

*First National Conference on **M**aterials **S**ciences:
From **R**esearch to **T**eaching¹*

MSRT'2020

Oran (Algeria)

23-24 February 2021



TIMETABLE

Overview

The First National Conference on Materials Sciences: From Research to Teaching “MSRT2020” will be organized by the exact sciences department, Higher School of Education, Oran on 23-24th, February 2021. This conference has two shutters: Research in materials sciences and the exploitation of research results to enhance their teaching.

The “MSRT2020” initiative will provide a common platform for the researchers from different disciplines (physics, chemistry, mathematics, computing science,...) to share their recent works covering interdisciplinary topics, which show the applicability of these disciplines to solve problems in materials sciences. Therefore, the employment of computational methods and experimental techniques in the materials sciences field allows discovering new materials, investigating and developing the existing one. The advance in materials sciences leads and requires the evolution of teaching methods. Updating the teaching program and adopting of efficient and effective practice in training will provide a better understanding of basic concepts in materials sciences. So, this scientific event aims to bring together researchers in materials sciences and didactics to discuss the exploitation of research results to improve the teaching / learning practices in theses sciences at higher education.

Topics:

- Materials elaboration and characterization.
- Nanotechnology and Nano biotechnology.
- Modeling, analysis and computations in materials sciences.
- Impact pedagogies in materials sciences teaching.
- Innovative strategies for materials sciences education.
- Physics and chemistry didactics.
- Mathematics didactics.
- Computing education.

Tuesday, February 23, 2021 « Morning »

08h30	Welcome and Registration
09h00	
09h00	Opening ceremony
09h30	Dr. Rahiel Djelloul - Director of ENS Oran - Pr. Hamou Mohamed - Rector of Univ.Oran 1- Pr. Sib Jamal Dine - Director of ESG2E Oran - Dr. Larbi Fadila - Conference Chair woman -
09h30	Plenary conference
10h15	Pr. Sib Jamal Dine <i>“Le silicium amorphe hydrogéné du photovoltaïque au biocapteur”</i>
10h15	- ESG2E Oran -
10h15	Chair: Pr. Kail Fatiha
10h45	- ISTA Oran -
10h15	Coffee break
10h45	Plenary conference
11h00	Pr. Baghdad Rachid <i>« Bismuth doping effect on structural and optical properties of nanocrystalline SnO₂ thin films grown by ultrasonic spray pyrolysis method “From the idea to the application” »</i>
11h00	- Univ. Tiaret -
11h30	Chair: Pr. Kail Fatiha
12h00	- ISTA Oran -
11h30	Plenary conference
12h00	Pr. Oldache Mustapha <i>« Vers un enseignement des sciences basé sur l'épistémologie et l'histoire des sciences »</i>
12h00	- ENS Kouba -

Chair: Pr. Kaid Fatiha
- ENS Oran -

12h00

Lunch

13h00

Tuesday, February 23, 2021 « Afternoon »

Workshop A

TIME	SPEAKER	TITLE	CHAIR
13h00	(02) Kaouka Alaeddine - ENS Laghouat -	Performance of titanium alloy Ti-6Al-4V-0.5Nb at high temperatures and its mechanical characterization	Pr. Baghdad Rachid
13h20			
13h20	(58) Zoudmi Sahraoui Fouzia - Univ.Oran 1-	Effect of the deposition pressure and substrate temperature on the structural and optical properties of radiofrequency magnetron sputtered hydrogenated silicon films	
13h40			
13h40	(56) Boussaada SalahEddine - Univ. Mascara -	Study of the optical and morphological electrical properties of MoO ₃ films for adjustment of the anode / buffer layer interface (ABL) in solar cells	
14h00			
14h00	(61) FekkarNemliche Nadia - ENS Mostaganem -	Physicochemical characterization of hydrophobic nanoporous silica materials	Pr. El-Miloudi Khaled
14h20			
14h20	(15) Sened Nassiba - Univ. Chlef -	Thermal properties of Nanocomposites based on polycaprolactone (PCL) and Zinc Oxide (ZnO)	
14h40			
14h40	(14) Dehraoui Fatiha - AinTemouchent Univ. Center -	Synthesis, characterization, and adsorption properties of Pani	
15h00			
15h00	(01) Dehar Mokhtaria - ENS Oran -	Synthèse, caractérisation et hydrolyse de polymères gels supports de principes actifs	
15h20			

Workshop B			
TIME	SPEAKER	TITLE	CHAIR
13h00 13h20	(65) BenmansourAmel - Univ Tlemcen -	Surface critical behavior of thin Ashkin Teller films at the ‘special point’	Pr. Belfedal Abdelkader
13h20 13h40	(73) Boubabouri Benaissa - ENP. Oran -	Analyse numérique d’un écoulement compressible autour d’un profil aérodynamique	
13h40 14h00	(43) Belabbas Mawloud - Univ. Saida -	CHSH undesirable Auger effect and Optoelectronic properties of the infrared materials TlxB1-xN for photocatalyst applications: A DFT Study	
14h00 14h 20	(60) Chenouga Ismahane - Univ. El Taref -	Rietveld Simulation as a Method of Further Developing a structural and microstructural properties of the mechanical alloyed Fe-Cu-Sn Nanomaterials	
14h20 14h40	(28) Kettache Meriem - Ain Temouchent Univ. Center -	New Fe-Cr Based Alloy, from Elaboration to Rietveld Simulation of Structural and Microstructural Properties	
14h40 15h00	(46) Demmouche Kamel - Ain Temouchent Univ. Center -	Anisotropic and plane-selective study of carbon interstitial in SiC: a theoretical study	Dr. Iles Nadia
15h00 15h20	(45) Belkofski Reguia - Univ. Bejaia –	Effet des vibrations du point zéro sur les transitions de phases dans le CaCO3 sous pression	
15h20 15h40	(08) Hamada Khelifa - Univ. Saida –	The use of ferromagnetic half-metals in spintronics	
15h40 16h00	Coffee break		

1st Posters Session

TIME	PARTICIPANT \ TITLE	CHAIR	
16h00	(02) Lellouche Saliha - Univ. Chlef -	Characterization of the microstructure of a Al-Cu thin film by differential scanning calorimetry (DSC)	Pr. Sib Jamal Dine Dr. Heireche Mohamed
	(06) Lakel Abdelghani - Univ. Biskra -	Preparation and characterization of ZnO thin films doped with aluminum and Iron by ultrasonic spray	
	(15) Lakel Abdelghani - Univ. Biskra -	Influence of expanded graphite on physical properties of fluoroplastics	
	(10) Ziani Faten - Univ. Tebessa -	Study of Doping and Co-doping with Al and Sb TinOxide-based Thin-Film	
	(34) Bendjeroudib Chafia - Univ. Tebessa -	The effect of the substrate type on the physical properties of the thin layer Fe / Ag	
	(48) Djoumi Siham - Univ. Oran 1 -	Analysis of Silicon Nanowires Grown by PECVD with the VLS Mechanism	
17h 00	(67) Ben hamdoune Sabah - Univ. Laghouat -	Ab initio investigation of the structural and optoelectronic properties of the hexagonal gallium iodate Ga(IO3)3	Dr. Bourahla Saïda Dr. Larbi Fadila
	(42) Nacef Ahmed - Univ. Tiaret -	Structural, Electronic and Optical properties of AgBO2 delafossite an ab-initio study	
	(66) Saadaoui Fatiha - Univ. Saïda -	Structural, elastic, and electronic properties of InNNi3 and InCNi3 antiperovskites	
	(35) Ouadhah Ismail - Univ. Sidi Belabes -	Study of the structural, mechanical and thermodynamic properties of the new MAX phase compound Ti3AlC2	
	(27) Beloufa Nabil - ENP. Oran -	Contribution à l'étude des propriétés des alliages ScGaN	
	(26) Benazzouzi Aïcha - Relizane Univ. Center -	First principles study of structural and electronic, properties of AgBr	
	(23) Rached Azzouz Ahmed - Univ. Chlef -	First-principle study of magnetic, mechanical and thermodynamic properties of MAX Phase Fe2AlC	
	(27) Beloufa Nabil - ENP Oran -	Contribution à l'étude des propriétés des alliages ScGaN.	
	(20) Kherfia Belabed - Univ. Mostaghanem -	theoretical and spectral study of toxic compounds	
	(25) Hamli Meryem - AinTemouchent Univ. Center -	Investigation théorique de nouveaux composés demi-Heusler MRhSb(M = Nb et Ta)	
	(38) Bentahar Yacine - Univ. Saïda -	Modélisation et simulation des propriétés thermodynamique des alliages Full-Heusler de type Rh2YIn(Y=Sm, Gd, Tb) pour la conversion Magnéto-calorique	
(11) Khelfoum Abdel Hamid - Univ. Blida 1 -	Studies of compression modulus B (bulk modulus) of graphene and similar materials		
17h00	Coffee Break		
17h15	Closing of the conference first day		

Wednesday, February 24, 2021 « Morning »

08h30	<p>Plenary conference</p> <p>Pr. Guendouz Naima</p> <p>« <i>L'enseignement des Sciences et exigences de l'enseignant du 21^{ème} siècle</i> »</p>
09h15	<p>- ENS Oran -</p> <p>Chair: Dr. Labeled Zohra</p>
09h15	<p>Plenary conference</p> <p>Pr. Belkredim Fatima Zohra</p> <p>« <i>Raisonnement et Intelligence artificielle</i> »</p>
10h00	<p>- Univ. Chlef -</p> <p>Chair: Dr. Boumedien Malika</p>
10h00	<p>Coffee break</p>
10h30	

Workshop C

TIME	SPEAKER	TITLE	CHAIR
10h30	<p>(49) Bishop Elizabeth - Univ. Oran 2 -</p>	<p>History of Materials Sciences: From Research to Teaching</p>	Dr. Labeled Zohra
10h50	<p>(31) Haouatis Djamel - Univ. Médéa -</p>	<p>Place centrale du modèle et de la modélisation dans l'enseignement de la Physique</p>	Dr. Boumedien Malika
11h10	<p>(72) Kies Karima - UST Oran -</p>	<p>Les pratiques modernes d'évaluation : Etude de cas</p>	
11h30	<p>(74) Boumedien Malika - USTHB Algiers -</p>	<p>Experimental Mathematics</p>	Dr. Dekhici Latifa
11h50	<p>(32) Abdesselem</p>	<p>Difficultés d'apprentissage des probabilités</p>	

12h10	Nawel - Univ. Laghouat -	en Algérie (Laghouat).	
12h10 12h30	(75) Khansous Ghania - ENS Oran -	Simulation tool SUMO for Vehicular Ad hoc Network	
12h30	Lunch		
13h00			

Wednesday, February 24, 2021 « Afternoon »

<i>2nd Posters Session</i>			
TIME	PARTICIPANT \ TITLE		CHAIR
13h00	(12) Bensafi Toufik - Univ. Mascara -	Synthesis, Characterization of New Substituted 4-Thiazolidinone for photovoltaic applications.	Dr. Harrats Charef Pr. El-Miloudi Khaled
	(14) Tabti Hadja Alia - Univ. Saïda -	Caractérisation des propriétés structurales et texturales d'une argile anionique,	
	(50) Saad Fatima - Univ. Oran 1 -	Elaboration and characterization of a petrochemical material by different spectroscopic techniques	
	(52) Chaouch Nawel - Univ. Chlef -	Synthesis , characterization of copper and cadmium complex	
	(54) Dib Nihel - Univ. Oran 1 -	Application à la rétention du plomb(II) par les hydrogels de poly(AMA-co-NVP-re-BAA)	
14h 10	(55) Hadj kaddour Nadia - Univ. Oran 1 -	Utilisation d'une méthode optique la spectroscopie UV-Visible pour déterminer le seuil de floculation d'une macromolécule	Dr. Bourahla Saïda Dr. Iles Nadia
	(59) Abdelmalek Fatiha - Univ. Tlemcen -	Etude des propriétés physiques et rhéologiques des composites biodégradables de poly butylène succinate PBS / Fibre d'Alfa	
	(62) Khemissi Aïcha - Univ. Chlef -	Modified transfer matrix method for electronic transmission properties of armchair Carbone nanotubes	
	(63) Bechokra Lina Linda - USTHB Algiers -	Monte carlo simulation study of functionalized coiled carbon nanotubes as emerging nanovectors for the delivery of quercetin drug.	
	(24) Baba Ahmed Nassim - Univ. Tlemcen -	Modélisation des propriétés optiques et électriques des cellules solaires.	
	(39) Rahal Wassila Leïla - Univ. Mostaganem -	Etude comparative des performances des cellules solaires à hétérojonctions de silicium	
	(41) Rahal Wassila Leïla	Simulation d'une cellule solaire CZTS à	

	- Univ. Mostaganem -	haut rendement avec réduction maximale du Sulfure de Cadmium utilisé comme couche tampon	
	(44) Tekouk Mokhtar - Univ. Mostaganem -	Optimisation par simulation d'une cellule solaire à couches minces ZnO/CdS/CZTS/MoS2	
	(40) Rached Djaaffar - UST Oran -	Etude de l'effet de la densité de défauts du silicium cristallin sur la caractéristique courant-tension des cellules HIT de type n.	
14h10	Coffee break		
14h30			
14h30	Closing ceremony Symposium recommendations		
15h30			

Organizing committee

Dr. M. Heireche , Dr. M. Berrahal, Dr. K. Yahiaoui , Mrs. S. Makouf, Dr. F.Z. Benkaddour , Mr S. Hebri, Dr. G. Khensous , Dr K. Labed, Dr. M. Dahar.

Scientific committee

Pr. F. Kaid (ENS Oran), Pr. N. Benamar (ENS Oran), Dr. K. Yahiaoui (ENS Oran), Dr. Z. Labed (ENS Oran), Pr. H.Y. Madani (ENPO. Oran), Pr. J.D. Sib (ESG2E. Oran), Pr. F.Kail (ISTA. Oran), Dr. N. Iles (ISTA. Oran), Dr. L. Dekhici (USTMB. Oran), Pr. M. Oldache (ENS Kouba), Pr. A. Belfedal (Univ.Mascara), Pr. R. Baghdad (Univ.Tiaret), Pr. H. Lidjici (Univ Laghouat), Pr. K. El Miloudi (Univ. Chlef), Dr. S. Bourahla (Univ. Chlef), Pr F.Z. Belkredim (Univ. Chlef), Dr. M. Boumedien (USTHB Algiers), Dr. C. Harrats (Univ. Mostaganem).