

## ICREA 2019 Planning

# The 1st Edition of the INTERNATIONAL CONFERENCE ON RENEWABLE ENERGY AND APPLICATIONS (ICREA' 19)

4-5 December 2019

ECOLE NORMALE SUPERIEURE

Casablanca, Morocco

Under the theme  
“ENERGY AND MATERIALS ARE THE MASTER KEYS  
OF THE OPEN CHALLENGE DOMINATING OUR  
WORLD AND ITS FUTURE”



**4 Dec. 2019**

(Session A → Room 1)

Session B → Room 2)

TIME	TYPE	EVENT
07:30 - 09:30		Registration and Welcome Reception
08:30 - 09:30	Break	Opening Ceremony
09:30 - 10:00	Speech	Matériaux pour le stockage électrochimique de l'énergie : Cas du phosphate - Prof. Ismael Saadoune, FST, Cadi Ayyad University, Marrakech, Morocco. Chairman: Pr. LASSRI Hassan
10:00 - 10:30	Speech	New active materials for Na-ion Batteries applications - Dr. Mohamed CHAKIR R&D Researcher in "ADVANCED BATTERIES UNIT" at Renault S.A.S. Chairman: Pr. EL BOUARI Abdeslam
10:30 - 10:50	Break	Coffee break
11:00 - 13:00	Session A	Renewable Energy Systems - Pr. ABID Mohamed & Pr. EZZINE Mohamed  › Comparative study of a normal solar water heater and smart thermal/thermoelectric hybrid systems - <i>ALI FADDOULI, ERDyS laboratory, MEEM &amp; DD Group, Hassan II University of Casablanca, FSTM BP 146 Mohammedia 20650</i>
11:15 - 11:30		› Exploitation of the Moroccan Maritime Potential in Tidal Energy - <i>Sara HARISS, Laboratory of Renewable Energies and Dynamic of Systems, Hassan II University, Faculty of Sciences Ain Chock, Department of Oceanography, National Institute for Fisheries Research</i>
11:30 - 11:45		› Improvement of the voltage profile following integration of RDG to the Distribution Network - <i>Asmaa LEBSIR, Faculty of Sciences of Casablanca AC, Hassan II, University, Casablanca 20100, Morocco;</i>
11:45 - 12:00		› Integration and optimal choice of multilevel inverter for a potential insertion on a hybrid renewable energy platform (wind-solar) - <i>khadija ezzouitine, Science physique - ABDELKADER BOULEZHAR, Science physique - TAJEDDINE KHALILI, Science technique</i>
12:00 - 12:15		› PROMOTING RENEWABLE ENERGY RESOURCES INTEGRATION WITHIN THE POWER GRID TO MEET ELECTRICITY DEMAND: MOROCCO 2019 - <i>Omar BENZOHRA, Université Hassan II, Faculté des sciences AinChock</i>
12:15 - 12:30		› Streamwise Heat Conduction and Rarefaction Effects on Laminar Forced Convection in Convergent Microchannels with Heating Section of Finite Length - <i>MOHAMMED NIAGUI, Laboratory of Mechanics, Faculty of Science Ain Chock, Hassan II University, B.P. 5366, Maarif, Casablanca 20100 Morocco</i>
12:30 - 12:45		› Structural, optical and electrical properties of CdS thin films deposited by CBD method: Experimental and theoretical studies - <i>Youssef NOURI, MEEM &amp; DD Group, Hassan II University of Casablanca, FSTM BP 146 Mohammedia 20650 - Bouchaib Hartiti, Groupe MEEM &amp; DD, Université Hassan II de Casablanca, FSTM BP 146 Mohammedia 20650 - Abdelkrim BATAN, faculté des sciences et techniques Errachidia</i>
12:45 - 13:00		› Theoretical and experimental study of the global solar radiation received by a clear sky in the city of Mohammedia-Morocco - <i>SAHAR EDDIANI, Laboratoire physique de la matière condensée et énergies renouvelables FST,Mohammedia, Université Hassan II Casablanca - Achouyab El Hassan, Laboratoire physique de la matière condensée et énergies renouvelables FST,Mohammedia, Université Hassan II Casablanca</i>

TIME	TYPE	EVENT
11:00 - 13:00	Session B	IT - Pr. NAIMI Youssef & Pr. NAJID Nourredine
11:00 - 11:15		› Ab initio investigation of the substitution effects of nitrogen elements on the magnetic, electronic and thermodynamic of Fe16N2 - Ali Saadi, LPMMAT, Faculté des sciences Ain chok, Université Hassan II de casablanca, Morocco, LBGM, ENS de Casablanca. Université Hassan II de casablanca, Morocco
11:15 - 11:30		› Study of nucleation and growth mechanism of manganese oxide - Mohammed AIT HIMI, Laboratoire Interface matériaux Environnement, Faculté des Sciences Ain Chock, Université Hassan II, Casablanca, Laboratoire Bio-Géosciences et Ingénierie des matériaux, Ecole Normale Supérieure , Université Hassan II-Casablanca
11:30 - 11:45		› Modeling magnetic properties of FM/NM multilayers at low temperature. - Abdelmajid Lekdadri, Laboratoire LPMMAT, Université Hassan II, Casablanca, Maroc
11:45 - 12:00		› Molecular dynamics study of growth and properties of Cu thin film on Si (001) - Hassane MES-ADI, aLaboratory of Process Engineering and Optimization of Industrial, National School of Science Applied of Khouribga,Morocco
12:00 - 12:15		› OPTIMIZATION OF OLIVE CAKE VACUUM DRYING BY THE TAGUCHI METHOD - MOHAMMED LAJDEL, Ecole Nationale Supérieure d'Electricité et de Mécanique
12:15 - 12:30		› Ru doping effect on the magnetic properties of hematite Fe <sub>2-x</sub> Ru <sub>x</sub> O <sub>3</sub> - assaad ELOUAFI, LPMMAT, Faculté des sciences Ain Chock, Université Hassan II de Casablanca
12:30 - 12:45		› Simulation of an extended 3D Mixed Ising model by Monte Carlo method - Anouar ELIDRYSY, Laboratoire Bio-Géosciences et Ingénierie des Matériaux, Ecole Normale Supérieure, Université HASSAN II- Casablanca, Morocco
12:45 - 13:00		› THE ELECTROMAGNETIC MEMORY OF WATER AT KINETIC CONDITION - mghaiouini redouane, A. Elaoud, M. Hozayn, A. EL BOUARI, M.MONKADE, M.E.Belghiti, T.GARMIM, A.ELMELOUKY
13:00 - 14:30	Break	Lunch Break
14:30 - 15:00	Speech	Recent advances in materials aspects for thermal energy storage at high temperature - Dr. Abdessamad Faik (PhD, Univ.Basque Country,Spain, 2009) Chairman: Pr. ITTO Bimaghra
15:00 - 15:30	Speech	Composite materials for renewable energies - Dr Mostapha TARFAOUI Professor at ENSTA Bretagne Chairman: Pr. BOULEZHAR Abdelkader
15:35 - 16:35	Session A	Composite Materials for RESs - Pr. TRIHI Mourad & Pr. EL ALAMI Mustapha
15:35 - 15:50		› Electropolymerization and characterization of polyaniline and poly(2-anilinoethanol) - FATIHA SAOUTI, laboratory physical chemistry of materials
15:50 - 16:05		› New hybrid graphene/inorganic salt composites for thermochemical energy storage: Synthesis, cyclability investigation and heat exchanger metal corrosion protection performance - Hanane AIT OUSALEH, Laboratory physical-chemistry of applied Materials (LPCMA), Faculty of Sciences Ben M'sik ,University Hassan II of CASABLANCA,Morocco

TIME	TYPE	EVENT
16:05 - 16:20		› Structural Analysis of Offshore Wind Turbine Blade Under Extreme Climatic Conditions Using FEM - <i>hicham boudouunit, ENSTA Bretagne, IRDL, UMR CNRS 6027, F-29200 Brest, France, FSAC – UH2C, Laboratory of Renewable Energy and Dynamic Systems, Morocco</i>
16:20 - 16:35		› The effects of environmental conditions on the mechanical properties of Jute yarns - <i>YOUSSEF BEN SMAIL, Laboratoire des Energies renouvelables et dynamique des systèmes, Faculté des Sciences – Aïn Chock , Casablanca, Maroc</i>
15:35 - 16:35	Session B	Energy Storage - Pr. BOULEZHAR Abdelkader & Pr. TANANE Omar
15:35 - 15:50		› Cooling of recent microprocessors by the fusion of nano-enhanced phase change materials - <i>Hamza FARAJI, Physics Department, LPMMAT Laboratory, Faculty of Sciences Ain Chock, Hassan II University., Physics Department, LPMMAT Laboratory, Faculty of Sciences Ain Chock, Hassan II University, BP 5366 Maarif, Casablanca 20000, Morocco</i>
15:50 - 16:05		› Effect of Mg substitution on structure and the electrochemical properties of MnWO4 - <i>chaimae kdider, Phd Student - Mohamed Youssef Messous, chercheur - Mohammed Moutaabbid, Professeur - Youssef Naimi, Professeur</i>
16:05 - 16:20		› Effect of the fins on the thermal performance of the latent heat thermal energy storage system - <i>Zakaria Elmaazouzi, Laboratory (LPMMAT), Faculty of sciences, Hassan II University of Casablanca-Morocco / Research Institute of Solar 2Energy and New Energies – IRESEN, Rabat, Morocco</i>
16:20 - 16:35		› Modelling a salt gradient solar pond under Moroccan climate taking into account double-diffusive convection - <i>Yassmine Rghif, Team of Heat Transfer and Energetic, Faculty of Sciences and Techniques, Abdelmalek Essaâdi University</i>
16:35 - 17:00	Break	Coffee break
16:35 - 17:00	Session	Poster
16:35 - 17:00		› Aerodynamic Simulation by the DMST model for a new Floating Darrieus-type straight-bladed design - <i>Mohamed Amine Dabachi, Doctoral Studies Center of National High School of Electricity and Mechanics, Hassan II University of Casablanca, Route d'El Jadida, Km 7, PC 8018 Oasis, Casablanca, Morocco, Laboratory of Mechanics Production and Industrial Engineering (LMPGI), High School of Technology, Hassan II University of Casablanca, Route d'El Jadida, Km 7, PC 8012 Oasis, Casablanca, Morocco</i>
16:35 - 17:00		› Atomic packing and fractal behavior of Al-Co metallic glasses - <i>Meryem KBIROU, Laboratoire de Physique de la Matiere Condensee, Faculte des Sciences Ben M'Sik, University Hassan II of Casablanca, B.P. 7955, Casablanca, Morocco</i>
16:35 - 17:00		› Elaboration and optimization of ZnO thin films by sol gel associated with dip coating - <i>Modou PILOR, LASES laboratory, Cheikh Anta Diop University of Dakar, Sénégal, ERDyS Laboratory, GMEEM&amp;DD Group, Hassan II University of Casablanca, FSTM, Morocco - Bouichaib HARTITI, ERDyS Laboratory, GMEEM&amp;DD Group, Hassan II University of Casablanca, FSTM, Morocco - Francisco Kouadio KONAN, Ecole Normale Supérieure- Abidjan- Côte d'Ivoire - Hicham Labrim, Matériaux Sciences Unit/DRES/CNESTEN, Rabat, Morocco - Allé Dioum, Laboratory of Solid State Physics and Materials Science, Faculty of Sciences et Techniques, Cheikh Anta Diop University, Dakar, Senegal - bassirou BA, LASES laboratory, Cheikh Anta Diop University of Dakar, Sénégal</i>

TIME	TYPE	EVENT
16:35 - 17:00		› Integration of solar energy as a power source for the desalination of brackish water and the use of chelating ion exchange resins in pre-treatment: Solutions for reducing the cost of this process - <i>Chaimaa SOUHABI, Laboratory of Renewable Energies and Systems Dynamics, Hassan II University Faculty of Science AIN CHOCK, Textile Materials Research Laboratory, REMTEX, ESITH, MOROCCO</i>
16:35 - 17:00		› Magnetic properties and magnetocaloric effect of spinel ZnFe2-x ErxO4 nanoparticles - <i>OUAFA EL OUJIHI, LMPGI, Ecole Supérieure de Technologie, Université Hassan II de Casablanca, - abdeslam Tizliouine, LMPGI, Ecole Supérieure de Technologie, Université Hassan II de Casablanca, - Asaad Elouafi, LPMMAT, Faculté des Sciences Ain Chock, Université Hassan II de Casablanca, Morocco</i>
16:35 - 17:00		› Mechanical and thermal properties of cementitious mortars reinforced with Sisal fibers - <i>bouchra bahja, Laboratoire de Mécanique, Productique et Génie Industriel (LMPG), Ecole supérieure de Technologie, Univ. Hassan II de Casablanca, Maroc.</i>
16:35 - 17:00		› mobilisation of NaCl separation from HFMC - <i>LATIFA SALAMA, University Hassan II of Casablanca, Faculty of Sciences Ben M'Sik</i>
16:35 - 17:00		› Physical and structural properties of alkali metaphosphate glasses doped with manganese - <i>MERYEM JERROUDI, Equipe Physico-Chimie la Matière Condensée (PCMC), Faculté des Sciences de Meknès</i>
16:35 - 17:00		› Preparation and characterization of AMoO4 (A= Ca, Sr, Ba) for Li-ion battery applications - <i>abdessamad azzouzi, Université Hassan II [Casablanca], Université Hassan II [Casablanca] - Mohamed Benchikhi, Université Sultan Moulay Slimane - USMS (Béni Mellal, MA) - Rachida El ouatib, Université Hassan II [Casablanca]</i>
16:35 - 17:00		› Sodium Niobate Glass-Ceramic in phosphate matrix: Preparation, structure and dielectric properties - <i>Sanaâ BENYOUNOUSSE, Laboratory of Physico-Chemistry of Materials Applied (LPCMA), Faculty of Sciences Ben M'sik, University HASSAN II of Casablanca, Morocco</i>
16:35 - 17:00		› Structural and optical properties of the perovskite Zr doped NiCeO3 nanoparticles - <i>Mejdoubi Badia, LPMMAT, Faculty of Sciences Ain-Chock, University of Hassan II, Casablanca, Morocco.</i>
16:35 - 17:00		› Structural, magnetic and magnetocaloric properties of ZnLaxFe2-xO4 spinel zinc ferrites - <i>SOUFIANE BAHHAR, LabSIEPE, Ecole Nationale des Sciences Appliquées, Université Chouaib Doukkali d'El Jadida, El Jadida, Plateau, 24002, Morocco., Laboratoire Instrumentation de Mesure et de Contrôle (IMC), Faculté des Sciences, Université Chouaib Doukkali d'El Jadida, 24002, Morocco.</i>
16:35 - 17:00		› Structural, optical, and dielectric properties of the ternary Bi2O3-K2O-TiO2-P2O5 glasses system - <i>Mehdi Haily, Equipe Physico-Chimie la Matière Condensée (PCMC), Faculté des Sciences de Meknès</i>
16:35 - 17:00		› Study and development of a photovoltaic power station - <i>LAMIA AMACHOU, AMACHOU Lamia</i>
16:35 - 17:00		› Study of effects on the mechanical properties of the incorporation of expanded perlite in concrete - <i>moudden omar, université Hassan II Casablanca , faculté des sciences Casablanca</i>
16:35 - 17:00		› Synthesis and Characterization of Organic-Inorganic Lead Halide Perovskite (CH3NH3PbI3) Thin Films for Photovoltaic Applications - <i>hajar benali, MEEM &amp; DD Group, Hassan II University of Casablanca, FSTM BP 146 Mohammedia Morocco., 'ERDyS Laboratory, GMEEM &amp; DD Group, Hassan II University of Casablanca, FSTM BP 146 Mohammedia Morocco.</i>

TIME	TYPE	EVENT
16:35 - 17:00		› Thermal transfer of a laser interaction with biological tissue - <i>Manal ElMouaddine, Laboratory of Renewable Energies and Systems Dynamics</i>
16:35 - 17:00		› Valorization of sewage sludge in clay bricks: physical properties and radiological assessment - <i>imane rhouch, laboratoire de physique de la matière condensée</i>
17:00 - 18:30	Session A	Composite Materials for RESs - Pr. KHATIR Rabha & Pr. Omari Lhaj El Hachemi
17:00 - 17:15		› Chemical preparation, crystallographic characterization, vibrational study and thermal behavior of a new cyclotriphosphate CaNH4P3O9.H2O - <i>El mehdi Majdi, majdi el mehdi, Laboratoire de Chimie-Physique des Matériaux, Faculté des Sciences Ben M'sik, B. P. 7955. Casablanca. Maroc</i>
17:15 - 17:30		› Optical and Thermal properties of composite materials: VFeSb and NbFeSb - <i>BENCHERIF Kaddour, Center University Belhadj Bouchaib of AinTemouchent, 46000, Algeria</i>
17:30 - 17:45		› Study of the thermal stability and physico-chemical properties of acidic geopolymers based on Moroccan kaolinitic clay - <i>hicham majdoubi, University Hassan II - HADDAJI younnes, University Hassan II - said MANSOURI, University Hassan II - mina OUMAM, University Hassan II - HASSAN HANNACHE, University Hassan II</i>
17:45 - 18:00		› The matrix-fiber interaction effect on the avalanche breaking in the failure process of composite materials - <i>Mohammed Tanasehte, Laboratory of Bio-Geosciences and Materials Engineering - Yassine Hariti, Laboratory of Bio-Geosciences and Materials Engineering</i>
18:00 - 18:15		› Transformation of graphite ore into adsorbent material for wastewater treatment - <i>mouad nadi, University Hassan II</i>
18:15 - 18:30		› Reinvestigation of the crystal structure of Calcium dihydrogenphosphate monohydrate and vibrational study - <i>Rachida OUBOUAZA, Laboratory of Chemistry-Physics of Materials, Faculty of Sciences Ben M'Sik, B.P. 7955. Hasan II University of Casablanca, Casablanca. Morocco.</i>
17:00 - 18:30	Session B	IT - Pr. MOUBAH Reda & Pr. SEHAQUI Rachid
17:00 - 17:15		› A new class of compact stellar model compatible with observational data - <i>Abdelghani ERREHYMY, Department of Physics, University of Hassan II, Faculty of Sciences Ain Chock, B.P. 5366, Mâarif, Casablanca 20100, Morocco</i>
17:15 - 17:30		› Aerogels super insulating materials for building applications: Preparation, characterization and mechanical properties investigation - <i>Sair Said, University Hassan II of Casablanca, Faculty of Sciences Ben M'Sik</i>
17:30 - 17:45		› Effects of Pr-doping on the structural and dielectric properties of Pb(Zr0.65Ti0.35)O3 powders - <i>LEMZIOUKA HAMANE, Renewable Energy Laboratory and Dynamic Systems, Faculté des Sciences Ain-Chock, Université Hassan II de Casablanca, Morocco, LREDS, Department of Physics, Faculty of Sciences Ain-Chock, Hassan II University-Casablanca, Morocco</i>
17:45 - 18:00		› Elaboration and Thermomechanical characterizations of a ceramic based on Moroccan geomaterials: Application in construction - <i>Achraf HARRATI, Laboratory of Physical Chemistry of Applied Materials (LPCMA), Department of Chemistry, Faculty of Sciences Ben Msik, Hassan II University, Casablanca, Morocco.</i>

TIME	TYPE	EVENT
18:00 - 18:15		› Langevin Dynamics Study of the Mean Flow Rate-Energy Stochastic Fluid Intrusion Process in Porous Media - <i>Yassine HARITI, a LBGIM, Ecole Normale Supérieure, University Hassan II. Casablanca, Morocco, LBGIM, Ecole Normale Supérieure, University Hassan II. Casablanca, Morocco - MOHAMMED TANASEHTE, a LBGIM, Ecole Normale Supérieure, University Hassan II. Casablanca, Morocco</i>
18:15 - 18:30		› Modeling of lattice parameters in WO <sub>3</sub> doped Lithium tantalate - <i>Mohamed Tahiri, Laboratory of LBGIM, Research Team-Nanomaterials Physics, University Hassan 2, ENS- Casablanca, Casablanca, Morocco</i>

**5 Dec. 2019**

TIME	TYPE	EVENT
09:00 - 09:40	Speech	The fourth wave of physical vapor deposition: application tailored coating engineering - Pr. Jones ALAMI professor at UM6P and Director of the Department of Materials Science and Nanoengineering (MSN) Chairman: Pr. HANNACHE Hassan
09:40 - 10:30	Speech	Two-dimensional materials for energy conversion and storage: Computational predictions of physical properties using Density Functional Theory (DFT) - Prof. Abdelilah Benyoussef, Moroccan Foundation for Advanced Science, Innovation and Research, Morocco. Chairman: Pr. Dennoun SAIFAOUI
10:30 - 11:00	Break	Coffee break
10:30 - 11:00	Session	Poster
10:30 - 11:00		› Ab-initio investigation of the structural, electronic and optical properties of Halide perovskites Cs <sub>2</sub> TlI <sub>6</sub> - <i>AHLAM NATIK, LPMMAT, Université Hassan II-Casablanca, Faculté des Sciences Ain Chock, BP, 5366, Mâarif- Casablanca, Morocco - KHADIJA ABARKHA, LERDyS, Université Hassan II-Casablanca, Faculté des Sciences Ain Chock, BP, 5366, Mâarif- Casablanca, Morocco</i>
10:30 - 11:00		› Characterization of anaerobic digester by using a mathematical model - <i>ABDELHAY LAABYECH, Modeling and Simulation of Mechanical and Energetic (MSME). Department of Physics, Faculty of Science, University Md V Morocco.</i>
10:30 - 11:00		› Development of carbonaceous materials with high added value from Moroccan (Tarfaya) oil shale using response surface methodology - <i>Said Mansouri, Equipe des Matériaux Thermo-structuraux et Polymères. Laboratoire d'ingénierie et Matériaux LIMAT-FSB, UH2MC.</i>
10:30 - 11:00		› Etude du phénomène de corrosion du cuivre en présence des produits pétroliers - <i>Said El Harrari, Corrosion</i>
10:30 - 11:00		› Experimental and Ab-initio study of CuIn <sub>1-x</sub> GaxS <sub>2</sub> thin films produced by Spray Pyrolysis for solar cells - <i>AHMED KOTBI, ERDyS Laboratory, GMEEMDD Group, FSTM, Hassan II Casablanca University, B.P 146, Mohammedia, Morocco</i>
10:30 - 11:00		› Graphene and CNT reinforced nanocomposites based on ceramic and polymeric matrix (TiO <sub>2</sub> -MgO/GNP or CNT): 3D mechanical and thermal simulation - <i>Marwane Rouway, Hassan II University, Faculty of Sciences Ain Chock, Laboratory of Renewable Energy and Dynamic Systems, BP 5366 Maarif, Casablanca, Morocco - Mourad Nachtane, IRDL (CNRS-FRE-3744) - Boulahia Zoubair, Hassan II University, Faculty of Sciences Ain Chock, Laboratory of Mechanics, BP 5366 Maarif, 20100 Casablanca, Morocco - Chakkhaoui Nabil, REMTEX Laboratory, Higher School of Textile and Clothing Industries (ESITH),</i>

TIME	TYPE	EVENT
		<i>Casablanca Morocco - Tarfaoui Mostapha, ENSTA Bretagne, IRDL, UMR, CNRS 6027, F-29200, Brest, France - Omari Lhaj El Hachemi, Hassan II University, Faculty of Sciences Ain Chock, Laboratory of Renewable Energy and Dynamic Systems, BP 5366 Maarif, 20100 Casablanca, Morocco - Frajia Fouzia, Hassan II University, Faculty of Sciences Ain Chock, Laboratory of Renewable Energy and Dynamic Systems, BP 5366 Maarif, 20100 Casablanca, Morocco</i>
10:30 - 11:00		› Hydrodynamic performance evaluation of a new hydrofoil design for marine current turbines - <i>MOURAD NACHTANE, IRDL (CNRS-FRE-3744) - Dennoun SAIFAOUI, FSAC - Marwane Rouway, FSAC</i>
10:30 - 11:00		› Microstructures and dielectric properties of BaTiO <sub>3</sub> ceramics with Bi <sub>2</sub> O <sub>3</sub> -BaO-P <sub>2</sub> O <sub>5</sub> glass addition - <i>mehdi haily, Equipe Physico-Chimie la Matière Condensée (PCMC), Faculté des Sciences de Meknès, Maroc.</i>
10:30 - 11:00		› Numerical study of natural and mixed convection in a square cavity filled by a Cu-water nanofluid with circular heating and cooling cylinders - <i>Zoubair Boulahia, Hassan II University, Faculty of Sciences Ain Chock, Laboratory of Mechanics, BP 5366 Maarif, 20100 Casablanca, Morocco - Marwane Rouway, Hassan II University, Faculty of Sciences Ain Chock, Laboratory of Renewable Energy and Dynamic Systems, BP 5366 Maarif, 20100 Casablanca, Morocco</i>
10:30 - 11:00		› Numerical Study of Two-Dimensional Salt-Finger - <i>riadh ouzani, Université de Batna 2</i>
10:30 - 11:00		› Soiling effect on a fixed and tracking glass samples for PV applications - <i>Alae AZOUZOUTE, Institut de Recherche en Energie Solaire et Energies Nouvelles (IRESEN), Materials, Energy and Acoustics team, Ecole Supérieure de Technologie de Salé, Mohammed V University Rabat</i>
10:30 - 11:00		› Structural and dielectric properties of Sodium niobate ceramic NaNbO <sub>3</sub> with phosphate glass additions - <i>Sanaa BENYOUNOUSSY, University Hassan II of casablanca faculty of science ben m'sik</i>
10:30 - 11:00		› Study of the optical properties of new ceramic Sr <sub>2</sub> CaFe <sub>2</sub> WO <sub>9</sub> perovskite - <i>jihad louafi, département de physique FSAC</i>
10:30 - 11:00		› Synthesis the brightly luminescent material FAPbBr <sub>3</sub> Perovskite Colloidal nanocrystal for the optoelectronic applications - <i>Nabila JARMOUNI, Université Hassan II [Casablanca]</i>
10:30 - 11:00		› Synthesis, structural and dielectric properties of PrFeTiO <sub>5</sub> - <i>ADIL CHAKIR, Université Hassan II [Casablanca]</i>
10:30 - 11:00		› The control and optimization of the electrical energy produced by wind power and its injection into the grid - <i>Badr BENYACHOU, Equipe de Modélisation et Simulation en Mécanique et Energétique, Faculté des sciences, Université Mohammed 5, Rabat</i>
10:30 - 11:00		› The energy bursts in fiber bundle models in composite materials with randomly oriented fibers - <i>siham boufass, LBGIM, Ecole Normale Supérieure, University Hassan II. Casablanca, Morocco, faculté des sciences ain chock</i>
11:00 - 13:00	Session A	Renewable Energy Systems - Pr. HARTITI Bouchaib & Pr. EL BOUARI Abdeslam
11:00 - 11:15		› Effect of solvents on the synthesis of TiO <sub>2</sub> thin films by chemical deposition for future photocatalytic applications to produce hydrogen - <i>Youssef Douibi, ERDyS laboratory, MEEM &amp; DD Group, Hassan II University of Casablanca, FSTM BP 146, 20650 Mohammedia, Morocco</i>

TIME	TYPE	EVENT
11:15 - 11:30		› Experimental study of reverse osmosis desalination OI / EV pilot system: Application to brackish water at low concentration. - <i>Amine LILANE, Laboratory of Renewable Energies and Dynamic of Systems, Hassan II University, Faculty of Sciences Aïn Chock</i>
11:30 - 11:45		› FORMATION OF ELECTROACTIVE BIOFILM FOR MICROBIAL FUEL CELL - <i>Siham ELMAZOUZI, Laboratoire de Chimie Physique des Matériaux</i>
11:45 - 12:00		› Integration of dispersed generation on distribution networks-impact on voltage profile - <i>Sidi Salah ECH-CHARQAOUY, National Company of electricity and water, Casablanca 20000, Morocco;</i>
12:00 - 12:15		› Measuring of the surface roughness for conductive woven fabrics for the integration of organic photovoltaic cells - <i>Hajar Jaouani, University Hassan II, Faculty of Science Ain Chock</i>
12:15 - 12:30		› Model of a hybrid Biogas-CSP system for the energy recovery of household waste in Morocco - <i>SAGHIR Mohammed, Mohammed SAGHIR</i>
12:30 - 12:45		› Optimization algorithms applied to maintenance strategies for wind turbines - <i>Aziza NANA, University Hassan II</i>
12:45 - 13:00		› Study and realization of a concentrator parabolic cylinder designed for desalination - <i>said ETTAMI, Faculté des sciences Ain chock</i>
11:00 - 13:00	Session B	Materials for RESs - Pr. LMAI Fatima & Pr. ABID Mohamed
11:00 - 11:15		› Chemical preparation, crystal structure and vibrational study of a new strontium dihydrogenophosphate monohydratate Sr(H <sub>2</sub> PO <sub>4</sub> ) <sub>2</sub> .H <sub>2</sub> O - <i>Smail EL Makhlofy, Laboratory of Chemistry-Physics of Materials, Faculty of Sciences Ben M'Sik B. P. 7955, Hassan II University in Casablanca, Morocco</i>
11:15 - 11:30		› Critical behavior and its correlation with magnetocaloric effect in C-implanted FeZr amorphous films - <i>abderrahim charkaoui, LPMMAT, FSAC. University of Hassan II Casablanca, B.P. 5366 Mâarif, Route d'El Jadida, km-8, Casablanca, Morocco</i>
11:30 - 11:45		› Détermination du travail de sortie des matériaux de contact par photoémission - <i>Aissa BOUCHOU, Ecole Normale Supérieure Taleb Abd errahmane, Laghouat</i>
11:45 - 12:00		› Growth Mechanism during the Early Stages of electrodeposition of Bismuth telluride Bi <sub>2</sub> Te <sub>3</sub> on ITO substrate - <i>Boubaker YOUBI, Laboratory Bio-Geosciences and Materials Engineering, Ecole Normale Supérieure, Hassan II University of Casablanca, Morocco.</i>
12:00 - 12:15		› Magnetocaloric and critical exponent properties of layered perovskite La <sub>1.1</sub> Bi <sub>0.3</sub> Sr <sub>1.6</sub> Mn <sub>2</sub> O <sub>7</sub> prepared by coprecipitation method - <i>yousra ounza, LPMMAT, FSAC. University of Hassan II Casablanca, B.P. 5366 Mâarif, Route d'El Jadida, km-8, Casablanca, Morocco</i>
12:15 - 12:30		› Properties of Metakaolin based Geopolymer Materials Incorporating Untreated Phosphate Washing Sludge - <i>Hasna HAMDANE, National Center of Sciences, Technology and Nuclear Energy (CNESTN), Center for Nuclear Studies-Maamoura (CENM), Rabat, Morocco., Laboratory of Engineering and Materials LIMAT, Faculty of Science Ben M'Sik, University Hassan II of Casablanca, Casablanca, Morocco</i>
12:30 - 12:45		› Study of structural, and optical properties of the layered perovskite La <sub>2-x</sub> A <sub>x</sub> Ti <sub>2</sub> O <sub>7</sub> (A = Bi, Ce, and Y, x = 0.01) nanoparticles. - <i>Vianney TUYIKEZE, LERDyS, Faculty of Sciences Ain-Chock, University of Hassan II, Casablanca, Morocco</i>
12:45 - 13:00		› Synthesis and Characterization of Hybrid Nanoparticles for Photocatalysis - <i>AITOUNA Hind, LPMC</i>

TIME	TYPE	EVENT
13:00 - 14:30	Break	Lunch Break
14:30 - 16:15	Session A	Renewable Energy Systems - Pr. DERKAOUI Souad & Pr. EL ALAMI Mustapha
14:30 - 14:45		› Advanced Development OF Doubly Fed Induction Machine Of Wind Turbine Energy - <i>Abdelali AARIB, Team Energy &amp; Conversion, Laboratory of Energy &amp; Electrical Systems, The National Superior School of Electricity and Mechanics (ENSEM), University Hassan II, Casablanca, Morocco</i>
14:45 - 15:00		› Control of a photovoltaic pumping system based on a MPPT algorithm - <i>Mohamed Chouiekh, Laboratory of Renewable Energies and Dynamics of Systems, Hassan II University Faculty of Science AIN CHOCK, El Jadida road Km9 -BP 5366 Maarif Casablanca. - Amine LILANE, Laboratory of Renewable Energies and Dynamics of Systems, Hassan II University Faculty of Science AIN CHOCK, El Jadida road Km9 -BP 5366 Maarif Casablanca.</i>
15:00 - 15:15		› Experimental and numerical investigation of an eco-friendly bio-sourced material for building envelop - <i>Ayoub GOUNNI, LPMMAT Lab, Faculty of Sciences Ain Chock, Hassan II University of Casablanca</i>
15:15 - 15:30		› Linear Fresnel Solar Power Plant: Experimental and CFD Analysis of the Thermal Perfomance of a CPC Receiver - <i>Ahmed Al Mers, 3ER Team, Department of Energy, Ecole Nationale Supérieure d'Arts et Métiers, Moulay Ismail University, Meknès, Morocco</i>
15:30 - 15:45		› Numerical study of natural and mixed convection in a square cavity filled by a Cu-water nanofluid with circular heating and cooling cylinders - <i>Zoubair Boulahia, Hassan II University, Faculty of Sciences Ain Chock, Laboratory of Mechanics, BP 5366 Maarif, Casablanca, Morocco - Marwane Rouway, Hassan II University, Faculty of Sciences Ain Chock, Laboratory of Renewable Energy and Dynamic Systems, BP 5366 Maarif, 20100 Casablanca, Morocco</i>
15:45 - 16:00		› Photovoltaic-thermal collectors for night radiative cooling solar heating of buildings: Numerical study - <i>Abdelkabir ZAITE, Laboratory of Engineering and Materials (LIMAT), Faculty of Sciences Ben M'Sik, Hassan II University of Casablanca</i>
14:30 - 16:15	Session B	Materials for RESs - Pr. Dennoun SAIFAOUI & Pr. LASSRI Hassan
14:30 - 14:45		› Barrier height inhomogeneities in PTB7:PC71BM based organic solar cells: Temperature dependent - <i>Brahim AIT ALI, laboratoire des Energies Renouvelables et Dynamique des Systèmes , Faculté des Sciences d'Ain Chock, Université Hassan II de Casablanca</i>
14:45 - 15:00		› Effect of temperature on copper oxide thin films elaborated by spray pyrolysis for photovoltaic application - <i>hinna maha, MEEM &amp; DD Group, Hassan II University of Casablanca, Morocco</i>
15:00 - 15:15		› Experimental and theoretical studies of physical properties of SnS thin film elaborated by sol-gel spin coating technique : photovoltaic applications - <i>Taoufik Garmim, 1Laboratory of condensed Matter Physics (LPMC), Department of Physic, Faculty of Sciences, Chouaib Doukkali University, EL-JADIDA, Morocco</i>
15:15 - 15:30		› External Quantum Efficiency of a ZnO / CdTe Solar Cell: Effects of Space Charge Zones, Diffusion Length & Recombination Rate, Calculated by the Dielectric Function Method - <i>Moulaye DIAGNE, LASES, Laboratory ,University Cheikh Anta DIOP, Senegal</i>
15:30 - 15:45		› Magnetic refrigeration in amorphous Fe40Ni38Mo4B18 alloy - <i>El Ouahbi Said, LPMMAT, Faculté des Sciences Ain Chock, Université Hassan II de Casablanca, BP 5366, Mâarif, Casablanca, Morocco.</i>

TIME	TYPE	EVENT
15:45 - 16:00		› Spin-coated iron doped cadmium sulfide thin films for solar cells applications - <i>rmili ahmed, Laboratoire d'Ingénieries des Systèmes Electriques et des Télécommunications, Ecole Nationale des Sciences Appliquées de Kénitra (ENSAK), Morocco</i>
16:00 - 16:30	Break	Coffee break
16:30 - 17:30	Session A	IT - Pr. ITTO Bimaghra & Pr. KATTANI Halabi Abderrafie
16:30 - 16:45		› Using GIS and photogrammetry for assessing solar photovoltaic potential on Flat Roofs in urban area case of the city of Benguerir/ Morocco - <i>hachem saadaoui, rhinane hassan</i>
16:45 - 17:00		› Indirect and direct vector control of a Doubly fed Induction Generator wind turbine - <i>Hasnaa Jenkal, Laboratory of renewable energy and dynamic of systems</i>
17:00 - 17:15		› Mechanical and microstructural properties of polypropylene fibers Reinforced Metakaolin / phosphate washing sludge based Geopolymers composites - <i>younesse haddaji, Laboratory LIMAT, Faculty of science Ben M'Sik, Hassan II University, Casablanca</i>
17:15 - 17:30		› Study of the thermal behavior of nanofluids based on carbon nanotubes in a coil heat exchanger - <i>SARA LAHLOU, Hassan II University, Faculty of Sciences Aïn Chock, Laboratory of Mechanics, BP 5366 Maarif, Casablanca, Morocco</i>
16:30 - 17:30	Session B	Energy Storage - Pr. SADIK Chaouki & Pr. ABOUD Younes
16:30 - 16:45		› Characterization of new insulating material based on feather waster for construction application - <i>ouahiba mraggi, Laboratory of physic-chemical of applied materials, Sciences Faculty of Ben M'sik , University Hassan II Casablanca Morocco</i>
16:45 - 17:00		› Metal-air Batteries - <i>aziz elaissi, Laboratory of Chemistry-Physics of Materials, Faculty of Sciences Ben M'Sik B. P. 7955,Hassan II University in Casablanca, Morocco</i>
17:00 - 17:15		› Numerical simulation with LBM of the cooling of electronic component : effect of the inclination angle - <i>EL MEHDI BERRA, LPMMAT, Département de Physique, Faculté des Sciences Aïn Chock, Université Hassan II, Casablanca, Maroc.</i>
17:15 - 17:30		› Numerical study of the thermal energy storage behavior of a novel composite PCM/Concrete wall integrated solar collector - <i>Ayman Benkaddour, Physics Department, LPMMAT Laboratory, Faculty of Sciences Ain Chock, Hassan II University, BP 5366 Maarif, Casablanca 20000, Morocco</i>
17:30 - 18:00		Discussions and closing remarks