



International Conference on
Advanced Materials, Microscopy and Energy (ICAMME'19)
April 15-19 / 2019, Meknes, Morocco



Laboratory of Advanced Materials Studies and Applications (LEM2A)
and
Advanced Physics Society of Nanomaterials for Energy and Technology
(SPANET)
In partnership with
Institut Mines Telecom (IMT) Lille Douai France

Final program

The Conference is supported by:



Conference Location:

Université Moulay Ismail - Présidence
Marjane 2, BP: 298 Meknès 50050, Maroc

<http://www.umi.ac.ma/>

Access map



Welcome

Dear Colleagues,

The International Conference on Advanced Materials, Microscopy and Energy (ICAMME'19) is held in Faculty of Sciences University Moulay Ismail Meknes-Morocco from April 17 to 19, 2019. This event includes different kinds of presentations given by researchers and experts from the national and international scientific community, including keynote speakers, special sessions, posters and tutorials. It covers a wide spectrum of topics.

A specialized spring school is held from April 15 to 16, 2019 before the Conference. The lectures during this school will cover fundamental and applied aspects related to Advanced Materials and Advanced Microscopy and spectroscopy techniques. The lecturers are international experts in these areas. The school is intended in order of priority to PhD students, Masters 2, Engineers and researchers.

ICAMME'19 is an ideal platform for all International and National Scientists, Professors, Students, and Industrials. There will be feature talks by eminent personalities from academics and industries on recent advances in field of Materials Science, Microscopy, Engineering, Technology and Energy. It will anticipate more than 200 participants around the globe with thought Keynote lectures, Oral Presentations and Poster Presentations. This is an excellent opportunity for the delegates from Universities and Institutes to interact with the world class Scientists.

This conference *ICAMME'19*, over three days, will permit:

1. to round up specialists in the advanced materials research field (theoretical and experimental),
2. to discover the scientific community and research in the Moulay Ismail University,
3. to review to the younger generation today, through various scientific presentations, the evolution of the advanced materials, and the revolution in nanotechnology and their applications in renewable energy.

We want to thank the members of the Scientific Committee and all the invited speakers.

We recall that the financial support of the symposium was provided largely by:

- ❖ The Moulay Ismail University
- ❖ The Laboratory of Advanced Materials Studies and Applications (LEMA)

We hope that everyone will found in this meeting an important topical interest, a great pleasure on exchanging with the inter-Mediterranean scientific community.

Prof. Abdelhai Rahmani,
General Chairman

Prof. Lahcen Khouchaf,
Co-Chairman

The International Conference on Advanced Materials, Microscopy and Energy (ICAMME'19)

Honorary Committee

Saaid AMZAZI, Minister of National Education, Professional Training, Higher Education and Scientific Research Morocco.

Hassan SAHBI, President of Moulay Ismail University Meknes Morocco.



Mohamed KHALFAOUI, Director of the National Centre for Scientific and Technical Research.

Hamid ELMIR, Dean of Faculty of Sciences Meknes.

Mohammed BENNASER, Director of Superior School of Technology Meknes.

Youssef EL AMRAOUI, Director of National School of Arts and Metier Meknes.

General Chairs

	Abdelhai RAHMANI Faculty of Sciences, Moulay Ismail University Meknes Morocco
	Lahcen KHOUCHAF Institut Mines Telecom, Université de Lille Douai, France

Organizing Committee

Abdelhai RAHMANI (Chairman)	Faculty of Sciences, Meknes, Morocco.
Lahcen KHOUCHAF (Co-chairman)	Institut Mines Telecom, Lille Douai, France
Abdelali RAHMANI	Faculty of Sciences, Meknes, Morocco.
Abdellah MIR	Faculty of Sciences, Meknes, Morocco.
Adil Mohammed NASSIR	Faculty of Arts and Humanities, Meknes, Morocco
Brahim FAKRACH	Faculty of Sciences Dhar Elmahraz, Fes, Morocco
EL Moukhtar ZEMMOURI	National School of Arts and Metier, Meknes.
Hassan CHADLI	High School of Technology, Meknes, Morocco.
Khalid SBAI	High School of Technology, Meknes, Morocco.
Mourad BOUTAHIR	Faculty of Sciences, Meknes, Morocco.

Students Committee

Jamal CHENOUF	Faculty of Sciences, Meknes, Morocco.
Souhail LAKHLIFI	Faculty of Sciences, Meknes, Morocco.
Maryam DLIMI	Faculty of Sciences, Meknes, Morocco.
Mohamed EL BARGHOUTI	Faculty of Sciences, Meknes, Morocco.
Sidi Abdelmajid AIT ABDELKADER	Faculty of Sciences, Meknes, Morocco.
Younes BENHOURIA	Faculty of Sciences, Meknes, Morocco.

The International Conference on Advanced Materials, Microscopy and
Energy (ICAMME'19)
Scientific Committee

Abdeddaim Kadoun	Sidi Bel Abbes Algeria
Abdelali Rahmani	Meknes Morocco
Abdelhai rahmani	Meknes Morocco
Abdelilah Kaddouri	Marrakech Morocco
Abdelfattah Achahbar	Tetouan Morocco
Abdelhalim Zoukel	Laghouat Algeria
Abdelhamid Benazzouz	Bordeaux France
Abdelmajid ainane	Meknes Morocco
Abdelmajid Belafhal	El Jadida Morocco
Abdelmoula Najmeddine	Sfax Tunisie
Abdelouahad Zegzouti	Marrakech Morocco
Abderrazak Traidia	Dhahran K. Saudi Arabia
Abdeslam el bouari	Casablanca Morocco
Abdesslame Belaaraj	Meknes Morocco
Ahmed Zaim	Meknes Morocco
Akjouj Abdellatif	Lille France
Ali Oubelkacem	Meknes Morocco
Ali Essahlaoui	Meknes Morocco
Amor Ben Fraj	Provins France
Aziz aboulmouhajir	Casablanca Morocco
Boutayna Frih	Bordeaux France
Brahim Elouadi	La Rochelle France
Christian Colliex	Orsay France
Christian Mathieu	Lens France
Damien Jacob	Lille France
El Hassane Bentefour	Harvard USA
Francisco Javier García	Madrid Spain
Frédéric Gambino	Bordeaux France
Frédéric Roger	Lille France
Gang Ji	Lille France
Gilmar Mompean	Lille France
Hajitou Amin	London UK
Hamadi Khemakhem	Sfax Tunisie
Hamid Nebdi	El Jadida Morocco
Haosu Luo	Shanghai China
Hassan chadli	Khenifra Morocco
Hassane Ouguir	Meknes Morocco
Ismail Essaoudi	Meknes Morocco
Jamal Elkhamkhami	Tetouan Morocco
Jean-Louis Bantignies	Montpellier France

Khalid Boulahya	Madrid Spain
Ibrahimi Azeddine	Rabat Maroc
Lionel Montagne	Lille France
Lahcen Bih	Meknes Morocco
Lahcen Khouchaf	Lille France
Laurent Alvarez	Montpellier France
Mabrouk Benhamou	Meknes Morocco
Marc Landry	Bordeaux France
Mohamed Aissa	Meknes Morocco
Mohamed Boustimi	Mecca K. Saudi Arabia
Mohamed Elaatmani	Marrakech Morocco
Mohamed Kerouad	Meknes Morocco
Mouhcine Bentaleb	Meknes Morocco
Mourad Bouhrara	Khenifra Morocco
Nothias Fatiha	Paris 6 France
Omar Mansour	Djelfa Algeria
Patrick Cordier	Lille France
Rabia Benazzouz	Bordeaux France
Rachid Agounoun	Meknes Morocco
Rachid Saadani	Meknes Morocco
Rose Noëlle Vannier	Lille France
Samir Al Moussalami	Quebec Canada
Talbi Abdelkrim	Lille France

The International Conference on Advanced Materials, Microscopy and Energy (ICAMME'19)

List of keynote speakers

 <p>Christian COLLIEX Orsay France</p>	<p>The French physicist Christian Colliex is known for his pioneering work on the use of electron energy loss spectroscopy (EELS) in transmission electron microscopy.</p> <p>Colliex graduated from the École Nationale Supérieure des Mines de Paris in 1965 and received his Ph.D. in Solid State Physics in 1970 from the CNRS Laboratoire de physique des solides, Orsay. He is CNRS Research Director at the Solid State Physics laboratory in Orsay, head of the Electron Microscopy group.</p> <p>Seeing, Analyzing and Measuring in the nano-world with a Scanning Transmission Electron Microscope (STEM)</p>
 <p>Patrick CORDIER Lille France</p>	<p>Patrick Cordier is a mineralogist who uses experimental and numerical approaches to study the plasticity of geological materials. He has authored or co-authored over 170 articles in international scientific journals. He received the Dana Medal from the Mineralogical Society of America in 2016, and is currently a chief editor of the European Journal of Mineralogy.</p> <p>He is the current president (2018–2020) of the International Mineralogical Association (IMA). He has also served as the president (2008–2009) of the French Mineralogical Society.</p> <p>Deforming minerals and rocks: from the atoms to plate tectonics and the rheology of the mantle</p>
 <p>Abdelhamid BENAZZOUC Bordeaux France</p>	<p>Research Director INSERM - Leader of Team "Monamines, brain stimulation (SCP) and Parkinson" at the Institute of Neurodegenerative Diseases (Bordeaux).</p> <p>Scientific advisor for the film "Parkinson's Disease: From Cell to Man" (26 minutes / Year 2013). http://videothèque.cnrs.fr/doc=4045 .</p> <p>Member of Section 25 of the CNRS National Committee since October 2012.</p> <p>Reviewer for several International Journals. Supervision of many theses. Author of Several scientific papers.</p> <p>Deep brain electrical stimulation for neurological and psychiatric disorders</p>
 <p>Jean Louis BANTIGNIES Montpellier France</p>	<p>Professor of Physics at the Laboratory Charles Coulomb in University Montpellier II</p> <p>Research topics or attachments:</p> <ul style="list-style-type: none"> ✓ Functional Nanomaterials ✓ Development and study of networks, films and composites based on nanotubes. ✓ Doping, confinement and functionalization in nanotubes <p>https://dumas.ccsd.cnrs.fr/L2C/search/index/q/*/authFullName_s/Jean-Louis+Bantignies</p> <p>Organic–inorganic nanohybrid materials: Self-assembling and properties</p>

 <p>Laurent ALVAREZ Montpellier France</p>	<p>Currently works at the Laboratory Charles Coulomb in University Montpellier II. Laurent does research in Condensed Matter Physics and Experimental Physics. Their most recent publication is 'Non-Covalent Functionalization of Carbon Nanotubes by Phthalocyanines Analyzed by Spatial-Resolved EELS'. Other research theme (s) or affiliation (s): Development and study of networks, films and composites based on nanotubes. Doping, confinement and functionalization in nanotubes. https://www.coulomb.univ-montp2.fr/spip.php?page=publications&aigle_auteur=87 Modulating single-walled carbon nanotube opto-electronic properties by dye confinement</p>
 <p>Damien JACOB Lille France</p>	<p>Professor in University of Lille, Materials and Transformations Unit, Team: Terrestrial and Planetary Materials. He is director of the Lille Microscopy Facility and President of the French Microscopy Society. He is an active member in the field of advanced electronic diffraction. Research topics: Microstructural Characterization of Materials by Transmission Electron Microscopy - Conventional Convergent Beam, Wide Angle and Precession Electron Diffraction. Structure refinement using precession electron diffraction tomography and dynamical diffraction applied to mineral geo-thermometers</p>
 <p>Haosu Luo Shanghai China</p>	<p>Professor and the group leader of ferroelectric single crystals and devices in Shanghai Institute of Ceramics, Chinese Academy of Sciences. He has significantly contributed to the growth and development of piezoelectric single crystals, especial for the growth and practical application of PMN-PT single crystals. Current researches involve the growth of high-Tc relaxor-based single crystals, lead free piezoelectric single crystals, and device applications. He has involved more than 400 publications. Higher performance PMNT based wearable piezoelectric energy harvester</p>
 <p>Brahim Elouadi La Rochelle France</p>	<p>Professor of chemistry in faculty of sciences at Rabat University from 1980 to 1990. In 1981, he held the position of a director of Applied Solid State Chemistry Laboratory in Rabat, where he worked until 1988. He was a visiting professor of chemistry at Oklahoma State University in 1985-1986.. Since 1995 he has been a professor of chemistry at the University of La Rochelle. Event of the Modern Electronic Era With Perovskite Structure Materials</p>
 <p>Rose Noëlle VANNIER Lille France</p>	<p>Professor of the Universities is in charge of the National School of Chemistry of Lille since September 1st 2016. She was a member of the committee of specialists 33rd section of Lille (1995-2008). She was member of the national council of the universities, 33e section, from 1999 to 2001, then named member, of 2007 to 2011. She was in charge of the MSTP 4 of the Ministry of Higher Education and Research, from 2006 to 2007. Oxide ion conductors for solid oxide cells</p>

 <p>Frédéric ROGER Lille Douai France</p>	<p>Frederic Roger currently works at Lille University and is a Professor at Institut Mines Telecom Lille-Douai. Current projects are Simulation of Additive Manufacturing for composites and metallic alloys, Multiphysics and Multiscale modelling in material science. He works also on damage modelling/simulation and X-ray tomography monitoring of short glass fiber automotive structures, Modelling of shape memory polymers and Mechanical behavior of thermoplastics polymers blends.</p> <p>Additive manufacturing : scientific, economic and educational opportunities</p>
 <p>Khalid BOULAYHA Madrid Spain</p>	<p>Affiliated to Inorganic Chemistry, Complutense University of Madrid, Dr. Khalid Boulayha is currently working as Professor Contracted Doctor, he has authored and co-authored several national and international publications and also working as a reviewer for reputed professional journals. He has received several awards for the contributions to the scientific community; his major research interest involves characterization of materials, chemistry of materials, solid state chemistry and Electron microscopy.</p> <p>Haadf and abf-stem study of new promising ruddlesden–popper member component for it-sofc</p>
 <p>Lahcen KHOUCHAF Lille Douai, France</p>	<p>Professor of Physics, experimental techniques and nanotechnology, Head of Physical Analysis Lab from 1999 to 2007 in IMT, Lille university, France. After a PhD in 1996 from University of Haute Alsace in Solid State Physics, he obtained an accreditation to supervise research in 2004 France. He works on microscopy and spectroscopy instrumentation development, Environmental Electron Microscopy and Microanalysis to study the properties at low scale of different materials.</p> <p>Gaseous Scanning Electron Microscopy (GSEM): Perspectives For Gaseous Transmission Electron Microscopy (GTEM)</p>
 <p>Mabrouk BENHAMOU Meknes Morocco</p>	<p>Professor at Faculty of Sciences, Meknes, Morocco, Researcher in Theoretical Physics, Statistical Physics, Soft-Condensed Matter, and Biological Systems. Supervision of many theses. Author of more than four hundred of scientific papers and advanced books. Editor of many International Scientific Journals. Expert to the benefit of several International Scientific Institutions. Member of the directory of many National and International Scientific Societies and Recipient of many Awards and Distinctions.</p> <p>Pickering emulsions : From experiment to theory.</p>
 <p>Abdelali RAHMANI Meknes Morocco</p>	<p>Professor of Physics at Faculty of Sciences, Université Moulay Ismail, Meknès. Director of Laboratory of Advanced Materials Studies and Applications (LEM2A). Researcher in Functional Nanomaterials and Numerical simulation. Supervision of many theses. Author of Several scientific papers (+55 publications in peer-reviewed journals, Impact Item +96, RG Score 31.08, Reads> 350).</p> <p>Nonresonant polarized Raman spectra calculations of doped single wall carbon nanotubes</p>

 <p>Fatiha Nothias Paris Seine, France</p>	<p>Fatiha Nothias currently works at the Neuroscience Paris Seine, CNRS UMR 8246, INSERM U1130, Pierre and Marie Curie University - Paris 6. Fatiha does research in Neuroscience, Molecular Biology and Cell Biology.</p> <p>Their most recent publication is "Physical chitosan microhydrogels as scaffolds for spinal cord injury restoration and axon regeneration."</p> <p>Regenerative biomaterial matrices for traumatic spinal cord injury repair</p>
 <p>Frédéric Gambino IINS-Bordeaux, France</p>	<p>Assistant Professor, Tenured position (CR2) at Institute of Interdisciplinary Neuroscience. His research goal is to understand how different neurons in the mammalian cortex modulate the structure of their connections in response to learning, and how this process regulates the cortical processing that underlies behavior. This a key to understand how we store information and acquire new skills.</p> <p>And Then There Was Light: Advanced Biophotonic Tools to study Brain Networks in vivo</p>
 <p>Marc Landry IINS-Bordeaux, France</p>	<p>He got a tenured position as a lecturer in 1997 at Bordeaux 2 University and then joined the INSERM team at the Institute for Neuroscience. He has developed morphological and cell biology approaches that contributed to establish a pro-nociceptive role for L-type calcium channels in the spinal dorsal horn. He setup a research project investigating cellular mechanisms of disinhibition in the spinal cord and he is in charge of the Electron Microscopy core facility at Bordeaux 2 University.</p> <p>The revival of electron microscopy for biomedical research</p>
 <p>Ibrahim Azeddine UM5, Rabat, Morocco</p>	<p>Azeddine Ibrahim is the director of the BioInova Research Center, head of Biotechnology Lab at the Rabat Medical School in Rabat and Professor of Medical Biotechnology at the University Mohammed V Rabat, Morocco. Pr Ibrahim has completed his graduate studies in Biochemistry Center at Nice–Sophia Antipolis University and his training in the US at Sate University of New York Health Sciences Center in Stony Brook where he joined its faculty in 1999. Back to Morocco, he founded the Biotechnology lab in the Rabat Medical School where he is acting as head of the department.</p> <p>Biotechnological advances & applications: when reality is catching up with fictionion</p>

**Première édition de l'école de printemps sur la Microscopie
Electronique, Spectroscopies Raman et Infrarouge, leurs applications
biomédicales et la Fabrication Additive, 15-16 Avril 2019, Meknès,
Maroc.**

Programme de l'école

Dimanche 14 Avril 2019, Après midi		
16:00	Réception et inscription des participants	
Lundi 15 Avril 2019, Matin		
08:00	Inscription des participants	
09:30	Allocutions d'ouverture Pr. Abdelhamid ZAID : Vice-président chargé de la recherche scientifique, coopération et partenariat Pr. Abdelhai Rahmani : Comité d'organisation Pr. Lahcen Khouchaf : Comité d'organisation	
10:00	Pause-café	
10:30	Séminaire 1 : Innovation : Accélérateur de développement économique et scientifique, Lahcen Khouchaf	
11:30	Séminaire 2 : Fabrication Additive, Frédéric Roger	
Lundi 15 Avril 2019, Après midi		
	Session 1 : Microscopie (Salle 2)	Session 2 : Spectroscopie (Salle 1)
14:30	Microscopie Electronique à Balayage et à Transmission sous Environnement Gazeux, Nano-Microanalyse X, L. Khouchaf	Introduction à la spectroscopie infrarouge: formalisme, J-L. Bantignie
16:30	Préparation des échantillons MEB, A. M. Blanchenet	Théorie classique de la diffusion Raman & applications I, L. Alvarez
Mardi 16 Avril 2019, Matin		
09:00	Séminaire 3 : Ethique et recherche expérimentale, Rabia Bouali-Benazzouz	
	Session 3 : Microscopie (Salle 2)	Session 4 : Spectroscopie (Salle 1)
10:00	Microscopie Electronique à Transmission et application 1, A. Addad	Introduction à la spectroscopie infrarouge : Instrumentation et applications, J-L. Bantignie
11:30	Préparation des échantillons MET, A. M. Blanchenet	Théorie classique de la diffusion Raman & applications 2, L. Alvarez
		Session 5 Applications biomédicales (Salle 3)
		Modèles animaux des maladies du cerveau, A. Benazzouz
		Modèles animaux dans les pathologies humaines, A. Benazzouz
Mardi 16 Avril 2019, Après midi		
	Session 6 : Microscopie (Salle 1)	Session 7 Applications biomédicales (Salle 3)
14:30	Microscopie Electronique à Transmission et application II, A. Addad	Approches comportementales et électro-physiologiques pour étudier le cerveau, A. Benazzouz
16:30	Diffraction Electronique, Damien Jacob	L'optogénétique : une approche innovante pour étudier les réseaux neuronaux, R. B. Benazzouz

Conference Program

Wednesday, April 17, 2019									
08:00	Registration								
09:30	Opening ceremony Pr. Hassan SAHBI : President of Moulay Ismail University Meknes (UMI) Pr. Mohamed KHALFAOUI : Director of the National Centre for Scientific and Technical Research Pr. Hamid ELMIR : Dean of Faculty of Sciences Meknes (FSM) Pr. Abdelhai RAHMANI : Chairman of organizing committee of ICAMME19 ; Pr. Lahcen KHOUCHEF : Co-Chairman of organizing committee of ICAMME19								
10:15	Reception in honor of participants								
11:00	Chairman: Fatiha Nothias Keynote Speaker 1: Abdelhamid BENAZZOUC "Deep brain electrical stimulation for neurological and psychiatric disorders"								
12:00	Invited Lecturer 1: R. Noëlle VANNIER "Oxide ion conductors for solid oxide cells"								
13:00	Lunch								
	<table border="1"> <tr> <td>Parallel Session S1 (Room1) (Chairman: Frédéric ROGER)</td> <td>Parallel Session S2 (Room2) (Chairman: Laurent ALVAREZ)</td> </tr> <tr> <td>Invited Lecturer2: Damien JACOB</td> <td>Invited Lecturer3: J. L. BANTIGNIES</td> </tr> <tr> <td>Invited Lecturer4: Khalid BOULAHYA</td> <td>Invited Lecturer5: Abdelali RAHMANI</td> </tr> <tr> <td>Oral presentations</td> <td>Oral presentations</td> </tr> </table>	Parallel Session S1 (Room1) (Chairman: Frédéric ROGER)	Parallel Session S2 (Room2) (Chairman: Laurent ALVAREZ)	Invited Lecturer2: Damien JACOB	Invited Lecturer3: J. L. BANTIGNIES	Invited Lecturer4: Khalid BOULAHYA	Invited Lecturer5: Abdelali RAHMANI	Oral presentations	Oral presentations
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Invited Lecturer4: Khalid BOULAHYA	Invited Lecturer5: Abdelali RAHMANI								
Oral presentations	Oral presentations								
14:30									
15:00									
15:30									
17:30	Coffee Break and Poster session A								
Thursday, April 18, 2019									
09:00	Chairman: Brahim ELOUADI Keynote Speaker 2: Christian COLLIEX "Seeing, Analyzing and Measuring in the nano-world with a Scanning Transmission Electron Microscope (STEM)"								
10:00	Coffee Break and Poster session B								
	<table border="1"> <tr> <td>Parallel Session S3 (Room1) (Chairman: Damien JACOB)</td> <td>Parallel Session S4 (Room2) (Chairman: J. L. BANTIGNIES)</td> </tr> <tr> <td>Invited Lecturer6: Lahcen KHOUCHEF</td> <td>Invited Lecturer7: Laurent ALVAREZ</td> </tr> <tr> <td>Oral presentations</td> <td>Oral presentations</td> </tr> </table>	Parallel Session S3 (Room1) (Chairman: Damien JACOB)	Parallel Session S4 (Room2) (Chairman: J. L. BANTIGNIES)	Invited Lecturer6: Lahcen KHOUCHEF	Invited Lecturer7: Laurent ALVAREZ	Oral presentations	Oral presentations		
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Oral presentations	Oral presentations								
10:30									
11:00									
13:00	Lunch								
15:00	Tour								
20:00	Gala Dinner								
Friday, April 19, 2019									
09:00	<table border="1"> <tr> <td>Chairman: R. Noëlle VANNIER Keynote Speaker 3: Patrick CORDIER "Deforming minerals and rocks: from the atoms to plate tectonics and the rheology of the mantle"</td> <td>Parallel Session S6 (Room2) (Chairman: Abdelhamid BENAZZOUC) Invited Lecturer8: Fatiha Nothias Invited Lecturer9: Frédéric Gambino</td> </tr> </table>	Chairman: R. Noëlle VANNIER Keynote Speaker 3: Patrick CORDIER "Deforming minerals and rocks: from the atoms to plate tectonics and the rheology of the mantle"	Parallel Session S6 (Room2) (Chairman: Abdelhamid BENAZZOUC) Invited Lecturer8: Fatiha Nothias Invited Lecturer9: Frédéric Gambino						
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10:00	Coffee Break and Poster session C								
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10:30									
11:00									

11:30	Oral presentations	Oral presentations
13:00	Lunch	
	Parallel Session S7 (Room1) (Chairman: Samir Al Moussalami)	Parallel Session S8 (Room2) (Chairman: Aziz ABOULMOUHAJER)
15:00	Invited Lecturer14: Frédéric ROGER	Invited Lecturer15: Mabrouk BENHAMOU
15:30	Oral presentations	Oral presentations
17:30	Coffee Break and Poster session D	
18:00	Closing	

Parallel Sessions

Paper ID and related session

Wednesday, April 17, afternoon

Parallel Session S1 (Room 1)
(Chairman: Frédéric ROGER)

Time	Title, Authors and Paper ID
14:30	Invited Lecturer2: Damien JACOB Structure refinement using precession electron diffraction tomography and dynamical diffraction applied to mineral geo-thermometers
15:00	Invited Lecturer4: Khalid BOULAHYA Haadf and abf-stem study of new promising ruddlesden–popper member component for it-sofc
15:30	First-principles calculations of electronic structure and optical properties of Be and Mg co-doped ZnO monolayer (Bouziani Ilyas, ID-249788)
15:40	MRT-LBM study of natural convection with surface radiation in a square inclined cavity. (Rehhali Khaoula, ID-250510)
15:50	Structural, Electronic and Mechanical Properties of Two-dimensional Penta-GeCx monolayer via external electric field and strain engineering. (Khossossi Nabil, ID-244412)
16:00	Performances Improvement of Doped-Pentacene-Based Organic Thin-Film Transistor with Top-Contact Geometry (Es-Saghiri Abdeljabbar, ID-245124)
16:10	Aspect of Mn-Doped forsterite ceramic pigments (Siragi Nouha, ID-248011)
16:20	Role of a uniform electric field on the energy spectrum of an exciton in a core/shell spherical quantum dot. (Chafai Ahmed, ID-263253)
16:30	Reticular plasmon resonance detection properties of metal nanoparticles. (El Barghouthi Mohamed, ID-246425)
16:40	Synthesis and characteristics of polyaniline/tungsten trioxide conductive nanocomposite for hexavalent chromium ions adsorption application (Hsini Abdelghani, ID- 245132)
16:50	Effet de la température sur les propriétés structurales, optiques et électrique des cellules solaires organométalliques à pérovskite bromée. (Bouazizi Abdelaziz, ID- 250183)
17:00	Ferroelectric, dielectric properties and electrocaloric effect of PbxSr1-xTio3 thin films (Tarnaoui Mustapha, ID- 250441)
17:10	Electronic and magnetic properties of the double perovskite Sr2CrWO6: ab-initio and Monte Carlo studies (Amraoui Smail, ID-249892)
17:20	Efficient removal of p-nitrophenol from water using natural materials: Insights into the adsorption mechanism, process optimization and regeneration (El Ouardi Mahmoud, ID- 265631)

Paper ID and related session

Wednesday, April 17, afternoon

Parallel Session S2 (Room 2)
(Chairman: **Laurent ALVAREZ**)

Time	Title, Authors and Paper ID
14:30	Invited Lecturer 3: J. L. BANTIGNIES Organic-inorganic nanohybrid materials: Self-assembling and properties
15:00	Invited Lecturer 5: Abdelali RAHMANI Nonresonant polarized Raman spectra calculations of doped single wall carbon nanotubes
15:30	Raman analysis of sexithiophene encapsulated inside single-walled carbone nanotubes (Jamal Chenouf, ID- 248765)
15:40	Etude des propriétés structurales et optiques des nanostructures à base de Si dédiées à l'optoélectronique. (Mghaieth Ridha, ID- 250154)
15:50	Optimization of an organic solar cell based on P3HT-ICBA: Effect of p-type doping. (Error Meriem, ID- 245367)
16:00	Infrared phonon modes of double walled CBN nanotube: theoretical study (Fergani Fatima, ID- 252243)
16:10	Viscosity of graphene/ethylene glycol (EG) nanofluids by molecular dynamics simulations: Effects of nanoparticle volume fraction, temperature. (Essajai Rida, ID- 244519)
16:20	Thermodynamic investigation for synthesis of intermetallic compounds by thermal process. (Bahaj Imane, ID- 244463)
16:30	Etude d'un écoulement turbulent dans un diffuseur axisymétrique plan- comparaison de modèles de turbulence (Aris Abdelkader, ID-246692)
16:40	The effect of tri and tetra-vacancies defects on the electronic and vibrational properties of (14,5) chiral carbon nanotube. (Ait Abdelkader Sidi Abdelmajid, ID- 248754)
16:50	Monte Carlo dose calculation for HDR brachytherapy source using GATE/GEANT4 code. (Ait Mlouk Lahcen, ID- 249554)
17:00	Charge Carrier Dynamics and optical properties of porphyrin /carbon nanotube composites for photovoltaic applications (Bajjou Omar, ID- 247078)
17:10	Theoretical study of electronic properties of nitrogen doped carbon nanotubes (Allali Fatima ezzahrae, ID- 244633)
17:20	NANOMD software for Molecular Dynamics study of nanomaterials. (Adil Nassir, ID-261987)

Paper ID and related session

Thursday, April 18, morning	
Parallel Session S3 (Room 1) (Chairman: Brahim ELOUADI)	
Time	Title, Authors and Paper ID
10:30	Invited Lecturer6: Lahcen KHOUCHAF Gaseous Scanning Electron Microscopy (GSEM): Perspectives For Gaseous Transmission Electron Microscopy (GTEM)
11:00	A study on the influence of process parameters on the thermal, mechanical and morphological properties of 3D printed Poly (phenylene sulfide) material (El Magri Anouar, ID- 249679)
11:10	Elaboration of solid biocombustibles from biomass waste. (Chaimae Hadey, ID- 255627)
11:20	Physico-chemical characterization of a regional clay: application to the adsorption of phenol. (Amar Abdelouahed, ID- 255623)
11:30	Study of thermal aging of a polymer matrix nanocomposite on mechanical behavior (Jabri Maria, ID- 255613)
11:40	The effect of M1 and M3 polymorph on the rate of hydration of Cement, using Rietveld analysis (Tlamsamani Dounia, ID- 252177)
11:50	Sorption of contaminants into thermoplastic pipes: critical review. (Elamine Lamyae, ID- 247856)
12:00	Simulation of soret convection flows in a square cavity with internal heat generation and opposite buoyancy forces. (Hasnaoui Safae, ID- 254969)
12:10	DFT+U study of the structural, electronic, mechanical, and optical response properties of XCoSb with (X=Hf, Ti and Zr) half-Heusler compounds (Lekhal Abdelkader, ID- 258738)
12:20	Magnetocaloric materials and refrigeration (El Zirani Mohamed, ID- 250457)
12:30	Effect of the nanostructuring on the thermoelectric properties of α -MgAgSb (Abdelkhalek Kammouni, ID- 250562)
12:40	Modelling and thermophysical characterization of a new clay-based construction material from the Atlas region (Lkouen Ahmed, ID-249623)
12:50	Performance des membranes zéolithiques de type A et Y déposées sur support en argile pour l'élimination des métaux lourds (Lahnafi Adnane, ID-245710)

Paper ID and related Oral Session

Thursday, April 18, morning	
Parallel Session S4 (Room 2) (Chairman: J. L. BANTIGNIES)	
Time	Title, Authors and Paper ID
10:30	Invited Lecturer 7: Laurent ALVAREZ Modulating single-walled carbon nanotube opto-electronic properties by dye confinement
11:00	Swelling Behaviour and Mechanical Properties in filled elastomeric nano-composites: A comparative study (Mdarhri Ahmed, ID- 246251)
11:10	Effects of variation in autoclave pressure, temperature and vacuum-application on mechanical properties and void content of epoxy prepreg. (Baghdad Abd, ID- 250348)
11:20	Preparation of a Novel Catalyst from two phase olive mill wastes using hydrothermal carbonization for Removal of Methylene Blue by heterogeneous Fenton-Like oxidation. (Izghri Zaina, ID-250206)
11:30	Energy and exergy analysis in a salt gradient solar pond for the assessment of three heat exchanger designs. (El Mansouri Abdelfattah, ID- 254910)
11:40	Thermodynamic study of a zinc deposit (El Fazazi Asmae, ID- 245090)
11:50	Elaboration et études structurale et vibrationnelle d'apatites lacunaires de APb _{3-x} CaxCd (PO ₄) ₃ avec A= Na, K et (0 ≤ x ≤ 1) (Ben Baaziz Meryem, ID-243695)
12:00	DFT , Monte Carlo and QSAR approches for quantifying the anticorrosive performance of some neutral and protonated macrocyclic polyether compounds, towards the iron surface, in vacuum and aqueous solution (Mahsoune Anass, ID-244314)
12:10	Conformational stability, Barriers to internal rotation, vibrational spectral assignments (FT-IR and FT-Raman), UV-Vis, NMR, NBO, HOMO-LUMO and NLO properties of 2,2,3-trimethyl pentane based on long-range (LR) corrected model's calculations. (Hachim Mouhi Eddine, ID-243450)
12:20	Numerical analysis in dynamic behavior of a novel absorption refrigeration system driven by an integrated latent heat storage solar heater (Ben Hamed Cherifa, ID-249876)
12:30	Soret and Dufour effects on the onset of thermosolutal convection in a shallow horizontal Brinkman porous layer (Filahi Ismail, ID-255577)
12:40	A new copolymer based on 2,7-divinylcabazole, DFT study. (Jabha Mohamed, ID-244448)
12:50	Métaux et oxydes : caractérisation par spectroscopie optique de produits de pulvérisation (Kaddouri Abdelilah, ID- 245754)
13:00	Phononic-plasmonic interaction in the nano-opto-mechanical cavities. (Oumekloul Zakariae, ID- 252572)

Paper ID and related Oral Session

Friday, April 19, morning	
Parallel Session S5 (Room 1) (Chairman: Hamid NEBDI)	
Time	Title, Authors and Paper ID
10:30	Invited Lecturer10: Brahim ELOUADI Event of the Modern Electronic Era With Perovskite Structure Materials
11:00	Invited Lecturer11: Haosu Luo Higher performance PMNT based wearable piezoelectric energy harvester
11:30	Analysis of polycrystalline silicon solar cells by Laser- Induced Breakdown Spectroscopy (LIBS) (Beldjilali Sid Ahmed, ID-245847)
11:40	Ab-initio calculations of Structural, Electronic and Magnetic Properties of GdNi5 and GdNi3T2(T= Cr, Fe and Co) Compounds (Tenia Ahmed, ID-252296)
11:50	Thermal Lattice Boltzmann Method for micro-Poiseuille gas flow (Elguennouni Youssef, ID-245111)
12:00	Optimisation de la performance thermique d'un capteur solaire plan à air (Marwa Ammar, ID-250195)
12:10	New magnetic core-shell particles based carbonaceous material@NPs-Fe3O4: dyes wastewater treatment and solving solid/liquid separation problem (Anfar Zakaria, ID- 249238)
12:20	Petroleum potential assesment of energetic oil shale material originated from central kongo basin of the democratic republic of the Congo (Bouamoud Rajaa, ID-249144)
12:30	Optical properties and thermal stability of the MoO3-CoO-P2O5 ternary system (Benzineb Meryem, ID-244370)
12:40	Strutural and magneti study of metal excess spinel: Cu1.30Cr1.30Zr0.70Se3.9 (Belakroum Karima, ID- 252175)
12:50	Influence of Manganese content on the structural and thermal properties of some manganese-phosphate glasses (Jerroudi Meryem, ID-241222)

Paper ID and related Oral Session

Friday, April 19, morning	
Parallel Session S6 (Room 2) (Chairman: Abdelhamid BENAZZOUZ)	
Time	Title, Authors and Paper ID
09:00	Invited Lecturer8: Fatiha Nothias Regenerative biomaterial matrices for traumatic spinal cord injury repair
09:30	Invited Lecturer9: Frédéric Gambino And Then There Was Light: Advanced Biophotonic Tools to study Brain Networks in vivo
10:00	Coffee Break and Poster session C
10:30	Invited Lecturer12: Marc Landry The revival of electron microscopy for biomedical research
11:00	Invited Lecturer13: Ibrahim Azeddine Biotechnological advances & applications: when reality is catching up with fictionion
11:30	Corrosion inhibition of E24 steel in acidic medium by composite coating with biodegradable charge (Elamrani Mouna, ID- 255591)
11:40	Investigation of the dosimetric parameters of a new cobalt 60 source used in brachytherapy with monte carlo n-particls extended code (MCNPX). (Elboukhari Said, ID- 245655)
11:50	Les effets du syndrome métabolique sur la cavité orale. (Mounia Elbouhairi, ID- 252861)
12:00	Etudes rhéologiques et physico-chimiques de nouvelles biocéramiques apatites nanocrystallines élaborées par consolidation à basse température. (Lakrat Mohammed, ID- 238935)
12:10	Advancement on mechanical and biological properties of magnesium substituted hydroxyapatite / carbon nanotubes modified surfactant nano-biocomposites (Meriam Bricha, ID- 242853)
12:20	Bioactivity and controlled drug delivery of mesoporous bioactive glass nanoparticles doped with magnesium. (Tabia Zakaria, ID-245433)
12:30	New bio-based concrete materials for energy efficiency in buildings (M'lahfi Basma, ID-246117)
12:40	L'adhésion bactérienne sur les surfaces dentaires et sur le titane (Imane Chafi, ID- 256134)
12:50	3D-printed microfluidic device for bio-sensing applications (Zekriti Mohssin, ID-257823)
13:00	Ambiguity domain characteristics of newborn EEG seizure signals (Brahim Jawad, ID-248060)

Paper ID and related Oral Session

Friday, April 19, afternoon	
Parallel Session S7 (Room 1) (Chairman: Samir Al Moussalami)	
Time	Title, Authors and Paper ID
15:00	Invited Lecturer14: Frédéric ROGER Additive manufacturing : scientific, economic and educational opportunities
15:30	Computational effective thermal conductivity of polyurethane foams (Hermama Chaïmaâ, ID-244933)
15:40	Various Synthesis of Nanostructured Vanadium dioxide VO ₂ : Properties, Advantages and Prospects for the Application of Energy Conversion (Derkaoui Issam, ID-246359)
15:50	Annealing temperature dependence of photovoltaic properties of solar cells containing Cu ₃ SnS ₄ thin films produced by spin coating (Welatta Fatimetou, ID- 242651)
16:00	Electrical and chemical behavior of silicone rubber under electrical aging (Belhiteche El Hadi, ID-250678)
16:10	Microstructural study of SiO ₂ aggregates and valorization (El Bahraoui Hassan, ID-255055)
16:20	Analaysis and characterization of phosphate sludge from Moroccan phosphate mines: Perspectives of valorization (Arroug Lamya, ID-254921)
16:30	Structural and microstructural characterization of ball-milled Ni ₅₀ Al ₅₀ powders and its kinetic parameters (Gherib Mebarka, ID- 245048)
16:40	Toward understanding the anticorrosive mechanism of cytosine derivatives: molecular structure, NBO, NLO, MEP and thermodynamic theoretical analyses. (Karima Sadik, ID-243301)
16:50	Spray synthesis and characterization of pure and Ba-doped Ni nanofilms (Ghamnia Mostefa, ID-248425)
17:00	Growth of metal thin film deposited on semiconductor substrate: insights from Molecular-Dynamics simulations (Youssef Ouhti, ID-250611)
17:10	Magnetic Demultiplexer Circuit with four-channel (Mouadili Abdelkader, ID- 245280)
17:20	Experimental and finite element analysis of the temperature effect on the plastic behavior of polymers during high pressure torsion process. (Drai Ahmed, ID-251139)
17:30	The Frustration Behavior On The Transverse Antiferromagnetic Ising Model. (Bouchra Lamarti, ID-246131)

Paper ID and related Oral Session

Friday, April 19, afternoon	
Parallel Session S8 (Room 2)	
(Chairman: Aziz ABOULMOUHAJER)	
Time	Title, Authors and Paper ID
15:00	Invited Lecturer15: Mabrouk BENHAMOU Pickering emulsions : From experiment to theory
15:30	Natural Convection Heat Transfer in an Open Cavity Provided with Multiple Discrete Heaters (Ouahas Mustapha, ID- 255449)
15:40	Study and investigation of silica surface (Oufakir Abdelhamid, ID- 249163)
15:50	Effect of the integration of hemp wool as an insulation material for the construction of the roof and external walls of a typical moroccan building. (Dlimi Maryam, ID- 255042)
16:00	Design of high-performance perovskite solar cells adapted to the tandem configuration (Laalioui Saida, ID- 245616)
16:10	Materiaux sans plomb pour le stockage de l'énergie électrique (El Bekkari Soukaina, ID- 255544)
16:20	Generation of generalized spiraling Bessel beams using Dark and Antidark Gaussian laser beams. (Yaalou Mohamed, ID- 250344)
16:30	Fp-lapw investigations of magnetic structure of REB2 compounds. (Zazoua Fatiha, ID- 252170)
16:40	Elastic and piezoelectric properties of boron-antimonide under high pressure: a DFPT study. (Bioud Nadhira, ID- 243512)
16:50	Ab-initio calculations of structural electronic and thermodynamic properties of PbSe1-xTex ternary alloys (Boukhris Nafissa, ID- 245595)
17:00	Transport and magnetotransport studies in CdAs2 semiconductor (Abdia Rachid, ID-250249)
17:10	Voigt Function for the Investigation of the Optical Properties of the A-Plane Oriented ZnO Epilayers Grown by Plasma-Assisted Molecular Beam Epitaxy. (Diouf Alioune Aidara, ID-255601)
17:20	Performance studies of an irreversible solar absorption refrigeration cycle (Boukhchana Yasmina, ID-249568)
17:30	Global indicators of the quality of the diffraction data (Ait Mouha Mbark, ID-245050)

Poster Sessions

Paper ID and related Poster Session

Wednesday, April 17, afternoon

Poster session A (Chair Ahmed ZAIM)

Panel	Title, Authors and Paper ID
01	Investigations of structural, chemical durability and electrical properties of phosphate glasses containing mixed Fe ₂ O ₃ and Li ₂ WO ₄ (Es-Soufi Hicham, ID- 243455)
02	Sodium zinc tris(dihydrogenphosphite)hydrate NaZn(H ₂ PO ₃) ₃ .H ₂ O (Akouibaa Mohamed, ID- 240512)
03	Oscillating magnetocaloric effect of a multiwalled nanotubes (Behloul Mariam, ID- 250498)
04	The photo catalytic hydrogen formation on the hetero-junction ag/nife ₂ o ₄ prepared by chemical route (Boukhemikhem Zahira, ID- 254613)
05	Non-covalent functionalization of carbon nanotubes by polyaniline molecules: Raman analysis (Jamal Chenouf, ID- 248771)
06	Effect of hexa-vacancy defects on a double wall carbon nanotube (Fergani Fatima, ID- 245498)
07	CFD simulations and experimental investigation of nucleate pool boiling of liquid nitrogen (Bouazaoui Kenza, ID- 244671)
08	Electronic, magnetic and electric proprieties of Cobalt-Iridium based double perovskite (Moussa Kibbou, ID- 249236)
09	Comparison between a simple smart facade and a smart double skin facade in terms of energy saving performances (Iken Omar, ID- 249865)
10	The thermal fluctuations on the charge density wave dynamics in a one-dimensional conductor in the presence of the free-carriers: Numerical result (E. zouadi, ID- 255347)
11	Anti-perovskite Mn ₃ (Sn, Zn)C : Potential candidates for an application in magnetic refrigeration (Benhouria Younes, ID- 244419)
12	Electronic and magnetic properties of two dimensional ferromagnetic semiconductor: Ab-initio calculations and Monte-Carlo simulation (Haman Zakaryae, ID- 249251)
13	Optimisation of prostate ballistic used in conformation radiotherapy with elekta synergy accelerator (Elboukhari Said, ID- 252245)
14	Preparation of Ni ²⁺ exchanged Zeolite NaY (FAU, Si/Al=2.56) for Efficient adsorption of phenol from Aqueous solutions nanotubes (Ba Mohammed Bouchra, ID- 260963)
15	A Monte Carlo study of Magneto-caloric and Magnetic properties of manganite derived oxide LS ₃₃ MO. (Omari Lhaj El Hachemi, ID- 245997)
16	Vibrational properties of linear carbon chains inside single-wall carbon nanotubes (Kensi Youssef, ID- 255624)
17	Exploration of electrical conductivity of Fe-doped foresterite synthesized by a new sol-gel method (El Asri Saloua, ID- 244405)
18	Adsorption of crystal violet from aqueous solution onto two agricultural waste residues: corncob and almond shell (Loulidi Ilyasse, ID- 255604)
19	Vibrational properties of black phosphorene: Raman study (O. Boutahir, ID- 245841)
20	Infrared-Active Modes in Finite and Infinite Hexagonal Boron Nitride. (Brahim Fakrach, ID-252117)
21	Hydrogen adsorption and storage of alkali metal ion-decorated boron phosphide with topological defects: A first-principles study (Benhouria Younes, ID- 244416)
22	Diagrammes de phase pour les fluides de Yukawa (Aisaam. Chourak, ID- 244416)

Paper ID and related Poster Session

Thursday, April 18, morning	
Poster session B (Chair Ali Oubelkacem)	
Panel	Title, Authors and Paper ID
01	Numerical assessment of a Phase Change Material: Sizing the PCM's envelope with fluxmetrics measures (Khattari Youness, ID- 245052)
02	Elaboration et caractérisation de trois variétés d'argiles de différentes régions de l'Algérie (Charef Mahmoud, ID- 244828)
03	Contribution to the study of mechanical characterization of self-compacting and high performance concrete using dune sand of Taghit (south-western Algeria) (Makani Abdelkadir, ID- 253564)
04	Theoretical study of AlN/ZnO/LiNbO3 structure for WLAW temperature sensor (Moutaouekkil Mohammed, ID- 245370)
05	Profilometric method used to characterize the mechanical properties of optical materials (Mohamed Bentoumi, ID- 242119)
06	Multiferroic properties in $\text{Bi}_{1-x}\text{Sr}_x\text{FeO}_3$ (Batouche Mouna, ID- 249307)
07	DFT investigations of the effect of intercalated atoms in layer graphene (O. Farkad, ID- 246558)
08	Magnetic, Magnetocaloric and Hysteresis behavior of Cd doped $\text{Nd}_{1-x}\text{Cd}_x\text{MnO}_3$ perovskite: Monte Carlo study (Amhoud Othmane, ID- 250524)
09	Effect of frequencies on the change of electrical Impedance in sand dunes of Ouargla region (Naamane Remita, ID- 243468)
10	Chirality dependence of electronic properties in single walled carbon nanotube (Takassa Takassa, ID- 245460)
11	Effect of mould temperature, grain refinement in Al-9Si alloy (Bilak Rida, ID- 253372)
12	Scale effect on wave propagation of double walled carbon nanotubes with initial axial loading (Leila Djazia Benmansour, ID- 247568)
13	Structural approach of the phosphate glass-ceramics belonging to the $50\text{Na}_2\text{O}-x\text{Nb}_2\text{O}_5-(50-x)\text{P}_2\text{O}_5$ system (Benyououssy Sanaâ, ID- 246391)
14	Geochemical modeling of water contamination in the pit lakes of the abandoned zeida mine (morocco) (El Alaoui Lamiae, ID- 253286)
15	Développement et caractérisation de supports tubulaires céramiques destinés à la filtration des eaux usées (Baya Sara, ID- 244476)
16	Ab-initio calculations of Structural, Electronic and Magnetic Properties of GdNi_5 and GdNi_3T_2 (T= Cr, Fe and Co) Compounds (Tenia Ahmed, ID- 246974)
17	Comportement rhéologique, calorimétrique et mécanique des mortiers adjuvantes (Didouche Zahia, ID- 251239)
18	Etude de premier principe du demi heusler ZrRhSb pour applications photovoltaïques (Azzi Saliha, ID- 246725)
19	Facile wet chemical synthesis of different shape-controlled copper oxide nanoparticles at low-temperature solution (Bouachma Soraya, ID- 251920)
20	Synthesis of a Cu-Si-MCM-41 from waste glass and the influence of the copper insertion method on the structure and the texture of this nanomaterial. (T. H. Alia, ID- 243671)
21	Sheath structure in dusty plasma with two temperature q-nonextensive electrons (Driouch Ismael, ID- 251084)
22	Aperçu sur les atouts des composites moléculaires de type pérovskite feuilletée et leurs propriétés photovoltaïques dans le domaine de conversion de l'énergie photonique en énergie électrique (Abdellatif Bahlagui, ID- 245018)

Paper ID and related Poster Session

Friday, April 19, morning	
Poster session C (Chair Mourad Boughrara)	
Panel	Title, Authors and Paper ID
01	Processing and dielectric properties of multiwall carbon nanotubes filled polymers (Mdarhri Ahmed, ID- 246270)
02	EM Radiation of Carbon Nanotubes Interconnects (Belhimer Lounas, ID- 244628)
03	Numerical study of the addition of H ₂ on the combustion of CH ₄ -H ₂ (Guessab Ahmed, ID- 246566)
04	Determination of free energies of point defects by molecular dynamic simulation: Case of Nickel. (Megchiche El Hocine, ID- 251910)
05	Chemin Al bond if the SmBa ₂ Cu ₃ Zn _x O _y (x=0 ans 1) system (Benredouane Rabab, ID- 250773)
06	Methods for recycling photovoltaic modules: a review. (A. B. Sabiha, ID- 255312)
07	Study of algerian sand from zemouri deposits (A. B. Sabiha, ID- 252637)
08	Structural stability of boron-antimonide under high pressure: a DFT study (Salah Daoud, ID- 243372)
09	Elaboration and characterization of ABX ₃ halogenated compounds: methylammonium lead iodide (CH ₃ NH ₃ PbI ₃). (Sossy Venceslas, ID- 249248)
10	Activated carbon from prickly pear seed cake: Optimization of preparation conditions using experimental design and its application in dyes Removal. (El Maguana Youssef, ID- 232222)
11	Li doped ZnO nanostructures: Growth, doping and physical properties (El Hichou Ahmed, ID- 242109)
12	Variable range hopping transport in insulating resistivity of doped InP. (Abdia Rachid, ID- 250657)
13	Study of the mechanical response of sandwich plates in FGM based on ceramic-metal (Salah Fethi, ID- 244276)
14	Photovoltaic electrical productivity measurements and its performance evaluation according to meteorological data in Nador, in north eastern Morocco. (Doudou Abdelkader, ID- 248057)
15	Comparative study between solid waste and bentonite clay for the treatment by adsorption of the organic matter contained in phosphoric acid (A. Islaam, ID- 245089)
16	Mechanical properties of titanium oxynitride thin films prepared for biomedical coatings (Ferroudja Lemdani, ID- 245401)
17	Optimization of heat treatment conditions of the weld joint of carbon steel SA516 GR 70 in shielded metal arc welding (SMAW) (Nait Salah Abdellah, ID- 248814)
18	A Monte Carlo study of Magneto-caloric and Magnetic properties of manganite derived oxide LS33MO. (Omari Lhaj El Hachemi, ID- 245997)
19	Sr ₂ FeMoO ₆ nanowires and carbon monoxide energy interaction (Carvajal-Quiroz Eliel, ID- 245772)
20	Effect of free carrier concentration of the one-dimensional incommensurate charge density wave dynamics (Essajai Rida, ID- 247916)
21	Quantitative Analysis And Microstructural Study Of Commercial Clinkers Using Rietveld Analysis (Dounia Tlamsamani, ID-280000)

Paper ID and related Poster Session

Friday, April 19, Afternoon

Poster session D (Chair Soukaina EL-MOUDNY)

Panel	Title, Authors and Paper ID
01	Magnetocaloric effects of mixed ternary nanoparticle (Zaim Malika, ID- 250586)
02	Magnetocaloric effects of a binary alloy multilayer graphene (Zaim Malika, ID- 250581)
03	Quantum monte carlo simulation study for hysteresis properties of a ferromagnetic thin film (Zaim Noura, ID- 250435)
04	Hysteresis behavior of a nanographene sandwich -like structure (Zaim Noura, ID- 250425)
05	Magnetic properties of cubic (1, 3/2) nanoparticles with core / shell morphology (Ouahdani Abdellatif, ID- 247356)
06	Structural, electronic and optical properties of deltamethrin (C ₂₂ H ₁₉ BR ₂ NO ₃) using density functional method and IR spectrum (Boutasta Amel, ID- 245738)
07	Retrait au jeune âge des BFUP a base de sable de dune de l'erg occidental de l'algerie renfermant de la fumée de silice ou du metakaolin (Tafraoui Ahmed, ID- 254924)
08	Temperature's impact on bitumen ageing during storage (Tahri Amina, ID- 245435)
09	Optical and spectroscopic properties of er ³⁺ doped oxy-fluoro tellurite glasses: effect of BaF ₂ and BaO (Amrouch Samah, ID- 241225)
10	Caractérisations structurales des nanocomposites à Matrice (Amidon thermoplastique /Polystyrène choc) (Nour Aouadi, ID- 250639)
11	Synthesis and characterization of nano-structured Li doped NiO thin film grown by spray pyrolysis technique for optoelectronic applications (Benhamida Soufiane, ID- 245005)
12	Effet de la vitesse de refroidissement et l'ajout de l'affinant sur la microstructure des alliages Al-Si (Bilak Rida, ID- 242600)
13	The frequency limits On GaAs-MESFET Device submicron (L=0.3um) (Djouder Mohamed, ID- 245398)
14	Experimental and theoretical studies of diethylammonium hexachloroplumbate [(C ₂ H ₅) ₂ NH ₂] ₂ PbCl ₆ (El-Adel Leila, ID- 245136)
15	Comparisons of Raman and IR spectra of quercetin anhydrate and dihydrate in order to use their antioxidant effects. (El Hadri Mustapha, ID- 248910)
16	Caractérisation d'un Bronze Cu10%Sn Fritté sous pression (Keraghel Fatiha, ID- 253584)
17	Etat de l'art de la régénération des tissus osseux (Haddani Fatima, ID- 250655)
18	Study of the mechanical response of sandwich plates in FGM based on ceramic-metal (Salah Fethi, ID- 244276)
19	Photodegradation of 2, 4, 5-trichlorophenoxyacetic acid in aqueous medium by zn ²⁺ /bip composite catalyst. (Naciri Yassine, ID- 263920)
20	Profilometric method used to characterize the mechanical properties of optical materials (Bentoumi Mohamed, ID- 255451)
21	Study the mechanical behavior of brittle mineral glasses by multi-scale indentation (Bentoumi Mohamed, ID- 255448)
22	A Monte Carlo study of Magneto-caloric and Magnetic properties of manganite derived oxide LS ₃₃ MO. (Chakir Sanae, ID- 264042)
23	Enhancement of localized surface plasmon resonances of a silver nanoparticle array upon the presence of graphene coatings: LSPR biosensor. (El Barghouti Mohamed, ID- 244447)