

# 3MA Program

Thursday 18 October 2018	
08h30-09h00	Registration
09h00-09h30	Opening ceremony and Welcome
09h30-10h30	<i>Chairman: Pr M.LAHBABI</i> <i>Keynote speech 1 : " Ibn Sahl et la découverte de la loi de la réfraction: une contribution majeure dans l'histoire de l'optique "</i> <b>Pr. Pierre Coulet, Nice University -France</b>
10h30-11h00	Coffee Break
11h00-12h40	Oral session 1 : Synthesis & structure 1
	Oral session 2 : Hybrid Materials 1
12h40-14h00	Lunch
14h30-16h10	Oral session 3 : Physical properties of ceramics
	Oral session 4 : Organic and Phosphates
16h10-16h30	Break coffee & Posters
16h30-18h30	Oral session 5 : Specific Materials
	Oral session 6 : Theories, Methods and models

	Friday 19 october 2018	
09h00-10h00	<b>Chairman: Pr N.EL AMRANI EL IDRISI</b> <b>Keynote speech 2 : " Properties of some two-dimensional Materials by Density Functional Theory: application for energy conversion and storage "</b> <b>Pr. Abdelilah Benyoussef, Professeur à l'Université Mohamed V - Rabat</b>	
10h00-10h30	Coffee break & Posters	
10h30-12h30	Oral session 7 : Synthesis & structure 2	Oral session 8 : Hybrid Materials 2
12h30-13h00	Closure Ceremony	

#### IMPORTANT AUTHOR INFORMATION

KEYNOTE presentations: 40 minutes presentation + 5 minutes discussion

Oral presentations: 15 minutes presentation + 5 minutes discussion. Have your presentation file on USB stick with you

Poster presentations: size A0, portrait orientation.

You are kindly asked to stay near your presentations for discussions or dialogue.

You are kindly asked to remove your poster after the meeting ends. Posters left on the boards will be disposed off and will not be stored

<b>SESSION 1 : SALLE DES CONFERENCES</b>	
<b>Synthesis and structure 1</b>	
<b>Chairman: Pr E.LOTFI</b>	
11H00-11H20	<b>ID23:</b> Influence du Strontium sur les propriétés structurales et diélectriques de PbTiO <sub>3</sub> élaborés par voie solide et hydrothermale El Houcine Lahrar, El Houssine El Ghadraoui, Ahmed Harrach, Mohammed Zouhairi and Tajeddine Lamcharfi
11H20-11H40	<b>ID34:</b> Hydrothermal synthesis, structural and electrical properties of lead-free (1-x)(Na <sub>0.5</sub> Bi <sub>0.5</sub> )TiO <sub>3-x</sub> (K <sub>0.5</sub> Bi <sub>0.5</sub> )TiO <sub>3</sub> ceramics Mohammed Mesrar, Taj-Dine Lamcharfi, Nor-Said Echatoui, Farid Abdi and Mohammed Zouhairi
11H40-12H00	<b>ID28:</b> Temperature-Pressure phase diagrams and dielectric properties of ferroelectric KNbO <sub>3</sub> Mustapha Tarnaoui, Malika Zaim, Ahmed Zaim and Mohammed Kerouad
12H00-12H20	<b>ID66:</b> Structural, spectroscopic studies and magnetic properties of new diphosphates: CO <sub>52</sub> +Fe <sub>23</sub> +(P <sub>2</sub> O <sub>7</sub> ) <sub>4</sub> and Zn <sub>2+5</sub> Fe <sub>3+2</sub> (P <sub>2</sub> O <sub>7</sub> ) <sub>4</sub> coating/electrode contact zone Hafsae Lamsaf, Benilde Costa, Ismail Maarouf, Elhoussine Elghadraoui, Ijjaali Mustapha and Abdallah Oulmekki
12H20-12H40	<b>ID56:</b> Temperature dependence on the lattice parameters variation in Lithium niobate Belbaraka Mohamed and Bouaza Smahan

<b>SESSION 2 : SALLE DES REUNIONS 1</b>	
<b>Hybrid Materials 1</b>	
<b>Chairman: Pr M.LACHKAR</b>	
11H00-11H20	<b>ID 4:</b> The dielectric and electrical properties of conducting organic copolymers Hussam Bouaamlat, Nasr Hadi, Hayat Sadki, Oufae Ninis, Tajeddine Lamcharfi, Farid Abdi, Mohammed Bannani, Mohammed Bouachrine and Mustapha Abarkan
11H20-11H40	<b>ID 5:</b> Synthesis, crystal structure, dielectric of two-dimensional Cd-based hybrid perovskite Tahiri Obaida, Kassou Said, El Mrabet Rajae, Ahabboud Malika, Belaaraj Abdesselam and Tajeddine Lamcharfi
11H40-12H00	<b>ID 47:</b> Synthesis and crystal structure of new open framework metal oxalate (detn)M(C <sub>2</sub> O <sub>4</sub> ) <sub>2</sub> (NO <sub>3</sub> )·2H <sub>2</sub> O with M = Ni, Cu, (detn) = diethylenetriamine Mohamed Akouibaa, Rachid Ouarsal, Souad Chaouch, Aziz Tahiri Alaoui, Soûad Rakib, Brahim El Bali and Mohammed Lachkar
12H00-12H20	<b>ID67:</b> Wettability and in vitro characterization of sol-gel derived SiO <sub>2</sub> -CaO, SiO <sub>2</sub> -CaO-Ag <sub>2</sub> O, and SiO <sub>2</sub> -CaO-P <sub>2</sub> O <sub>5</sub> -BaO bioglasses Bouhazma Sarra, Herradi Samaiel, Chajri Sanae, El Hachadi Ahmed, Bennouna F., Elabed S., Ibsouda Koraichi S., El Bali B. and Lachkar M.
12H20-12H40	<b>ID 50</b> A physicochemical study of a modified sol-gel derived Neodymium-hydroxyapatite Smaiel Herradi, Sara Bouhazma, Sanae Chajri, Ahmed El Hachadi, Mohamed Khaldi, Brahim El Bali and Mohammed Lachkar

<b>SESSION 3 : SALLE DES CONFERENCES</b> <b>Electrical properties of ceramics</b> <b>Chairman: Pr N.MASAÏF</b>	
14H30-14H50	<b>ID32</b> : Effect of Barium doping on electrical and electromechanical properties of $(1-x)(\text{Na}_{0.5}\text{Bi}_{0.5})\text{TiO}_3-x\text{BaTiO}_3$ Mohammed Mesrar, Taj-Dine Lamcharfi, Nor-Said Echatoui, Farid Abdi and Fatima Zahra Ahjyaje
14H50-15H10	<b>ID36</b> : THE EFFECTS OF CALCINATION AND DOPING ON DIELECTRIC PROPERTIES OF $\text{CaCu}_{3-x}\text{Co}_x\text{Ti}_4\text{O}_{12}$ CERAMIC Nasr Hadi, Abdi Farid and Taj-Edine Lamcharfi
15H10-15H30	<b>ID37</b> : Synthesis, Electrical Properties and Conduction Mechanism of $[\text{C}_6\text{H}_5\text{C}_2\text{H}_4\text{NH}_3]_2\text{ZnCl}_4$ Said Kassou, Naser Hadi, Najwa Gouitaa and Tajeddine Lamcharfi
15H30-15H50	<b>ID40</b> : The study of the Dielectric properties, ac conductivity and thermal behaviour of ilmenite $\text{CdTiO}_3$ cadmium titanate ceramic. Radouane Bahloul, Salaheddine Sayouri and Tajeddine Lamcharfi
15H50-16H10	<b>ID62</b> : Structural and dielectric properties of $\text{Ba}_{0.95}\text{Bi}_{0.05}\text{Ti}_{1-x}\text{Fe}_x\text{O}_3$ ceramics at $x=0.0, 0.1$ and $0.2$ prepared by solid state method. Gouitaa Najwa, Lamcharfi Taj-Dine, Bouayad Lamfadal and Abdi Farid

<b>SESSION 4 : SALLE DES REUNIONS 1</b> <b>Organic and Phosphates</b> <b>Chairman: Pr M.BENZAKOUR</b>	
14H30-14H50	<b>ID51</b> : Synthesis and characterization of new rare earth diphosphates $\text{KLnP}_2\text{O}_7 \cdot 2\text{H}_2\text{O}$ ( $\text{Ln} = \text{Gd} (1), \text{Tb} (2), \text{Yb} (3)$ ) Aziz Alaoui Tahiri, Rachid Ouarsal, Brahim El Bali and Mohammed Lachkar
14H50-15H10	<b>ID52</b> : Synthesis and characterization of new thallium dihydrogenediphosphates $\text{Tl}_2\text{M}(\text{H}_2\text{P}_2\text{O}_7)_2 \cdot 2\text{H}_2\text{O}$ [ $\text{M} = \text{Mn} (1), \text{Co} (2)$ and $\text{Ni} (3)$ ] Aziz Alaoui Tahiri, Rachid Ouarsal, Brahim El Bali and Mohammed Lachkar
15H10-15H30	<b>ID53</b> : Synthesis and structural characterization of organically templated cobalt phosphite $(\text{C}_4\text{N}_2\text{H}_{14})\text{Co}(\text{H}_2\text{PO}_3)_4 \cdot 2\text{H}_2\text{O}$ Najlae Hamdi, Souad Chaouch, Ivan Da Silva, Mohamed Ezahri, Brahim El Bali and Mohammed Lachkar
15H30-15H50	<b>ID55</b> : Synthesis and characterization of lithium iron phosphate by solid-state reaction Safaa Hidaoui, Ahmed El Hachadi, Mohammed Khaldi, Brahim El Bali and Mohammed Lachkar
15H50-16H10	<b>ID44</b> : Polyethylene glycol-10000 concentration effect on the phase evolution from $\text{Li}_3\text{PO}_4$ to $\text{LiMnPO}_4$ cathode material using a solvothermal process Redouan El Khalfaouy, Abdellah Addaou and Ahmed Lahsini

<b>SESSION 5 : SALLE DES REUNIONS 1</b> <b>Specific Materials</b> <b>Chairman: Pr M.ABARKAN</b>	
16H30-16H50	<b>ID9 :</b> Raman spectra of thiophene (C <sub>4</sub> H <sub>4</sub> S) molecules encapsulated inside single walled boron nitride nanotube Aziz Alaoui Tahiri, Rachid Ouarsal, Brahim El Bali and Mohammed Lachkar
16H50-17H10	<b>ID11 :</b> Catalytic Oxidation of Isopropanol in the Liquid Phase at Low Temperature in the Presence of a Mixed Oxide Cr-Ni Younes Dehmani and Said Kassou
17H10-17H30	<b>ID63 :</b> Use of Naturel Clay for Adsorption of Textiles Dyes Zineb Bencehroun, Hicham Zaitan, Mohammed Kachabi, Mostapha Nawdali, Imane El Mrabet and Maria Isabel Pontes Correia Neves
17H30-17H50	<b>ID59 :</b> Investigation of structural and thermal behavior of polymer nanocomposites from natural clay: A comparative study Souad Ghyati, Mabrouk Benhamou, Mostapha El-Jai and Said Kassou
17H50-18H10	<b>ID65 :</b> Lignin Spectroscopic Study : Characterization of Syringyl and Guaiacyl components Somia Fellak and Abdellatif Boukir
18H10-18H30	<b>ID30 :</b> Molecular simulation and experimental studies of the solibility of cellulose by cuam El Amrani Abdessamad, Nour Mohamed and Chalioui Allal

<b>SESSION 6 : SALLE DES REUNIONS 2</b> <b>Theories, Methods and models</b> <b>Chairman: Pr M.KEROUAD</b>	
16H30-16H50	<b>ID2 :</b> Resonance transparency in a mesoscopic ring threaded by a magnetic flux and side coupled to a quantum waveguide Mouadili Abdelkader, Labdouti Zayed, Mrabti Tarik and El Houssaine El Boudouti
16H50-17H10	<b>ID6 :</b> Plasmonic induced transparency in a compact graphene-based nanostructure Adnane Noual, Madiha Amrani, El Houssaine El Boudouti, Yan Pennec and Bahram Djafari-Rouhani
17H10-17H30	<b>ID13 :</b> Analysis of absorptance and reflectance characteristics in a four layers structure using transfer method for solar cells Bouchra Mokhtari, Nour El Houda Hissi, Mohammed Musa Shabat, Nouredine Cherkaoui Eddeqaqi, Abdenbi Bouzid and Ahmed Roukhe
17H30-17H50	<b>ID29 :</b> An effective field theory study of the electrocaloric effect in ferroelectric thin-films Mustapha Tarnaoui, Malika Zaim, Ahmed Zaim and Mohammed Kerouad
17H50-18H10	<b>ID39 :</b> Magnetocaloric effect and magnetic properties of core-shell ferrimagnetic nanoparticle : A Monte carlo study Malika Zaim, Mustapha Tarnaoui, Ahmed Zaim and Mohamed Kerouad
18H10-18H30	<b>ID57 :</b> The phase diagrams of double perovskite Sr <sub>2</sub> CrIrO <sub>6</sub> : Monte Carlo study Othmane Amhoud, Noura Zaim, Ahmed Zaim and Mohamed Kerouad

<b>SESSION 7 : SALLE DES CONFERENCES</b>	
<b>Synthesis &amp; structure 2</b>	
<b>Chairman: Pr A.BOUZID</b>	
10H30-10H50	<b>ID20 :</b> INFLUENCE OF GADOLINIUM ON THE PHYSICAL CHARACTERISTICS OF TITANIUM BARIUM MATERIAL Lamiae Mrharrab, Yahya Ababou, Salaheddine Sayouri and Abdelhalim Elbasset
10H50-11H10	<b>ID42 :</b> Synthèse et Caractérisation des Composés de Structure Pérovskite $Pb_{1-x}Fex(Zr_{0.52}Ti_{0.48})_{1-x/4}O_3(PFZT)$ avec $(0 \leq x \leq 20\%)$ Ahabboud Malika, Lamcharfi Taj-Dine, Abdi Farid and Ahjyaje Fatima Zahra
11H10-11H30	<b>ID25 :</b> Caractérisation par Spectroscopie Raman des Matériaux $BaTiO_3$ dopé avec Mg ( $Ba_{1-x}MgxTiO_3$ ) élaboré par voie sol-gel Elghadraoui Oufae, Zouhairi Mohammed, Harrach Ahmed, Lamcharfi Tai-Edine, Abdi Farid and El Ghadraoui El Houssine
11H30-11H50	<b>ID14 :</b> L'effet du dopage de Cuivre sur les propriétés structurales et diélectriques de $BaTi_{0.9}Zr_{0.1}O_3$ Mohammed Amrani Joutei, Ahmed Harrach, Tjeddine Lamcharfi, Farid Abdi, Mohammed Zouhairi and Fatima Zahra Ahjyaje
11H50-12H10	<b>ID16 :</b> Influence of Manganese content on the structural and thermal properties of some manganese-phosphate glasses Meryem Jerroudi, Lahcen Bih, Mohamed Azrou, Bouchaib Manoun and Peter Lazror
12H10-12H30	<b>ID38 :</b> STUDY OF THE DIELECTRIC, OPTICAL AND MICRO-STRUCTURE PROPERTIES OF $(1-x)CaCu_3Ti_4O_{12}-(x)PbZr_{0.48}Ti_{0.52}O_3$ COMPOSITE Nasr Hadi, Taj-Edine Lamcharfi, Abdi Farid, Abdesselam Belaaraj, Said Kassou and Fatima Zahra Ahjya

<b>SESSION 8 : SALLE DES REUNIONS 1</b>	
<b>Hybrid Materials 2</b>	
<b>Chairman: Pr A.BOUKIR</b>	
10H30-10H50	<b>ID3 :</b> Conducting polymers: Comprehensive analysis of the coating/electrode contact zone Abdelqader El Guerraf, Mimouna Bouabdallaoui, Zineb Aouzal, Sana Ben Jadi, Mohammed Bazzaoui and El Arbi Bazzaoui
10H50-11H10	<b>ID54 :</b> Synthesis, crystal structure and thermal behavior of a new hybrid sulfate: $[(C_6H_{16}N_2)Mg(H_2O)_6]_{0,5}SO_4.H_2O$ Souad Chaouch, Najlaa Hamdi, Mohamed Khaldi, Mohamed Ezahri, Brahim El Bali and Mohammed Lachkar
11H10-11H30	<b>ID17 :</b> Density measurements and thermal stability of phosphate glasses belonging to $LiCl-Li_2O-P_2O_5$ system Lhoucine Naanaai, Lahcen Bih, Mohamed Azrou, Bouchaib Manoun and Peter Lazror
11H30-11H50	<b>ID18 :</b> Structure and thermal stability of phosphate glasses in the $MoO_3-CoO-P_2O_5$ system Benzineb Meryem, Bih Lahcen, Azrou Mohamed, Manoun Bouchaib and Lazror Peter
11H50-12H10	<b>ID61 :</b> Analysis study of structure defects in $LiTaO_3$ (LT) and $LiNbO_3$ (LN) single crystals Jaafar Khalifaoui, Farid Abdi, Taj-Edine Lamcharfi and Nor-Said Echatoui
12H10-12H30	<b>ID45 :</b> Effect of cement on Mechanical Properties of Bricks Mesrar Hamza, Jabrane Raouf and Mesrar Laila



POSTERS : HALL

**ID1:** THEORETICAL AND EXPERIMENTAL LINEAR OPTICAL AND DIELECTRIC PROPERTIES OF MIXED PEROVSKITES  $PB(1-X)MG(X)TiO_3$  WITH  $X=0.2$  AND  $0.5$   
OBAIDA TAHIRI, SAID KASSOU, NASR HADI, RAJAE EL MRABET, ABDESSELAM BELAARAJ, TAJEDDINE LAMCHARFI

**ID7:** YTTRIUM EFFECTS ON STRUCTURAL PROPERTIES OF BARIUM TITANATE CERAMICS  
AZIZ NFISSI

**ID8:** DIELECTRIC AND ELECTRIC BEHAVIOR OF A NOVEL ORGANIC-INORGANIC HYBRID CO-BASED  
RAJAE EL MRABET.

**ID10:** 2D LAYERED MULTIFUNCTIONAL MATERIAL: GROWTH, OPTICAL AND ELECTRONIC PROPERTIES  
SAID KASSOU

**ID12:** ABSORPTION ENHANCEMENT IN GRAPHENE-BASED ABSORBERS AT VISIBLE AND NEAR-INFRARED RANGE  
NOUR EL HOUDA HISSI, BOUCHRA MOKHTARI, MOHAMMED M. SHABAT SHABAT, NOUREDDINE CHERKAOU EDDEQAQI, ABDENBI BOUZID AND AHMED ROUKHE

**ID15:** ETUDE DES PROPRIETES STRUCTURALES DE  $BaTi_{0.9}Zr_{0.1}O_3$  DOPE AU MAGNESIUM ELABORES PAR DEUX METHODES DIFFERENTES  
MOHAMMED AMRANI JOUTEI, TAJEDDINE LAMCHARFI, AHMED HARRACH, FARID ABDI, MOHAMMED ZOUHAIRI AND MALAK SLAOU

**ID19:** ELABORATION ET ETUDE PHYSICO-CHIMIQUE DES PEROVSKITES HYBRIDES  
FATIMA ZAHRA AHJYAJE, MALAK SLAOU, TAJEDDINE LAMCHARFI, FARID ABDI AND AHMED HARRACH

**ID21:** ETUDE DES PROPRIETES STRUCTURALES ET DIELECTRIQUES DU MATERIAU  $BaTiO_3$  DOPE AU NICKEL  
HAFES ED-DNOUB, OUAFAE EL GHADRAOU, MOHAMMED ZOUHAIRI, AHMED HARRACH, TAJEDDINE LAMCHARFI AND EL HOUSSINE EL GHADRAOU

**ID22:** INFLUENCE DU STRONTIUM SUR LES PROPRIETES STRUCTURALES ET DIELECTRIQUES DE  $PbTiO_3$  ELABORES PAR VOIE SOLIDE ET HYDROTHERMALE  
EL HOUCINE LAHRAR, EL HOUSSINE EL GHADRAOU, AHMED HARRACH, MOHAMMED ZOUHAIRI AND TAJEDDINE LAMCHARFI

**ID24:** SYNTHÈSE ET CARACTÉRISATION PHYSICOCHIMIQUES DES NOUVEAUX MATERIAUX CERAMIQUES DE TYPE PEROVSKITE A BASE DE TITANATE DE STRONTIUM  $SrTiO_3$   
ISSAM ALAOU, EL HOUSSINE EL GHADRAOU, MOHAMMED ZOUHAIRI, AHMED HARRACH AND TAJEDDINE LAMCHARFI

**ID26:** ETUDE DES PROPRIETES PHYSICO-CHIMIQUES DES MATERIAUX  $Ba_{1-x}Mg_xTiO_3$  ELABORES PAR VOIE SOL-GEL  
ELGHADRAOU OUAFAE, ZOUHAIRI MOHAMMED, AHMED HARRACH, TAJ-DINE LAMCHARFI, ABDI FARID AND EL HOUSSINE ELGHADRAOU

**ID27:** ETUDE PHYSICO-CHIMIQUES DES MATERIAUX DE TYPE PEROVSKITE  $Pb_{1-x}Y_xTi_{1-x}X/4O_3$  ELABORES PAR VOIE HYDROTHERMALE  
ELGHADRAOU OUAFAE, ZOUHAIRI MOHAMMED, TAJ-DINE LAMCHARFI, AHMED HARRACH, ABDI FARID AND EL HOUSSINE ELGHADRAOU

**ID31:**  $(1-x)(Na_{0.5}Bi_{0.5})TiO_3-x(K_{0.5}Bi_{0.5})TiO_3$  (NBT-XKBT) SYSTEM: A STRUCTURAL AND DIELECTRIC STUDY  
MOHAMMED MESRAR, TAJ-DINE LAMCHARFI, NOR-SAID ECHATOU, FARID ABDI AND FATIMA ZAHRA AHJYAJE



**ID33:** ENHANCING DIELECTRIC PROPERTIES IN  $(1-X)(\text{NA}0.5\text{BI}0.5)\text{TIO}_3\text{-XBATIO}_3$  LEAD-FREE PIEZOELECTRIC CERAMICS BY THE HYDROTHERMAL METHOD

MOHAMMED MESRAR, TAJ-DINE LAMCHARFI, NOR-SAID ECHATOU, FARID ABDI AND AHMED HARRACH

**ID35:** EFFECTS OF DIFFERENT SYNTHESIZING METHODS ON THE DIELECTRIC AND PIEZOELECTRIC PROPERTIES OF  $(1-X)(\text{NA}0.5\text{BI}0.5)\text{TIO}_3\text{-XBATIO}_3$  CERAMICS

MOHAMMED MESRAR, TAJ-DINE LAMCHARFI, NOR-SAID ECHATOU AND FARID ABDI

**ID41:** STRUCTURAL, DIELECTRIC AND ELECTRICAL PROPERTIES OF  $\text{BATI}0.8\text{-XFE}0.2\text{ZR}X\text{O}_3$  CERAMICS AT  $X=0.00, 0.05$  AND  $0.10$  PREPARED BY SOLID STATE METHOD

GOUITAA NAJWA, LAMCHARFI TAJ-DINE, BOUAYAD LAMFADDAL, ABDI FARID AND NACIRI BENNANI MOHAMMED

**ID43:** ELABORATION ET CARACTÉRISATION DES COMPOSÉS DE STRUCTURE PÉROVSKITE DE FORMULE  $\text{PB}1\text{-XBIX}(\text{ZR}0.48\text{T}0.52)1\text{-X}/4\text{O}_3$  ( $X=5\%, 10\%, 20\%$ )

AHABBOUD MALIKA, LAMCHARFI TAJ-DINE, ABDI FARID, AHJYAJE FATIMA ZAHRA AND ZOUHAIRI MOHAMMED

**ID46:** STRUCTURAL AND VIBRATIONAL STUDY OF DIAMMONIUM TRIS [HEXAQUACOBALT(II)] TETRAKIS [HYDROGENPHOSPHATE(III)]:  $(\text{NH}_4)_2[\text{CO}(\text{H}_2\text{O})_6]_3(\text{HPO}_3)_4$

MOHAMED AKOUIBAA, RACHID OUARSAL, SOUAD CHAOUCH, AZIZ TAHIRI ALAOU, SOÛAD RAKIB, BRAHIM EL BALI AND MOHAMMED LACHKAR

**ID48:** SYNTHESIS, CHARACTERIZATION AND VIBRATIONAL STUDY OF DIPOTASSIUM COBALT(II) BIS(HYDROGENE-PHOSPHITE) DIHYDRATE  $\text{K}_2\text{CO}(\text{HPO}_3)_2 \cdot 2\text{H}_2\text{O}$

MOHAMED AKOUIBAA, SOUAD CHAOUCH, RACHID OUARSAL, ALAOUI TAHIRI AZIZ, SOÛAD RAKIB, BRAHIM EL BALI AND MOHAMMED LACHKAR

**ID58:** STUDY OF STRUCTURAL, ELECTRICAL AND DIELECTRIC PROPERTIES OF PURE AND MG-DOPED  $\text{LITAO}_3$  CERAMIC

JAAFAR KHALFAOUI, TAJ-EDINE LAMCHARFI, FARID ABDI, ABDELHADI KASSIBA AND NOR-SAID ECHATOU

**ID64:** SYNTHESIS OF NEW MATERIAL CONTAINING THE PYRAZOLONE RING SYSTEM

GHANDOUR ISMAIL, BOUAYAD ABDELOUAHED, CHAKROUNE SAID, KANDI RODI YOUSSEF AND BOUAYAD KAOUTAR.

**ID 49:** Structure cristalline et spectroscopique de  $\text{NaM}(\text{H}_2\text{PO}_3)_3 \cdot \text{H}_2\text{O}$ ,  $M = \text{Mn, Co, Ni, Zn, Mg et Cd}$

MOHAMED AKOUIBAA, SOUAD CHAOUCH, RACHID OUARSAL, SOÛAD RAKIB, BRAHIM EL BALI AND MOHAMMED LACHKAR

**ID68:** Use of Combination of Coagulation and Adsorption for the Landfill Leachate Treatment from Fez City

EL MRABET IMANE, BENCHEQROUN ZINEB, CHAOUKI ZINEB, KACHABI MOHAMMED, NAWDALI MOSTAPHA AND ZAITAN HICHAM

**ID69:** Use of Powder Activaed Carbon for Adsorption of Wastewater

KACHABI MOHAMMED, NAWDALI MOSTAPHA NAWDALI AND ZAITAN HICHAM