojunction solar cell.*
- 11:50 **Mohamed El Azzouzi**, Abdelfattah Achahbar and Lahcen Khouchaf. *A new approach to Monte Carlo simulation of electron-gas-solid interactions in cementitious and polymer materials.*
- 12:20 **Somia Fellak** and Abdellatif Boukir. *X-Ray diffraction and FT-IR spectroscopy as non Invasive methods to evaluate changing of cellulose cristallinity during natural ageing of Moroccan softwood.*
- 12:40 **Somia Fellak** and Abdellatif Boukir. *Evaluation of chemical structure of lignin component containing Moroccan hardwood by Raman and FTIR spectroscopy.*
- 13:00 **El Hassan El Harouny**. *Binding energy and spatial extension of an on-plan donor impurity in a hemispherical quantum dot.*
- 13:20 **Mourad Derra** and Abdellah Amghar. *Development of an ultrasonic technique for non destructive testing in the food industry: application to enzymatic coagulation of milk.*
- 13:40 **Mourad Derra** and Abdellah Amghar. *An innovative ultrasound technique for the study of enzymatic coagulation of milk.*

Session 4: Room 103

Chairmen: Mohammed Bezzazi and Mounia Ajdour

- 11:30 **Zineb Achegaf** and Abdellatif Khamlichi. *Thermomechanical fatigue in the presence of variable temperature cycles.*
- 11:50 **Rachad Oulad Ben Zarouala**. *Optimizing wind turbine composite blades with regards to a frequency criterion.*
- 12:20 **El Kabira El Mjabber**, Abdellah El-Hajjaji and Abdellatif Khamlichi. *Sliding mode control for wind turbines as reliant on composite blades flexibility.*
- 12:40 **Youssra El Qasemy**, Abdelfattah Achahbar and Abdelaltif Khamlichi. *Torque estimation in wind turbines through stochastic Modeling.*
- 13:00 **Narjisse Amahjour** and Abdellatif Khamlichi. *Simulation of aerodynamic loads acting on wind turbine composite blades by using a CFD approach.*
- 13:20 **Abdelouahid El Amri**, Mounir El Yakhloufi Haddou and Abdellatif Khamlichi. *Investigation of thermal and mechanical coupled deformation in hot metal forming based on distributed displacement loading.*

Session 5: Room 105

Chairmen: Rachad Oulad Ben Zarouala and Loubna Lehssissen

- 11:30 **Ikram Feddal**, Abdellatif Khamlichi and Koutaiba Ameziane. *Effects of ply orientation and initial geometric imperfections on buckling strength of a composite stiffened panel.*
- 11:50 **Asmae Talamakrouni**, Abdelatif Khamlichi and Koutaiba Ameziane. *Detection of a rigidity loss in a composite plate by Lamb waves.*
- 12:20 **Abdeslam Aoukili** and Abdellatif Khamlichi. *Damage detection of surface cracks in carbon fibre reinforced composites by pulsed eddy-current probe.*
- 12:40 **El Kouri Mohamed**, Bakkali Abderrahmane and Azrar Lahcen. *Micromechanical modeling of porous viscoelastic composite materials.*
- 13:00 **Hajar Benzeroual**, Abdellatif Khamlichi and Alia Zakriti. *Reliability of rail transverse flaw detection by means of an embedded ultrasonic based device.*
- 13:20 **Ouadia Mouhat**, Abdellatif Khamlichi. *Thermal effect on free vibration of functionally graded materials Stiffened panels.*
- 13:40 **Ouadia Mouhat**, Abdellatif Khamlichi. *Nonlinear buckling dynamical analysis of stiffened panels Functionally Graded Composite Materials (FGCM).*

Session 6: Room 106

Chairmen: Abderrahim El Omri and Abdellah El-Hajjaji

- 11:30 **Abdellatif Khamlichi**. *Non-destructive evaluation of composite structures: a review.*
- 11:50 **Fadoua El Khannoussi**, Abdellatif Khamlichi and Mariam Achbal. *Simulation of ultrasonic waves scattering by delamination defect in composite plates by the scaled boundary finite element method.*
- 12:20 **Mariam Achbal** and Abdellatif Khamlichi. *Optimizing the focal laws in ultrasonic array for non-destructive evaluation of composite panels.*
- 12:40 **Sofia Rejani**, Abdellatif Khamlichi and Abdellah El-Hajjaji. *Reliability of delamination sizing as performed by synthetic aperture focusing technique and ultrasonic array elements.*
- 13:00 **Samagassi Souleymane**, Jacquelin Eric and Khamlichi Abdellatif. *Identification of the force generated by the impact of a punctual object using a Bayesian regularization in time domain.*
- 13:20 **Samira Mimount** and Hammadi Saidi. *Non destructive testing of composite materials.*