People`s Democratic Republic of Algeria

Ministry of Higher Education and Scientific Research

University Mohamed Boudiaf of M'sila

The physics Department at the Faculty of Sciences
In collaboration with
Laboratory of Physics-chemistry of Materials (LPCM)

Organize

The 1st National Conference on Energy Transition in Algeria

CNTEA1-2020

University Mohamed Boudiaf of M'sila

M'sila, March 8-9, 2020

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HOUMER WIDAD

Speakers

Pr. CHARIFI Zoulikha received her PhD in Condensed Matter Physicsin 2004 from the university of Batna, Algeria. In 1998, she joined the Department of Physics of the University of M'sila as an Assistant Professor with subsequent promotions to Associate Professor in 2008 and full Professor in 2011. From 2008-2010 sheheld the position of Chairman of the Scientific Committee of the physics department.

She has published more than 60 peer-reviewed articles with over 1,000 citations and an h-factor of 17 and has participated in many scientific events (workshops, meetings, siminars and congress). She is a member of the Editorial Board of the International Journal of Nanoelectronics and Materials. Unimap, Perlis, Malaysia.

For two months, she was a visitor at Max Planck Institute for the Physics of Complex Systems Nöthnitzer Straße 38 01187 Dresden (Germany) in 2008 and Physics department (Iran) in 2003 and in 2005. She is collaborating with several scientific groups in the world.

Recently she served as a chair of the Scientific Committee of the physics department and a member of the scientific committee of the faculty of science

Dr. ABBAS Mohamed is a Mechanical engineer and Ph.D. holder in mechanical engineering. He received his Diploma (Magister and Doctorate) on solar-driven Stirling engine in 2006 and 2011, respectively, both from the University of Blida, Algeria. He joined the Unité de Développement des Equipements Solaires, UDES/ Centre de Développement des Energies Renouvelables (CDER) early 2005 as permanent researcher (full time). Since February 2012, he is Head of research department working on Cooling Systems and Water Treatment using Renewable Energy with the following fields of research: solar process heat and cooling, brackish and seawater desalination process (reverse osmosis, Multi effect distillation, multi stage flash distillation,...) concentrating solar power systems (CSP), techno-economic assessment and simulation of solar power systems and their applications. His research activities resulted to 30 peer-reviewed scientific papers (as author and co-author) appeared in international and national journal such as desalination and water treatment, International journal of hydrogen energy and Renewable energy journal. His has also many papers that have appeared in conference proceedings (more than 60 papers). He has been involved in national R&D projects. Among his scientific activities, Dr. Mohamed Abbas is a Member of scientific committee of several international and national conferences and reviewer in many peer reviewed international journals.

Dr. BAADJI Nadjib is a senior lecturer at University of M'sila since 2013, He had a Magistère in theoretical physics from Setif's university then a DEA and PhD in condensed matter physics from Louis Pasteur university, Strasbourg France in 2006. He got a position as research fellow in the Computational Spintronics Group (CSG), School of Physics & CRANN, Trinity College Dublin, Ireland. He was a Member of the European project : Spintronics Devices for Molecular Electronics SpiDME and Molecular electronics project (InterNet). He was an active member in many project such as :

Member of Spin Electronics and Sensors project (Supervised by Prof. M. Coey)

Member of Organic Spintronics (supervised by Prof. S. Sanvito)

Spin Crossover Molecules, Molecular electronics, Spintronics and magnetotransport, Scanning tunneling microscopy, Magneto-optics and XMCD, Magnetism and Berry phase.

And he visited many leading groups in condensed matter physics in Europe.

Locally he is a fondator member of Réseau des Chercheurs et Académiciens Algériens (DARNet).

Dr Baadji had many rewards and an author of many high level papers including a nature materials and Phys. Rev. Lett.

Mr. AGGABI Mohammed, nationalité Algérienne, formé à Lyon et ayant occupé des postes dans de grands groupes internationaux dans les domaines du stoeckage et de la conversion d'énergie.

En 2013, Ortech Power Solution est créé à Nantes, France et développe des solutions techniques relatives aux Smartgrids, Le stockage centralisé et distribué. Dans cette démarche, Ortech Power Solutions a développé des solutions pour l'électrification rurales et des sites isolés ou insulaires.

Installé en Algérie depuis Décemebre 2019, à travers, Ortech Power Solutions.

Ortech est active dans l'électrification des sites isolés et de l'autoconsommation.

Conference program

Sunday March 8, 2020

08 :00	Registrement
09 :00	Opening Ceremony Ibn El Haithem Room Conference Chairman : Dr. SALMI Mohamed Honorary President : Prof. BADDARI Kamel
10 :00	Plenary talk : Chairman : Pr. SI ABDELLAH Maayouf Dr. ABBAS Mohamed Title : Les énergies Renouvelables : ressources clés pour accélérer la transition énergétique
10 :40	Posters Session 1 : Ibn El Haithem Hole Chairmans : Pr. RAHMOUNI Zine el Abidine, Pr. LOUHAB Krim Dr. ABBAS Mohamed, Pr. DEGHFEL Bahri Dr. NAHOUI Azzedine, Dr. FETAH Sabah + Coffee break
11 :20	Plenary talk : Chairman : Pr. LATELLI H'mida Pr. CHARIFI Zoulikha Title : Modélisation des matériaux pour le stockage solide d'hydrogène
12 :00	Lunch
14 :00	Oral Presentations Rooms: 01, 02, 03 (Bibliothèque Centrale)

Monday March 9, 2020

08 :20	Plenary talk : Chairman : Dr. NAHOUI Azzedine Mr. AGGABI Mohammed Mr. GUELMINE Aziz Title : Les batteries au Lithium
09 :00	Posters Session 2 : Ibn El Haithem Hole Chairmans : Pr. BELLEL Nadir, Pr. CHARIFI Zoulikha, Dr. BENDERREDJI Razik, Pr. IHADDADENE Nabila, Pr. LATELLI H'mida, Dr. KHALFALLAH Fares + Coffee break
10 :00	Plenary talk : Chairman : Dr. BOUSSENDEL Abdelmadjid Dr. BAADJI Nadjib Title : Energy Harvesting : Basic Principles and Applications
11 :00	Closing Ceremony

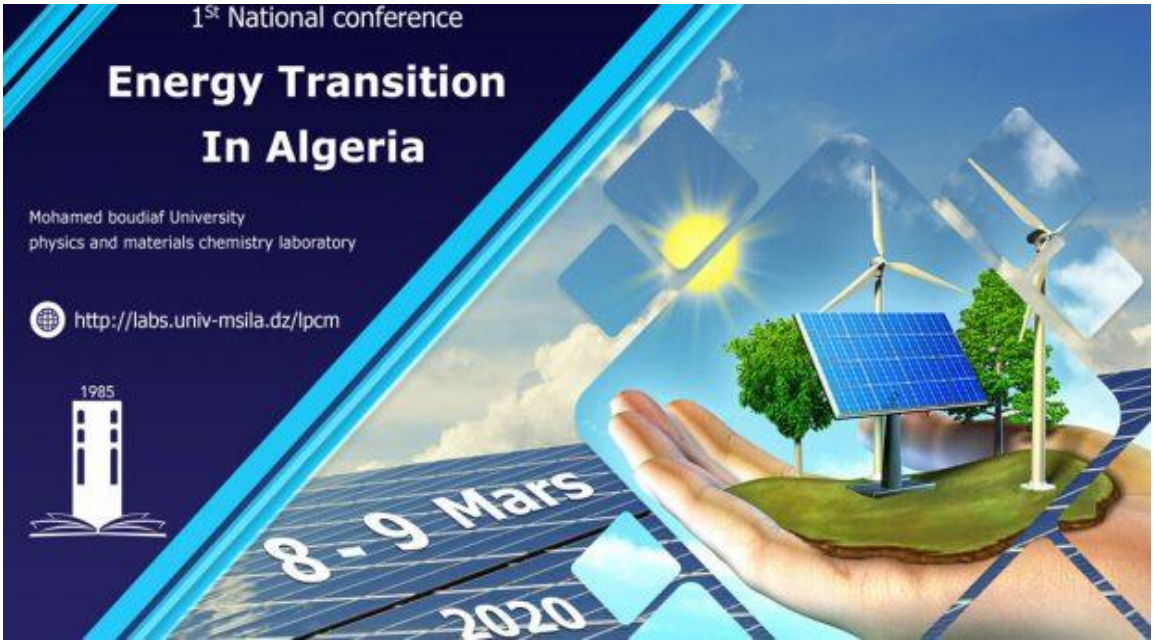
ORAL PRESENTATIONS
Sunday March 8

Oral Session : Room 01 (*Bibliothèque Centrale*) Chairmans : Pr. BELLEL Nadir, Dr. AFIF Benameur	
14 :00	ID-A01 : ABADA Z'hour Les énergies renouvelables en Algérie : un potentiel très peu exploité
14 :20	ID-A15 : BOUROUROU Fares GADA Wind Conversion Chain Model Simulation Using Fractional PI Voltage Regulation
15 :40	ID-A16 : CHEKCHEK Besma Contribution to the study of Photothermal Systems: Application in Algeria
15 :00	ID-A23 : KHERICI Zoubida Degradation analysis of silicon PV modules in desert environment
15 :20	ID-D30 : BOUFERRACHE Karim The study of electronic and optical properties of ternary semiconductors $CuGaX_2$ (X= S, Se)
16 :00	ID-A37 : MAHDI Khaled Modeling of wind speed and calculation of the eolian potential case: Constantine, Algeria
16 :20	ID-A27 : MEDJEDEL Souheyb Calculation Program of the Components of the Solar Radiation on a Horizontal Plane in Algeria

Oral Session : Room 02 (*Bibliothèque Centrale*) Chairmans : Pr. BAAZIZ Hakim, Dr. ABBAS Mohamed	
14 :00	ID-A29 : MEHIRA Samah Designing a zero energy solar housing for an energy transition in the residential sector in Algeria
14 :20	ID-A31 : Sidi Brahim Regad Mohamed Analyzed Control of an Autonomous Microgrid System based on Renewable Energy Resources using PID
14 :40	ID-A36 : BOUREGBA Hicham Étude de performances des régulateurs dans une chaine éolienne base sur une MADA
15 :00	ID-D13 : BOUNAB Sabrina Density functional study of the structural, electronic and thermodynamic proprieties of the half-Heusler semiconductors liMgAs and liMgSb in the α phase
15 :20	ID-D18 : GHELLAB Torkia Study of the structural and electronic properties of copper-based chalcogenide semiconductors
16 :40	ID-A35 : IDIR Abdelhakim A Comparative Study of MPPT Controllers for PV System: NN-PID and NN-MPC Approaches
16 :00	ID-D01 : MOHAMMEDI Abdelkader Extent of cobalt effect on physical properties thin films zinc oxide elaborated by chemical method
16.20	ID-A41 : FRIDJA Djamal Dimensionless axial velocity profiles of hydrogen flow inside a channel containing three baffle plates

ORAL PRESENTATIONS
Monday March 8, 2020

Oral Session : Room 03 (*Bibliothèque Centrale*) **Chairmans : Pr. LOUHAB Krim, Pr. IHADDADENE Nabila**	
14 :00	**ID-C03 : BELAZIZIA Abdennacer** **Double diffusive natural convection instability in a square cavity**
14 :20	**ID-C04 : BEN MESSAI Rahma** **Heat and Mass Transfer in Cylindrical Solar Still for Water Desalination**
14 :40	**ID-C11 : MILOUDI Mohamed** **Aspects on High Frequency Energy Transformer**
15 :00	**ID-C14 : RAHAL Nacer** **Comportement thermique des poutres mixtes acier-béton**
15 :20	**ID-C24 : CHINE Adel** **Simulations numériques d'écoulements de polymère semi-cristallin au sein d'une conduite axisymétrique à convergent**
15 :40	**ID-C13 : NAHOUI Azzedine** **Effets de la compressibilité de l'écoulement autour d'une pale d'éolienne**



POSTER PRESENTATIONS 01

Sunday March at 11h40

Session Poster 1 : Ibn El Haithem Hole Chairmans : Pr. RAHMOUNI Zine el abidine, Pr. LOUHAB Krim, Dr. ABBAS Mohamed, Pr. DEGHFEL Bahri, Dr. NAHOUI Azzedine, Dr. FETAH Sabah		
A-18	GHOBRINI DJILLALI	Biodiesel Production from Green Microalgae cultivated in dairy wastewater
A-06	BADIS DALILA	kinetic, equilibrium and thermodynamic study on the removal of a cationic dye from aqueous solutions by adsorption onto activated carbon agricultural solid waste
A-28	MEFTAH NABIL	Energies renouvelables : un défi de la transition énergétique en Algérie
A-34	ZIGHED MOHAMMED	Biodegradable materials as an alternative to hydrocarbon resources in the heart of energetic transition
A-21	IFRAH KARIM	Comparison entre les Methodes MPPT P&O et Incrémental Conductance pour l'optimisation un GPV connectés au réseau
A-10	BEN ACHOUR SOUHEYLA	Voltage Stability Analysis of Hybrid Pv-Wind Using SVC-FACTS Device.
A-22	KEBIR HADDA	Natural radionuclide concentrations in thermal springs of east Algeria
A-03	AFIFBENAMEUR	SOLAR ENERGY SUPPLY INFLUENCING THE COOLING SYSTEMS EFFICIENCY, CASE STUDY : BISKRA-WAHAT (ALGERIA)
A-33	ZAGHRAT FATIHA	Comparative study and experimental validation to improve Sliding Mode Control using two approaches Fuzzy-Siding Mode
C-08	ISSAADI NOUARA	Evaluation de l'efficacité de l'isolation de l'enveloppe d'un bâtiment résidentiel existant avec du polystyrène expansé. Simulation de scénarios de réhabilitation avec l'outil RETA (CT BAT).
C-15	SAAD AZZEM LOKMANE	Une revue sur l'isolation thermique et des matériaux d'isolation dans les bâtiments
C-05	BOUTRIAA ABDELOUAHAB	Simulation du comportement thermo-hydraulique d'un nouveau distillateur solaire
C-06	DJEFFAL FARES	Comparaison des caractéristiques thermo-hydraulique d'un échangeur de tubes à ailettes planes et ondulées

C-23	BENDJAGHLOULI ALI	Etude d'un écoulement MHD à contre-rotation avec transfert de chaleur dans un récipient conique tronqué
C-09	KACEL TINIHINANE	Simulation process for the separation of toluene and hexane mixture
D-28	ZAIOUR ASMA	Optical Properties of ZnO by Sol Gel Method
D-08	BELOUFA NABIL	Theoretical Study of ternary Compounds HgCdTe Structural, Electronic and Optical Properties
D-29	ZERARGA FARES	Thermoelectric Properties of the GeX_2O_4 (X =Mg, Zn and Cd) cubic spinels compounds : An ab-initio FP-LAPW study
D-10	BENADDI FATIHA	Half-Heusler CaAgN Compound for Solar Cell Application: A first Principles Study
D-04	AMEUR IMENE	Optical and structural properties of ZnO thin films synthesis by sol-gel method for solar cell applications
D-06	BELAIDI ITIDEL	$CH_3NH_3PbI_3$ perovskite films Synthesis by using solvents mixture
D-07	BELDJEBLI OUIDAD	Structural and morphological studies on doped TiO_2 thin films elaborated by Sol-Gel method for solar cell applications
D-15	DARANFED WARDA	Influence of Precursor Solution the Cobalt Oxide Thin Films Deposition by Spray Pyrolysis
D-27	RAKHROUR WAFFA	Etude électrochimique d'un matériau sur une électrode modifiée par un film de polymère organique conducteur
D-11	BENAIDA MERIEM	Structural, energetic, electronic and magnetic properties of AsGen clusters.
D-12	BENKOUIDER IMEN	Électrodéposition et caractérisation des couches minces nano-structurées pour des applications photovoltaïque.
D23	KABACHE SABAH	Propriétés photoélectriques et optiques de surfaces métalliques polycristallines d'argent
D-09	BEN MESSAOUD OUARDA	L'influence d'ajout d'Al sur les propriétés structurales, optiques et électriques de l'oxyde de cuivre
D-22	HETTAL SOUHEILA	Optimization of the concentration of copper oxide thin films elaborated using pneumatic spray pyrolysi
D-03	ALLAM ZEHOR	The structure a base GaN/ ZnO for the detection of solar rays in the visible ultraviolet domain

Session Poster 2 : Ibn El Haithem Hole Chairmans : Pr. BELLEL Nadir, Pr. CHARIFI Zoulikha, Dr. BENDERREDJI Razik, Pr. IHADDADENE Razika, Pr. LATELLI H'mida, Dr. KHALFALLAH Fares		
A-26	MEDERREG DERRADJI	Evaluation le glissement éolien sur le site de m'sila
A-07	BECHANELEILA	Optimisation du Rendement de Conversion Photovoltaïque des cellules solaires à hétérojonction GaAs /c-Si
A-14	KIHOUL khadidja	Etude numérique de l'effet des paramètres externes et internes sur les performances thermiques d'un capteur solaire
A-17	DJOURNI YOUCEF	Improved maximum power point tracking based on dynamic error detector via fractional order backstepping control
A-13	TARAFI AHLAM	Etude expérimentale et théorique du Gisement Solaire pour la région de M'sila
A-11	BENDERRADJI RAZIK	Simulation de l'efficacité géométrique d'un concentrateur solaire parabolique sur la distribution du flux
B-02	DJERIOUI AMMAR	Modélisation d'un système d'Electro-générateurs à Pile à Combustible
C-21	BAKRI BADIS	A comparative study of the turbulence models on the heat ventilation in a box prototype
C-22	BAKRI BADIS	Choice of the appropriate turbulence model for modeling the air flow inside a room
C-07	HADDAD ZAKARIA	Etude des transferts thermiques dans un distillateur solaire avec des parois transparentes
C-16	ASMA AID	Analyse numérique de la convection naturelle laminaire dans une quarte ellipse avec une ailette adiabatique fixée au mur vertical chaud
C-17	IKRAME SEGHIOUR	Etude de la convection naturelle laminaire dans une quarte ellipse utilisant un chauffage sur des murs adjacents
C-20	BENDERRADJI RAZIK	Etude numérique de la convection mixte dans une cavité
D-31	MAHROUG ABDELHAFID	Synthesis and Characterization of ZnO/CuO Nano structures thin films by sol gel technique

D-19	GUERMAT NOUBEIL	Effect of Fluorine doping on the properties of sno2 thin films deposited by spray pyrolysis for optoelectronic applications
D-32	TORKI ZOHIR	Etude et Simulation Thermo-Magnéto-électrique d'un matériau piézoélectrique
D-13	BOUNAB SABRINA	Density functional study of the structural, electronic and thermodynamic proprieties of the half-Heusler semiconductors limgas and limgsb in the α phase
D-33	ABBOUD METATLA	CLUSTER MONTE CARLO STUDY OF THE FERROMAGNETIC ISING-LIKE MODEL FOR SPIN TRANSITION SYSTEMS.
D-26	MENEDJHI ADEL	Band structure and optical spectra of cubic perovskite CsSnX3 for solar cells performance
D-20	HADDI BAKHTI	The influence of CuO on the dielectric properties of BaTiO3-Epoxy resin composites
D-02	ALLALI DJAMEL	Thermoelectric Properties of the LiCdX (X =P, As and Sb) filled-tetrahedral compounds: An ab initio FP-LAPW study
D-17	FETAH SABAH	Structural and Electronic Properties of TiS2 and TiSe2 Determined from Generalized Gradient Approximation Study