AICME

LASEM

The 5th International Conference on Mechanics and Energy

ICME'2019 Conference Program

December 19-21, 2019, Monastir, TUNISIA

www.icme.aicme.net

ICME' 2019 Conference Program

Time	Thursday/ December 19, 2019	Friday/ December 20, 2019	Saturday/ December 21, 2019
08:00	Welcome and registration		
08:30		Keynote 7 / Keynote 8 Keynote 9	Keynote 12 / Keynote 13 / Keynote 14
10:00	Official Opening Ceremony		Oral session 5
10:15	Keynote 1	Coffee break	
10:30			
10:45	Coffee break	Oral session 3	
10:50			
11:20	Keynote 2 / Keynote 3		Coffee break
12:00			
			Closing Ceremony / Attestation Distribution
12:30	Lunch	Lunch	
14:00	Keynote 4 / Keynote 5 Keynote 6	Keynote 10 / Keynote 11	
14:30			
15:30	Industrial Workshop	Oral session 4	
15:45	Oral session 1		
16:00		Poster session	
16:40	Coffee break	Social visit	
17:15	Oral session 2		
17 :30			
19:00	Dinner	Dinner	

WELCOME TO ICME'2019

REGISTRATION

08H00-10H00

OFFICIAL OPENING CEREMONY

10H00-10H15

(Room 1)

Keynote 1

10H15-10H50

La propriété intellectuelle et la demande de brevet dans le droit tunisien

Direction générale de valorization de la recherche. Ministère de l'Enseignement Supérieur et de la Recherche Scientifique

Speaker: Mme. Neila Ben Slima **Tunisia**

COFFEE BREAK

10H50-11H20

(Room 1)

Keynote 2

11H20-11H55

Mechanical behaviour of structures and materials having a negative Poisson's ratio (Auxetic)

Laboratoire de Mécanique Appliquée des appliquée des nouveaux matériaux (LMANM) BP. 401 Université 8 Mai 1945 Guelma 24000 Algeria

Speaker: Pr. Abderrezak Bezazi **Algeria**

Keynote 3

11H55-12H30

Fiber ratio and alkali treatment effects on jute/expoxy biocomposite materials under tensile loading

Department of Mechanical Engineering, State University of Amazonas, Manaus, AM, Brazil

Speaker: Pr. Gilberto García del Pino **Brazil**

LUNCH TIME

12H30-14H00

(Room 1)

Keynote 4

14H00-14H30

Study of Effect of Radiative Heat Transfer on the Microclimate under a Tunnel Greenhouse and Nutrient Solution Flows in Growing Media

Laboratoire de recherche de Physique Energétique Appliquée (LPEA), Faculté des Sciences de la matière, Université de Batna1 Route de Biskra, 05000, Batna, Algérie

Speaker: Pr. Saadi Bougoul **Algeria**

Keynote 5

14H30-14H45

Application of instrumented sphere in assessing bedload transport dynamics for near threshold of motion flow conditions: a frequency perspective

Water Engineering Laboratory, James Watt School of Engineering, University of Glasgow, Glasgow G12 8LT, UK.

Speaker: Pr. Manousos Valyrakis **UK**

Keynote 6

14H45-15H15

Prediction of fatigue damage and fatigue life under random loading

LPQ3M Laboratory, Mechanical Engineering Department, Uiversity of M.S of Mascara, B.P305, Mascara, Algeria

Speaker: Pr. Abdelkrim Aid **Algeria**

(Room 1)

Industrial – workshop

15H15-15H45

Photovoltaic system progress

SATES society

Speaker: Pr. Mohamed Halouani **Tunisia**

ORAL SESSION N°1

15H45-16H45

SS _ Mechanical and physical characterization/ Mechanical engineering technology

Chair: Pr. A. Bezazi
(Room 1)

1. ICME2019-039 : Mechanical Behavior Study of Mechanical Brushing of MIG Welded AISI 316L SS Grades :Using Taguchi Orthogonal Design
Hichem Guizani, Brahim Tlili, Abdelbacet Oueslati, Moez Chafra

2. ICME2019-005 : 3D finite element modeling of thermal behavior of HDPE under HPT process.
Ahmed DRAI, Benaoumeur AOUR, Abdelhak BENAOUM, Ahmed Amine DAIKH

3. ICME2019-110 : Analytical study and numerical modelling of the stress?s concentration in the perforated plates in composite materials
Amine Harkati , El-Haddi Harkati, Aberrezak Bezazi, Fabrizio Scarpa , Baker Wael Abuteir

4. ICME2019-019 : Finishing and quality of mechanically brushed 316L stainless steel welded joints using MIG process: Hardness modeling by L9 TAGUCHI design
Hichem Guizani, Brahim TLILI , Abdelbacet Oueslati, Moez Chafra

SS _ Mechanical engineering technology

Chair: Pr. El Hassan Boudaia
(Room 2)

1. ICME2019-119 : Ab initio characterisation of Mechanical properties of Cr1-xAlxN
Said LAKEL, Kenza ALMI

2. ICME2019-127 : Experimental analysis of concrete elements degradation under mechano-hygrothermal effect.
Hassani Nacera, Dehmous Hocine

3. ICME2019-056 : Mixed mode fracture mechanics behavior of notched Brazilian disk based in strain energy density approach
Moussaoui Mustafa , Tahiri Antar, Hachi Brahim Khalil

4. ICME2019-157 : New MATLAB program of PV simulation based on Lab-experiment study of an aero-voltaic collector
Ismail BAKLOUTI, Zied DRISS

SS _ Mechanical and physical characterization

Chair: Pr. M. Valyrakis
(Room 3)

1. ICME2019-025 : A cracked cruciform specimen in aluminum alloy 6082-t6 subjected to different biaxial loading conditions
khelil foudil, Aid Abdelkrim
2. ICME2019-034 : Finite Element Analysis of O-Ring Performance Reinforced by a Metallic Core
El Mehdi EL Bahloul , Mohammed Diany, Hicham Aissaoui , Elhassan Boudaia , Mustapha Mabrouki
3. ICME2019-030 : CFRP strengthening effect on cyclic characteristics of slender reinforced concrete columns
Youcef SI YOUCEF
4. ICME2019-169 : Uncertainty anlysis of a wind turbine tower in flexible base using Generalised Polynomial Chaos.
Abderraouf Kamel , Majdi Yangui , Abdelkhalak El Hami , Mounir Ben Jdidia , Lotfi Hammami , Mohamed Haddar

COFFEE BREAK

16H45-17H15

ORAL SESSION N° 2

17H15-19H00

SS _ Heat and mass transfer / Renewable energy

Chair: Pr. S. Bougoul
(Room 1)

1. ICME2019-003 : Numerical Simulation of Combined surface radiation and Free Convection in Vertical conical Cavity
Mohamed Amine Medebber, Belkacem OULD SAID , Noureddine Retiel
2. ICME2019-017 : Numerical study of natural convection in conical annular space with discrete heat sources
Belkacem OULD SAID, Mohamed Amine Medebber
3. ICME2019-051 : CFD study of an optimized sulphur boiler furnace with an added circular baffle
Souhir Echi, Abdallah Bouabidi, Raffaella Gerboni, Zied Driss
4. ICME2019-138 : Numerical study of laminar natural convection of power-law fluid in a differentially heated inclined square cavity
Horimek Abderrahmane, Ait-Messaoudene Noureddine, Noureddine Brahim, Ben khchibaAbd El-Fatah El-Hadj
5. ICME2019-154 : Roof height effect on the indoor thermal comfort
Hasna Abid, Ismail Baklouti, Zied Driss, Jamel Bessrour
6. ICME2019-165 : Modeling of thermal behaviour of a low porosity ceramic
Wiem Nasri, Kyu-Yeon Lee, Zied Driss, Hyung-Ho Park
7. ICME2019-151 : Analytical model of solar chimney power plant
Haythem Nasraoui, Zied Driss, Hedi Kchaou

SS _ Materials and industrials technologies

Chair: Pr. A. Aid
(Room 2)

1. ICME2019-050 : Automation and Supervision of the Industrial Processes of Single Screw Extruder
Samia Latreche, Houssem Eddine Amara, Mabrouk Khemliche
2. ICME2019-007 : An Analytical Solution for Bending and Free Vibration Responses of Functionally Graded Beams with Porosities
Lazreg Hadji, Fabrice Bernard, Nafissa Zouatnia, Amar Kassoul
3. ICME2019-026 : The effects of open hole in CFRP laminate on the mechanical behavior
Adel Abidi, Sahbi Ben Salem, Abderrezak BEZAZI , Haithem BOUMEDIRI
4. ICME2019-101 : Hygrothermal Stresses Analysis of Thick Composite Plates Using High Order Theory Under a Fick Concentration Distribution
BILLE LBOUKERT, AMINA BENKHEDDA, MOHAMED KHODJET KESBA, EL ABBESADDA BEDIA
5. ICME2019-183 : Theoretical investigation of structural and electronic of LaPtBi Heusler compound.
MOKHTARI Djihad, HAMRIT Fareh

DINNER TIME

19H00

(Room 1)

Keynote 7

08H30-09H00

Numerical investigation of effects of pitch angle on the performance of three straight cambers bladed

Unit of research:Mechanical Modeling,Energy and Materials, National School of Engineers of Gabes (ENIG), University of Gabes (US), Avenue Omar Ibn El Khattab, Zrig Gabes 6029, TUNISIA

Speaker: Pr. Mouldi Chrigui **Tunisia**

Keynote 8

09H00-09H30

Beveled Leading Edges Effect on Aerodynamics of a Thin Delta Wing

Department of Mechanical Engineering - Mouloud Mammeri University, Tizi-Ouzou, Algeria

Speaker: Pr. Iddir Boumrar **Algeria**

Keynote 9

09H30-10H00

Meshless Local Petrov-Galerkin Method Analysis of Stress Concentration

, Laboratory of Industrial Engineering, Faculty of Science and Technology, Beni Mellal, Morocco

Speaker: Pr. El Hassan Boudaia **Morocco**

COFFEE BREAK

10H00-10H30

ORAL SESSION N° 3

10H30-12H30

SS _ Modeling and optimization of energy systems

Chair: Pr. M. Chrigui
(Room 1)

1. ICME2019-033 : Fuzzy Logic and Vector Controls of the Permanent Magnet Synchronous Machine
Riyadh Rouabhi , Hani Benguesmia, Rachid Abdessemed, Abdelghafour Herizi , Boudia Moustafa
2. ICME2019-035 : PI Controller Optimization Based on PSO and BBO for Quadruple Tank System
Ali Akka, Oussama Moussa, Hani Benguesmia
3. ICME2019-041 : Dual Space Vector Modulation based on Indirect Field Oriented Control for a Five-Level Inverter: Application to six-phase induction machines
Saad Khadar, Hani Benguesmia
4. ICME2019-042 : Load Torque Estimation in Sensorless Speed Control of Dual Star Induction Machine Using Only Voltage and Current Measurements
Saad Khadar, Hani Benguesmia
5. ICME2019-064 : Modeling and Simulation of the Evolution of Thermal and Hydraulic Energy in a Boiler Using Bond Graph Approach
Samia Latreche, Houssem EddineAmara, Mabrouk Khemliche
6. ICME2019-153 : Numerical simulation of a Wind Savonius turbine
Ahmed Ayadi, Mabrouk Mosbahi, Zied Driss
7. ICME2019-170 : Study of the rotating area effect on the aerodynamic structure around a NACA2415 airfoil wind turbine
Sobhi Frikha, Zied Driss, Walid Barhoumi, Tarek Chelbi, Mohamed Salah Abid

SS _ Fluid & structure investigations

Chair: Pr. Iddir Boumrar
(Room 2)

1. ICME2019-046 : Performance evaluation of the natural-convection of a solar air-heater with a plate absorber
Badis Bakri, Hani Benguesmia, Ahmed Ketata, Haythem Nasraoui, Zied Driss
2. ICME2019-198 : MI investigation of turbulent flow inside squared vessel at different axial positions
Ammar Mariem, Ben amira Bilel, Driss Zied, Abid Mohamed Salah
3. ICME2019-201 : Steady air flow Simulations of internal combustion engine using swirl system
Amal Gargouri, Mohamed Ali Jemni, Hedi Kchaou
4. ICME2019-172 : Experimental study on performance of internal combustion engine fueled with Diesel-biodiesel mixture
Olfa Moussa , Mariem Harabi , Ali Damak, Dorra Driss , Mohamed Bouaziz , Zied Driss

SS _ Applied Mechanical and characterization

Chair: Pr. B. Nacib
(Room 3)

1. ICME2019-094 : Analytical solution for interfacial stresses in reinforced concrete beams strengthened with sandwich FGM plate
Hassaine Daouadji Tahar, Rabahi Abderezak, Benferhat Rabia, Abbes Boussad, Abbes Fazily
2. ICME2019-132 : Effect of date palm fiber content on the morphological, mechanical and water absorption properties of polyvinyl chloride composites
Boussehel Hamida, Belhi Guerrira, Belghar Noureddine
3. ICME2019-196 : Investigation and identification of damage mechanisms of recycled flax/Elium composite using acoustic emission
Sami Allagui, Abderrahim EL MAHI, Jean-luc REBIERE, Anas BOUGUECHA, Moez Beyaoui, Mohamed Haddar
4. ICME2019-067 : Study of the Transformation of metallographic and mechanical properties resulting from spot welding of metal 430 AISI ferritic stailess steel
Mourad Mazzouz, Omar Allaoui, Abdelghani Belhocine, Mokhtar Djendel
5. ICME2019-069 : The influence of heat treatment of carbon steels after a deposit of chromium
Abdelghani Belhocine, Omar Allaoui, Mourad Maazouz, Hani Benguesmia
6. ICME2019-079 : Mechanical comparison and statistical study of different material used in industry
Hanaa OUAOMAR, Nadia Mouhib, MOHAMED Lahlou, Rajaa ghanim, Mohamed Barakat
7. ICME2019-066 : Improvement of the steel surface by APS plasma coatings
Fareh Hamrit, Hani Ben guesmia, Badis Bakri
8. ICME2019-125 : Effect of high temperature on the stiffness properties of cracked composite laminates with asymmetrical environmental conditions
Mohamed khodjet kesba, Amina Benkhedda, El abbes Adda bedia, Billel Boukert

LUNCH TIME

12H15-14H30

(Room 1)

Keynote 10

14H00-14H30

Thermomechanical behavior analysis of shape memory alloys and estimation of their strain energy absorption, application to biomechanical technologies

Laboratory of Mechanics (LabMec), Mechanical engineering Department, University of Freres Mentouri Constantine 1(UFMC1), Campus Chab Ersas, Road of Ain El Bey,25000 Constantine, ALGERIA

Speaker: Pr. Brahim Necib **Algeria**

Keynote 11

14H30-15H00

Water distribution systems simulation, design and operation: the algerian challenge

Département de Génie des Procédés, Laboratoire des Silicates, Polymères et Nanomatériaux (LSPN), Université 8 Mai 1945 Guelma, B.P. 401, Guelma, Algeria

Speaker: Pr. Lahiouel Yasmina **Algeria**

ORAL SESSION N° 4

15H00-16H00

SS _ Computational methods in mechanics

Chair: Pr. Y. Lahiouel

(Room 1)

1. ICME2019-027 : Numerical evaluation of the stress intensity factor, the T-stress and the biaxiality parameter.
Khelil Foudil, Fatima Benaoum, Ali Benhamena , Abdelkrim Aid
2. ICME2019-149 : Effect of meshing indoor a room containing a manikin and a computer
Ifa Sondes, Driss Zied
3. ICME2019-168 : Experimental and numerical study of twisted Savonius hydrokinetic turbine
Mabrouk Mosbahi , Ahmed Ayadi , Zied Driss , Tullio Tucciarelli
4. ICME2019-171 : Numerical analysis of different piston bowl configuration effect at intake stroke
Olfa Moussa, Ahmed Ketata, Zied Driss

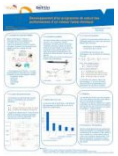
SS _ Experimental and numerical techniques

Chair: Pr. A. Horimek

(Room 2)

1. ICME2019-075 : Influence of dairy content on moisture evolution in binary cements
BOUALLE G Saida, HAMRIT Fareh
2. ICME2019-128 : Desalination of seawater using waste heat from condenser of air conditioning
Sami Missaoui, Romdhane Ben Slama, Béchir Béchir
3. ICME2019-195 : The effect of the substrate grade on the microstructural and the tribological behaviour of Ti-Al coatings obtained by pack cementation
Ghouss Haoues, Boudebane Said
4. ICME2019-205 : Performance Combined Darrieus-Savonius Rotor
MABROUKI Ibrahim, MOSBAHI Mabrouk, DRISS Zied, ABID Mohamed salah

POSTER SESSION



16H00-16H30

Social visit

16H30-18H30

DINNER
18H30-21H00

(Room 1)

Keynote 12

08H30-09H00

Unsteady state of the turbulent flow around a water Savonuis rotor in a hydrodynamic test bench

Laboratory of Electro-Mechanic Systems (LASEM), National School of Engineers of Sfax (ENIS), University of Sfax (US), B.P. 1173, Road Soukra km 3.5, 3038 Sfax, TUNISIA

Speaker: Pr. Zied Driss **Tunisia**

Keynote 13

09H00-09H30

Simulation of the turbulent diffusion flames caused by the aircraft crash using the FDS code

Laboratory of aeronautical sciences, institute of aeronautics and space studies, University of Blida1, Algeria

Speaker: Pr. Rachid Renane **Algeria**

Keynote 14

09H30-10H00

Cooling by natural convection of a hot source placed at the bottom of a square cavity. Effect of source length, position, thermal condition and Prandtl

Laboratoire de développement en mécanique et matériaux (LDM2), Djelfa university Algeria

Speaker: Pr. Horimek Abderrahmane **Algeria**

ORAL SESSION N° 5

10H00-11H30

SS _ Experimental and modeling investigations

Chair: Pr. Z. Driss

(Room 1)

1. ICME2019-036 : High-order sliding mode control of a grid-connected brushless doubly fed induction generator
OussamaMoussa, Hani Benguesmia, Rachid Abdessemed, Said Benaggoune

2. ICME2019-057 : Flashover voltage prediction of cap and pin insulator using the computational intelligence
Hani Ben guesmia, Badis Bakri, Saad Khadar, Nassima M'ziou

3. ICME2019-122 : Model predictive current control for grid-connected PWM rectifier with constant switching frequency
Kawther FAHEM, Dhia Elhak CHARIAG, Lassaad SBITA

4. ICME2019-063 : Contribution to the study of the choice of training rotors of a pilot unit of production of micro-algae.
Oussama Ghannem, Zied Driss

5. ICME2019-152 : EVALUATION OF SAVONIUS WIND ROTOR PERFORMANCE: DYNAMIC STUDIE
Mariem Lajnef

6. ICME2019-202 : Experimental analysis for an onshore OWC wave energy converter
Elmbarki Sawssan, Hamdi Hantati, Mohamed Ali Jemni

SS _ Experimental and numerical techniques

Chair: Pr. R. Renane

(Room 2)

1. ICME2019-002 : Beneficial Role of Soil Foundation and Structure Interaction on Seismic demands in seat-type abutments of Bridges
Ouanani Mouloud, Sandjak Khaled, Tiliouine Boualem
2. ICME2019-095 : Water distribution network design and analysis for south Guelma town using EPANET
H Boumaza, A Haddad, M Kherouf
3. ICME2019-155 : Roof height effect on the indoor airflow characteristics
Hasna Abid, Ismail Baklouti, Zied Driss, Jamel Bessrour
4. ICME2019-133 : The effect of viscosity on the transport of crude oil in the OZ2 line connected Haoued El-Hamra to Arzew
challal makhlouf, hassani nacera
5. ICME2019-204 : Numerical study of parabolic trough solar collector design
Sahar Hadjkacem, Mohamed Ali Jemni, Mohamed Salah Abid

COFFEE BREAK

11H30-12H00

CLOSURE CEREMONY / BEST PAPERS AWARDS / ATTESTATION DISTRUBITION

12H00-12H30

Poster Session

(This session is taking place on **Friday** afternoon 16H00 – 16H30)

1. ICME2019-158 : Fins-cells busbar implementation technique within an aero-voltaic collector for PV cells improvement
Ismail BAKLOUTI, Zied DRISS

2. ICME2019-181 : Effect analysis on hydrogen addition improvement of a SI engine fueled with LPG H2 blend based on an enhanced thermodynamic model
Mohamed Ali jemni, Wissem Zghal, Sarhan Karray, Mohamed Salah Abid

3. ICME2019-206 : Exergy Analysis of Fuel Mixture Combustion: Application to CH4 and/or H2
Nadjet Gheraissa, Abdellah Dogga, Fethi Bouras, Fouad Khaldi, Olfa Moussa

4. ICME2019-137 : Broadband laser source based on supercontinuum generation in all-normal dispersion chalcogenide photonic crystal fiber
Tahar Mesbahi, Abdelkader Medjouri, Djamel Abed, Zied Driss

5. ICME2019-176 : Design of dual band antenna for 4G wireless applications using Genetic Algorithm
Cherif Bali, Zahra Hemaizia, Zied Driss

6. ICME2019-180 : Presentation of the main parameters that affect the greenhouse technology
Hamza Chiboub, Hasna Abid, Zied Driss

7. ICME2019-058 : Étude Numérique de la Vectorisation Fluidique Dans une Tuyère Conique Supersonique Convergent-Divergent à Double Injection
Benderradji razik, Gouidmi Hamza, Beghidja Abdelhadi

8. ICME2019-124 : Simulation of the hydro-thermal behavior of a disc brake
Mohamed Kaffe, Mounir Baccar

9. ICME2019-166 : Three Dimensional Numerical Investigation of Natural Convective Heat Transfer and Entropy Generation inside a Closed Wavy Cavity
Amina Benabderrahmane, Abderrahmane Khechekhouche, Zied Driss

10. ICME2019-182 : CFD Analysis of DOC automotive catalyst for CO oxidation with Pt dioxide using a Porous medium approach
Ahmed Ketata, Zied Driss, Mohamed Salah Abid

11. ICME2019-143 : Effect of fins on the conventional solar still productivity
Abderrahmane Khechekhouche , Donia Djaballah, Ali Sadoun, Imad Kemerchou, Abderlkader Hima, Zied Driss

12. ICME2019-150 : Experimental study of an air conditioning system indoor a classroom
Ifa Sondes, Mansouri Mariem, Driss Zied

13. ICME2019-014 : LES model to predict twin jet impingement
BENAOUM Abdelhak, BOUREGBA Rachid

14. ICME2019-024 : Smart sphere development
Zaid Alhusban, Manousos Valyrakis

15. ICME2019-097 : Optimization of pipe sizes in a fluid distribution system
Souad Beddiaf, Yasmina Lahiouel

16. ICME2019-049 : Numerical Simulation of the Optimal Speed of Spacecraft during Atmospheric Reentry by Aerothermodynamics Analysis of Hypersonic Flow
RENANE RACHID, ALLOUCHE RACHID

17. ICME2019-052 : Importance of sulphur boiler furnace in phosphate industries
Souhir Echi, Abdallah Bouabidi, Raffaella Gerboni, Zied Driss

18. ICME2019-053 : Use of spray nozzle technology in an industrial sulphur boiler furnace
Souhir Echi, Abdallah Bouabidi, Raffaella Gerboni, Zied Driss

19. ICME2019-054 : Effect of turbulence model on the numerical results of a sulphur boiler furnace with three baffles
Souhir Echi, Abdallah Bouabidi, Raffaella Gerboni, Zied Driss

20. ICME2019-055 : Theoretical insights about nanoporous materials used in recent technologies
Souhir Echi, Abdallah Bouabidi, Zied Driss, Kyu-Yeon Lee, Hyung-Ho Park

21. ICME2019-098 : Numerical investigation of double diffusive natural convection in elliptical cylinders: Influence of Rayleigh number
Bouras Abdelkarim, Djedid Taloub, Zied Driss

22. ICME2019-146 : Effect of meshing on numerical simulation of heat transfer through a low porosity ceramic

Wiem Nasri, Kyu-Yeon Lee, Hyung-Ho Park, Zied Driss

23. ICME2019-187 : Combined Economic and Emission Dispatch Solution Using Hybrid PSO-ALO Algorithm
Hana Merah, Abdelmalek Gacem, Djilani Benattous, Yacine Labbi

24. ICME2019-161 : Comparative study of diagnostic techniques of the induction motor by analyzing the normalized spectrum by the healthy spectrum
Abderrahim Allal, Raphael Romary, Remus Pusca, Boukhemis Chetate, Abderrahmane Khechkhouche, Zied Driss

25. ICME2019-008 : Numerical Analysis of the Effect of the Mechanical Properties on Welded Joints in the Fracture Mechanics
Abdelghani Baltach , Abdelkader Djebli , Mostefa Bendouba, Amel Boukhlif , Abdelkrim Aid

26. ICME2019-010 : Characterization of date palm based polypropylene composite using the nano indentation
Noureddine Mahmoudi, Safia Haciné

27. ICME2019-023 : Mechanical Properties of New Composite Materials Based on Date Palm Waste
Almi Kenza, Lakel Said, Benchabane Adel, Kriker Abdelouahed

28. ICME2019-061 : Effect of Heat Treatment on Microstructure, Mechanical Properties and Corrosion Resistance of Duplex Stainless Steel Welds
Ahmed Kellai, Amar Boutaghane, Sami Kahla, Said Dehimi, Mohamed Farid Benlamnouar

29. ICME2019-100 : Surgical Interest of Shock Absorbing Materials in Dental implantology
Ali Merdji , Ali Benaissa, Laid Aminallah, Noureddine Della, Foudil Khelil, El-Bahri Ould Chikh

30. ICME2019-111 : Study of microstructure, phases and microhardness of molybdenum coatings sprayed by flame wire on
Mokhtar Djendel , Omar Allaoui , Rabah Boubaaya, Maazouz Mourad , Samir Benaniba

31. ICME2019-163 : Study of the physical behavior of functionally graded materials (F.G.M), continuous and discontinuous distribution
Khadra Bouafia, Halima Bouafia, Abderrahmane Khechekhouche, Zied Driss

32. ICME2019-167 : Optical Properties of Magnesium Oxide Thin Films Deposited by Spray Pyrolysis
Aboubaker Chibani, Djamel Kendil, Boubaker Benhaoua, I. Kermerchou, Zied Driss

33. ICME2019-173 : Deposition and characterization of n type Lanthanum-doped zinc oxide / p-cuprous oxide layers
Nassiba Allag, Chahnez Saied, Boubaker Benhaoua, Leila Segueni, Brahim Gasmi, Hanane Touhami, Zied Driss

34. ICME2019-179 : Structural, morphological and optical characterization of Fe-doped SnO2 thin layers
Laila Segueni, Boubaker Benhaoua, Nassiba Allag, Brahim Gasmi, Zied Driss

35. ICME2019-184 : X-ray powder diffraction studies of zinc ferrite spinel (ZnFe2 O4)
Hanane Fodil, Mahmoud Omari, Zied Driss

36. ICME2019-185 : Effect of electrodeposition of ZnO thin film on SnO2 substrate on structural and optical properties
Chahnez Saied, Saida Marmi, Abdelouahed Chala, Nassiba Allag, Zied Driss

37. ICME2019-193 : Development and mechanical characterization of innovative wood-based building materials: \Superwood\" panels"
Sirine Dhifallah, Nawel Tlili, Xiaodong Wang, Nejib Hidouri

38. ICME2019-194 : Influence of alloying elements on wear behavior of ausferitic GS irons
Mohammed Iliasse Boulifa, Ali Hadji, Zied Driss

39. ICME2019-209 : Effect of martensite morphology and content on abrasive wear behavior of dual phase X70 pipeline steel
Zidelmel Sami, AllaouiOmar, Laidi Omar

40. ICME2019-006 : Behaviour Characterization Of Welded Joints By Friction Stir Welding (FSW) For Polymer Materials
Ould chikhEl Bahri, Meddah Hadj Miloud, Khellafi Habib

41. ICME2019-011 : Investigations on chemical, thermal decomposition and statistical analysis of the mechanical properties for jute fiber yarns
Djamal Eddine Kari, Abdelbaki Benmounah, Haithem Boumediri, Abderrezak Bezazi, Boudjema Bezzazi

42. ICME2019-015 : Ab-intio study of electronic and elastic properties of XN (X= Sc, Y) compounds
Amira El Hassasna, AbderrachidBechiri, Fella Benmakhlouf, Nadir Bouarissa

43. ICME2019-031 : The non-isothermal kinetics of hydroxyapatite formation in kaolin - natural phosphate mixtures
Fateh Chouia , Hocine Belhouchet, Toufik Sahraoui

44. ICME2019-044 : Characterization by ab initio calculations of the structural and elastic properties of Y1-xScxN alloys
Hadjer CHARROUF, Said LAKEL, Kenza ALMI, Sara SAADA

45. ICME2019-083 : Chemical and thermal decomposition study of a local natural fiber Ampelodesmos mauritanicus
Abdessamed Atoui, Salah Guenfoud, Abderrezak Bezazi , Haithem Boumediri, Fabrizio Scarpa, Alain Dufresne
46. ICME2019-086 : Structural, Magnetic, Electronic, and Elastic Properties of Full-Heusler Compound Co2MnTi
Sabrina Nia, Salah Khenchoul , Iben Khaldoun Lefkaier
47. ICME2019-130 : Mechanical characterisation of date stone flour reinforced polystyrene composites
Boussehel Hamida, Guerira Belhi, Belghar Noureddine
48. ICME2019-141 : Production of chromium carbide layers on carbon steel with conversion treatment: Physico-chemical and mechanical characterization
Boubaaya Rabah, Allaoui Omar, Djendel Mokhtar, Driss Zied
49. ICME2019-065 : Study the Effect of Climatic Conditions and Practical Conditions on the performance of a Solar Air Conditioner
Mokhtar Ghodbane, Boussad Boumeddane, Abderrahmane Khechekhouche, Zied Driss
50. ICME2019-068 : Fatigue life calculation by Rain flow cycle counting methods under random loading
Sahnoun Zengah, Abdekrim Aid, Foudil Khelil, Mohamed Benguediab, Abderrahim Talha
51. ICME2019-208 : Study of the repair performance of cracked and corroded structures by composite patches
Sadek Kaddour, AourBenaoumeur, Drai Ahmed, Bennouna Mohamed Salah
52. ICME2019-084 : Design and 3D Printing of a Non-Anthropomorphic Articulated Mechanical Hand
A Bouachari, A Haddad, W Leuchi
53. ICME2019-121 : A simple approach for supersonic nozzle design of arbitrary cross-section
N Boughazi, A Haddad
54. ICME2019-175 : Partial shading effect modeling in photovoltaic systems using artificial neural networks
Khelaifa Fethi, Lamamra Kheireddine, Abdelkader Mahmoudi, Zied Driss
55. ICME2019-001 : Numerical study of airfoil on a horizontal axis wind turbine
Sarhan Karray, Wissem Zghal, Mohamed Salah Abid
56. ICME2019-013 : Heat transfer study in a phase change (PCM) material used in the building's energy-efficient walls
Djidel Salah Eddine, Mahmoudi Noureddine, Mouly Taher,
57. ICME2019-038 : MICROSTRUCTURAL STUDIES OF MATERIALS DD AND KT2 BY X-RAY DIFFRACTION
Lakel abdelghani, Said Lakel
58. ICME2019-040 : Experimental Study of Temperature Distribution in an Indirect Solar Dryer
Mohammed El Hadi Attia, Zied Driss, Ahmed Kadhim Hussein
59. ICME2019-062 : Study the Changing Climatic Conditions Impact on the Optical and Thermal Behavior of a Small Parabolic Trough Collector
Mokhtar Ghodbane, Boussad Boumeddane, Abderrahmane Khechekhouche, Zied Driss
60. ICME2019-123 : The First and high order sliding mode MPPT controller for a photovoltaic power system: A comparative study
Radhia Garraoui, Mouna Ben Hamed, Lassaad Sbita
61. ICME2019-135 : Effect of introduction of CdS, ZnS and ZnSe in CuInGaSe Solar Cells
Ali Sadoun, Imad Kemerchou, Abderlkader Hima, Abderrahmane Khechekhouche, Zied Driss
62. ICME2019-136 : Investigation of InGaN/SnS and GaN/SnS solar cells
Ali Sadoun, Imad Kemerchou, Abderlkader Hima, Abderrahmane Khechekhouche, Zied Driss
63. ICME2019-142 : Optimization of CIGS thin-film solar cells using Silvaco-Atlas
Mohamed Wahid Bouabdelli, Fatiha Rogti, Mostefa Maache, Imad Kemerchou, Zied Driss
64. ICME2019-147 : Numerical simulation of natural convection in the air gap of an inclined flat plat thermal solar collector with partitions attached to its glazing
Adel Laaraba, Abderrahmane Khechekhouche, Zied Driss
65. ICME2019-148 : Experimental investigation of a small solar water heater
Abderrahmane Khechekhouche, Imad Kemerchou , Ali Sadoun, Abderlkader Hima, Mokhtar Ghoubdane, Abderrahim Allal , Zied Driss
66. ICME2019-156 : Meshing Effect on the Performance of a Banki Micro hydro-Turbine
Marwa Hannachi, Ahmed Ketata, Marco Sinagra, Zied Driss, Tullio Tucciarelli
67. ICME2019-159 : Turbulence Model Effect on the Performance of a Banki Micro Hydro-Turbine
Marwa Hannachi, Marco Sinagra, Ahmed Ketata, Tullio Tucciarelli, Zied Driss
68. ICME2019-160 : Improvement of MPPT using a Low Cost Automatic Dry-Cleaning via Robot with DC-DC Converter for Solar Photovoltaic Panels
Nabil Obeidi, Bachir Belmadani, Abdelkrim Allag, Zied Driss

69. ICME2019-162 : Performance analysis of zinc oxide (ZnO) solar cells with various values of its characteristics by SCAPS
Azzeddine Abdelalim, Fatiha Rogti, Imad Kemerchou, Zied Driss
70. ICME2019-177 : Backstepping control strategy for a Doubly Fed Induction Generator based Wind Energy Conversion System
Zoubir Zeghdi, Linda Barazane, Abdelkader Larabi, Zied Driss
71. ICME2019-178 : Optimal Controller Design of a Doubly Fed Induction Generator Driven by a Wind Turbine Using Particle Swarm Optimization
Zoubir Zeghdi , Linda Barazane, Abdelkader Larabi , Oucef Bekakra , Zied Driss
72. ICME2019-190 : Biodiesel production from waste vegetable oils at Laboratory Scale
Nawel Tlili, Mawaheb Mouftahi, Mouna Dhaouadi, Nejib Hidouri
73. ICME2019-199 : 3D simulation of solar tower system
Abdallah BOUABIDI, Hania ARRARI, Mohamed Ammar ABBASSI, Zied DRISS, Mohamed Salah Abid
74. ICME2019-200 : 3D simulation of solar air heater with rectangular baffled absorber
Abdallah Bouabidi, Rawaa Fattoum, Mohamed Ammar Abbassi, Zied Driss , Mohamed Salah Abid
75. ICME2019-080 : Study of the dynamic behavior of FGM plates
AIT ATMANE REDHWANE, MAHMOUDI NOREDDINE, BENAI RIADH, AIT ATMANE HASSEN
76. ICME2019-099 : Natural frequencies and modes shapes of an orthotropic multi-span bridge deck with line rigid supports
Imed Farah, Abdelouahab Rezaiguia, Debra F Laefer
77. ICME2019-174 : Performance analysis of earth air heat exchangers at operating conditions in sub-Saharan climate region
Abdessamia Hadjadj , Boubaker Benhaoua , Nabiha Naili , Abdelmalek Atia , Abderrahmane Khechekhouche, Zied Driss

ICME Organizing Committee

Time	Thursday/ December 19, 2019	Friday/ December 20, 2019	Saturday/ December 21, 2019
08:00	Welcome and registration		
08:30		Keynote 7 / Keynote 8 Keynote 9	Keynote 12 / Keynote 13 / Keynote 14
10:00	Official Opening Ceremony		Oral session 5
10:15	Keynote 1	Coffee break	
10:30			
10:45	Coffee break	Oral session 3	
10:50			
11:20	Keynote 2 / Keynote 3		Coffee break
12:00			
			Closing Ceremony / Attestation Distribution
12:30	Lunch	Lunch	
14:00	Keynote 4 / Keynote 5 Keynote 6	Keynote 10 / Keynote 11	
14:30			
15:30	Industrial Workshop	Oral session 4	
15:45	Oral session 1		
16:00		Poster session	
16:40	Coffee break	Social visit	
17:15	Oral session 2		
17 :30			
19:00	Dinner	Dinner	