



## Dr. Amor Saidi BenAli

Associate Professor

### Personal Data

Nationality | Tunisian

Date of Birth | 1-2-1973

Department | Chemistry

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### Language Proficiency

Language	Read	Write	Speak
Arabic	fluent	√	fluent
English	excellent	excellent	moderate
French	fluent	excellent	fluent

### Academic Qualifications (Beginning with the most recent)

Date	Academic Degree	Place of Issue	Address
1997	Bachelor	University of Carthage	Tunisia
1999	Master	University of Carthage	Tunisia
2003	PhD	University of Le Mans	France
2009	Habilitation	University of Carthage	Tunisia

### PhD, Master or Fellowship Research Title: (Academic Honors or Distinctions)

<b>PhD</b>	The chemical systems $\text{Na}_2\text{CO}_3\text{-(YbF}_3 \text{ ou YF}_3\text{)-H}_2\text{O}$ : hydrothermal synthesis, structural study and spectroscopy characterization
<b>Master</b>	Synthesis and characterization of a new rubidium borate
<b>Fellowship</b>	-

### Professional Record: (Beginning with the most recent)

Job Rank	Place and Address of Work			Date
Professor	University of Carthage			2016
Associate professor	University of Carthage	University of Dammam		2011
Assistant professor	University of Carthage			2004



## Scientific Achievements

### Published Refereed Scientific Researches

(In Chronological Order Beginning with the Most Recent)

#	Name of Investigator(s)	Research Title	Publisher and Date of Publication
1	B. Grindi, A. BenAli, C. Magen, G. Viau	M-SrFe <sub>12</sub> O <sub>19</sub> and ferrihydrite-like ultrathin nanoplatelets as building blocks for permanent magnets: HAADF-STEM study and magnetic properties	Journal of Solid State Chemistry 264 (2018) 124–133
2	B. Grindi, Z. Beji, G. Viau, A. BenAli	Microwave-assisted synthesis and magnetic properties of M-SrFe <sub>12</sub> O <sub>19</sub> nanoparticles	Journal of Magnetism and Magnetic Materials 449 (2018) 119–126
3	Nesrine Ben Saber, Amor Benali, Lise-Marie Lacroix, Patrick Gredin, Bertrant Raquet, Guillaume Viau	A 3D array of Co(II) cubanes with very strong magnetic anisotropy	J. Alloys and compounds 686 (2016) 447–452.
4	Houssem Sellemi, Sandrine Coste, Maude Barre, Richard Retoux, Amor Ben Ali, Philippe Lacorre	Synthesis by the polyol process and ionic conductivity of nanostructured La <sub>2</sub> Mo <sub>2</sub> O <sub>9</sub> powders	J. Alloys and compounds 653 (2015) 422–433.
5	Insaf Abdi, Je rome Lhoste, M. Leblanc, V. Maisonneuve, J-M Greneche, G. Viau, A. Ben Ali	[H <sub>2</sub> amtaz] <sup>+</sup> iron fluorides; synthesis, crystal structures, magnetic and Mössbauer studies	J. Fluo. Chem. 173 (2015) 23–28.
6	I. Abdi, K.A. Al-Sadhan, A. Ben Ali	Crystal structure of bis(propane-1,3-diammonium) hexafluoroaluminate fluoride trihydrate	ActaCryst. (2014).E70, m335–m336
7	I. Abdi, K.A. Al-Sadhan, A. Ben Ali	Crystal structure of bis(propane-1,3-diaminium) hexafluoroaluminate diaqua tetrafluoro aluminate tetrahydrate	Acta Cryst. (2014). E70, 471–473.
8	Insaf Abdi, Fatmah Alzahrany, Jérôme Lhoste, Jean-Marc Greneche, Amor Ben Ali,	Synthesis, crystal structure and Mossbauer study of new iron fluoride [C <sub>2</sub> N <sub>5</sub> H <sub>6</sub> ] <sub>2</sub> .FeF <sub>5</sub> (H <sub>2</sub> O).2H <sub>2</sub> O	Journal of Advances in Chemistry, 10 (2014) 2617-2624
9	Houssem Sellemi, Sandrine Coste, Amor Ben Ali, Richard Retoux, Leila Samia Smiri, Philippe Lacorre,	Synthesis of La <sub>2</sub> Mo <sub>2</sub> O <sub>9</sub> powders with nanodomains using polyol procedure	Ceramics International, Ceramics International 39 (2013) 8853–8859
10	Amor BenAli, Monique Body, Marc Leblanc, Vincent Maisonneuve	2D zirconium fluorides: Synthesis, Structure and NMR Spectroscopy	Solid State Sci., 11 (2011) 1331
11	Imène Balti, Taher Ben Chaabane, Marc Leblanc, Amor BenAli	Synthesis, crystal structure and characterizations of a new hybrid fluoride zirconate : (C <sub>8</sub> H <sub>12</sub> N) <sub>4</sub> •Zr <sub>2</sub> F <sub>12</sub>	Journal de la société chimique de Tunisie 12 (2010) 71-78.



#	Name of Investigator(s)	Research Title	Publisher and Date of Publication
12	A. zouaghui, A. Ben Ali, V. Maisonneuve, M. Leblanc,	Bis(propane-1,3-diaminium) hexafluoridoferrate(III) fluoride trihydrate	Acta Crystallogr., E66 (2010) m702.
13	Karim Adil, Mohamed Ali Saada, Amor Ben Ali, Monique Body, Minh Trung Dang, Annie Hémon-Ribaud, Marc Leblanc and Vincent Maisonneuve,	Hydrogen bonded $H_3O^+$ , $H_2O$ , HF, $F^-$ in fluoride metalates (Al, Cr, Fe, Zr, Ta), templated with tren (tris-(2-aminoethyl)amine)	J. Fluor. Chem. 128 (2007) 404.
14	Amor Ben Ali, Minh Trang Dang, Jean-Marc Grenèche, Annie Hémon-Ribaud, Marc Leblanc, Vincent Maisonneuve	Synthesis, structure and Mössbauer study of $[H_3dien] \cdot (MF_6) \cdot H_2O$ (M = Cr, Fe)	J. Solid State Chem. 180 (2007) 1911.
15	K. Adil, A. Ben Ali, M. Leblanc and V. Maisonneuve	On isoelectronic fluorides $[H_3tren] \cdot (AlF_6) \cdot H_2O$ , $[H_3tren] \cdot (AlF_6) \cdot HF$ , $[H_4tren] \cdot (AlF_6) \cdot (F)$ and the iron analogue $[H_4tren] \cdot (FeF_6) \cdot (F)$	Solid State Sciences, 8 (2006) 698.
16	A. Ben Ali, V. Maisonneuve, M. Leblanc	Synthesis and crystal structure of $NaYb(CO_3)F_2$	Acta Crystallogr., E62 (2006) i133.
17	A. Ben Ali, M. Leblanc, V. Maisonneuve,	Phase stability region in the $Na_2CO_3$ - $YF_3$ - $H_2O$ system at $190^\circ C$	Solid State Sciences 8 (2006) 1326.
18	A. Ben Ali, M.O.Awaleh, M. Leblanc, V. Maisonneuve, S. Houlbert,	Hydrothermal synthesis, crystal structure, thermal behaviour, IR and Raman spectroscopy of $Na_3Y(CO_3)_3 \cdot 6H_2O$	C. R. Chimie, 7 (2004) 661.
19	A. Ben Ali, V. Maisonneuve, S. Houlbert, G. Silly, J.Y. Buzaré, M. Leblanc,	Cation and anion disorder in new cubic rare earth carbonates $Na_2LiLn(CO_3)_3$ (Ln = Eu-Lu, Y); synthesis, crystal structure, IR, Raman and NMR characterizations	Solid State Sciences 6 (2004) 1237.
20	K. Adil, A. Ben Ali, G. Dujardin, R. Dhal, M. Leblanc and V. Maisonneuve,	Ternary and tetrahedral symmetry in hybrid fluorides, fluoride carbonates and carbonates	J. Fluor. Chem., 125 (2004) 1709.
21	M.O. Awaleh, A. Ben Ali, V. Maisonneuve, M. Leblanc,	Microwave-assisted synthesis, crystal structures and thermal behaviour of $Na_5Y(CO_3)_4$ and $Na_5Yb(CO_3)_4 \cdot 2H_2O$	J. Alloys Compds, 349 (2003) 114.
22	A. Ben Ali, V. Maisonneuve, S. Kodjikian, L.S. Smiri, M. Leblanc	Synthesis, crystal structure and magnetic properties of a new fluoride carbonate $Ba_2Co(CO_3)_2F_2$	Solid State Sciences, 4 (2002) 503.
23	A. Ben Ali, V. Maisonneuve, L.S. Smiri, M. Leblanc,	Synthesis and crystal structure of the fluorocarbonate $BaZn(CO_3)F_2$ , revision of the structure of $BaMn(CO_3)F_2$ . Structure correlations	Solid State Sciences, 4 (2002) 891.



#	Name of Investigator(s)	Research Title	Publisher and Date of Publication
24	A. Ben Ali, V. Maisonneuve, M. Leblanc,	Phase stability regions in the YbF <sub>3</sub> -Na <sub>2</sub> CO <sub>3</sub> -H <sub>2</sub> O system at 190°C. Crystal structure of two new fluoride carbonates, Na <sub>2</sub> Yb(CO <sub>3</sub> ) <sub>2</sub> F and Na <sub>3</sub> Yb(CO <sub>3</sub> ) <sub>2</sub> F <sub>2</sub>	Solid State Sciences 4 (2002) 1367.
25	A. Ben Ali, V. Maisonneuve, L.S. Smiri,	Crystal Structure of NaRbB <sub>4</sub> O <sub>5</sub> (OH) <sub>4</sub> •4H <sub>2</sub> O; comparison with Other tetraborate hydrates	J. Alloys Compds, 322 (2001) 153.

#### Scientific Research Papers Presented to Refereed Specialized Scientific Conferences

#	Name of Investigator(s)	Research Title	Conference and Publication Date
1	Insaf Abdiet Amor Ben Ali,	Nouveau fluoro aluminate d'amine [C <sub>7</sub> H <sub>10</sub> N] <sub>2</sub> (AlF <sub>5</sub> H <sub>2</sub> O),: Synthèse, cristallographie et caractérisation par RMN du solide"	JNC17 – 17 <sup>èmes</sup> Journées Nationales de Chimie du 17 au 19 Décembre 2013 – Monastir
2	H. Sellemi, S. Coste, A. Ben Ali, P. Lacorre, L.S. Smiri,	"Synthesis of nanocrystalline oxide ion conductor La <sub>2</sub> Mo <sub>2</sub> O <sub>9</sub> by polyol processes"	Congrès International EUROMAT 2013, Seville (Espagne), 8-13 septembre 2013
3	Insaf Abdiet Amor Ben Ali,	Matériaux hybrides organiques inorganiques : synthèse et caractérisation	JNC17 – 17 <sup>èmes</sup> Journées Nationales de Chimie du 17 au 19 Décembre 2012 – Monastir
4	Imen Balti, Amor Ben Ali, Vincent Maisonneuve, Marc Leblanc et Tahar Ben Chaabane,	Synthèse et caractérisation d'un nouveau fluorozirconate hybride [C <sub>8</sub> H <sub>12</sub> N] <sub>4</sub> •(Zr <sub>2</sub> F <sub>12</sub> )	2 <sup>nd</sup> Tunisian crystallographic meeting, 10-12 Juin 2008, Hammamet, Tunisie.
5	K. Adil, M.A. Saada, A. Ben Ali, A. Hemon-Ribaud, M. Leblanc, V. Maisonneuve,	H <sub>3</sub> O <sup>+</sup> , H <sub>2</sub> O, HF, (HF <sub>2</sub> ) <sup>-</sup> or F <sup>-</sup> in fluoride aluminates, ferrates, zirconates or tantalates templated with tren (tris-2(aminoethyl)amine	French-Japanese seminar : chemistry and physics of advanced inorganic fluorides ICMCB-CNRS/Bordeaux, 11 mai 2006.
6	K. Adil, A. Ben Ali, G. Dujardin, R. Dhal, V. Maisonneuve, M. Leblanc,	Ternary and tetrahedral symmetry in hybrid fluorides, fluoride carbonates and carbonates	International Conference on Fluorine Chemistry '04 Kyoto, Japon (2004).
7	M. Leblanc, V. Maisonneuve, A. Ben Ali	Phase diagram exploration by microwave assisted hydrothermal synthesis. Application to fluoride carbonates	26 <sup>th</sup> Fluorine Chemistry Conference, Fluorine Chemistry Research Committee. Fukui (Japan), 14-15 novembre, 2002
8	A. Ben Ali, V. Maisonneuve, S. Houlbert, A. Bulou, J. Y. Buzaré, G. Silly, M. Leblanc,	Etude du désordre dans une nouvelle famille de phases cubiques Na <sub>2</sub> LiLn(CO <sub>3</sub> ) <sub>3</sub> (Ln = Eu-Lu, Y) par DRX, IR, Raman et RMN	7 <sup>ème</sup> Journées Francophones des Jeunes Physico-Chimistes 19-21 mars 2002, Monastir, Tunisie.
9	A. Ben Ali, V. Maisonneuve, L.S. Smiri et M. Leblanc,	Structure et propriétés magnétiques d'un nouveau fluorocarbonate Ba <sub>2</sub> Co(CO <sub>3</sub> ) <sub>2</sub> F <sub>2</sub>	Journées Scientifiques de la Société Française de Chimie (Angers, France) 3-4 mai 2001.



#	Name of Investigator(s)	Research Title	Conference and Publication Date
10	H. Sellemi, S. Coste, A. Ben Ali, P. Lacorre, L.S. Smiri,	'Synthesis of nanocrystalline anionic conductor $\text{La}_2\text{Mo}_2\text{O}_9$ by polyol process, microstructural and electrical characterization''	1 <sup>st</sup> International Conference on Polyol Mediated Synthesis 22-25 June 2014. Paris-France
11	B. Grindi, Z. Beji, A. Ben Ali, L.-M. Lacroix, G. Viau	Microwave Synthesis of Magnetic Nanoparticles	International nanotechnology conference and exhibition, Nanotech MEET du 24 au 26 avril 2014 – Hammamet, Tunisie.
12	N. Ben Saber, Z. Beji, A. BenAli, L. Smiri, Guillaume Viau,	Elaboration et caracterisations de nanopoudres de grenat de fer et d'yttrium $\text{Y}_3\text{Fe}_5\text{O}_{12}$	Conférence Franco-maghrébine sur les Nanomatériaux. 2 -5 mai 2013 - Sousse
13	N. Ben Saber, Z. beji, A. Ben Ali, L. Smiri, Guillaume Viau,	Synthesis and ab-initio crystal structure of $\text{CoC}_3\text{H}_6\text{O}$	Conférence Franco-maghrébine sur les Nanomatériaux. 21 -23 mars 2014 - Sousse
14	H. Sellemi, A. BenAli, S. Coste, L. Smiri, P. Lacorre	Synthesis of nanocrystalline oxide ion conductor $\text{La}_2\text{Mo}_2\text{O}_9$ by polyol process	Conférence Franco-maghrébine sur les Nanomatériaux. 2 -5 mai 2013 – Sousse
15	I. Abdi et A. Ben Ali,	Synthèse et caractérisation d'un nouveau fluoroferrate hybride	JNC17 –Congrès de l'Association Française Cristallographie 2013, Grenoble 2-5 juillet 2013 France
16	N. Ben Saber, A. Aloui, A. Ben Ali	Elaboration d'alcoxyde de cuivre par hydrolyse forcée en milieu polyol	JNC17 – 17 <sup>èmes</sup> Journées Nationales de Chimie du 17 au 19 Décembre 2012 – Monastir, Tunisie
17	A. BenAli, K. Adil, A. Le Bail, M. Leblanc, A. Hémon-Ribaud, V. Maisonneuve,	New layered organic-inorganic fluorides	15 <sup>th</sup> European Symposium on Fluorine Chemistry, July 15-20, 2007, Prague, Czech Republic
18	A. Ben Ali, V. Maisonneuve, M. Leblanc,	Exploration rapide par voie hydrothermale micro-onde des diagrammes de phases $\text{Na}_2\text{CO}_3\text{-YbF}_3\text{-H}_2\text{O}$ et $\text{Na}_2\text{CO}_3\text{-YF}_3\text{-H}_2\text{O}$	6 <sup>ème</sup> Journées Francophones des Jeunes Physico-Chimistes 3-5 juillet 2002, Marseille.
19	A. Ben Ali, V. Maisonneuve, S. Houibert, A. Bulou, M. Leblanc, L.S. Smiri,	Caractérisation par spectroscopies d'absorption IR et de diffusion Raman de l'ion $\text{CO}_3^{2-}$ dans quelques carbonates	7 <sup>ème</sup> Journées Francophones des Jeunes Physico-Chimistes 19-21 mars 2002, Monastir Tunisie.

#### Completed Research Projects

#	Name of Investigator(s) (Supported by)	Research Title	Report Date
1	University of Dammam	Synthesis and characterization of hexaferrites $(\text{Sr},\text{Ba})\text{Fe}_{12}\text{O}_{19}$ nanoparticles with controlled morphology	30-1-2015
2	University of Dammam	Crystal study and characterization of nonmetal cations borate hybrid	29-11-2016

#### Current Researches



#	Research Title	Name of Investigator(s)
1	Synthesis, physico-chemical characterizations of new copper or cobalt alkoxide	Maryam Al-Dubaike, Dr.Aisha Alamri and Amor BENALI

#### Contribution to Scientific Conferences and Symposia

#	Conference Title	Place and Date of the Conference	Extent of Contribution
1	Initiation for Rietveld refinement of x-ray diffraction	Faculty of science Physics department Dammam, 20 November 2018	
2	Mini workshop on Advanced X-ray Diffraction Data Treatment using the FULLPROF Suite program	Faculty of science Physics department Dammam, 17-18 April 2017	
3	Comity organization member	3rd Tunisian days Nanoscience's and Nanotechnologies, Sousse 29 to 31 July 2010.	
4	Comity organization member	The analysis diffraction powder data. Monastir 15 to 18 December 2010.	
5	Comity organization member	1st school of nanomaterial and biomedical applications, Bizerte 3 to 9 November 2009.	

#### Teaching Activities

##### Undergraduate

#	Course/Rotation Title
1	General Chemistry 1
2	Chemistry of Transition metals
3	Computer application in chemistry
4	Group theory
5	Inorganic Spectroscopy
6	Chemistry of Lanthanides and actinides
7	Inorganic chemistry
8	Coordination chemistry
9	Analytical chemistry

##### Postgraduate

#	Course/Rotation Title
1	Readings in the Area of Specialty of Inorganic Chem: Structure and properties of solids
2	Ionic Liquids
3	Structure and properties of solids

##### Supervision of Master and/or PhD Thesis



#	Degree Type	Title	Institution	Date
1	Master	Synthesis, physico-chemical characterizations of new copper or cobalt alkoxide	Imam Abdulrahman Bin Faisal University	2019
2	Thesis	Synthèses solvothermales de nanoparticules d'hexaferrites de strontium et de cobalt - Contrôle morphologique, structural et propriétés magnétiques.	University of Carthage	11-12-2018
3	Master	DFT Study and Modeling the Reactivity of Some Fluoroferrates Complexes	Imam Abdulrahman Bin Faisal University	12-5-2017
4	Master	synthesis, crystal study and characterization of non-metal cations borate hybrid compounds	Imam Abdulrahman Bin Faisal University	2-12-2016
5	Thesis	Synthèse et caractérisation d'alcoxydes de métaux de transition préparés en milieu polyol	University of Carthage	12-11-2016
6	Thesis	Synthèse et caractérisation de matériaux hybrides à base de cations trivalents (Fe, Al) et l'étude de leurs propriétés physiques	University of Carthage	28/12/2014
7	Thesis	Elaboration par chimie de douce de composé de la famille LAMOX	University of Carthage	20/6/2014
8	Master	Synthèse et caractérisation de nanopoudres de l'hexaferrite de strontium $SrFe_{12}O_{19}$	University of Carthage	27/03/2014
9	Master	Synthèse et caractérisation des alcoxydes de métaux de transition 3d en milieu polyol	University of Carthage	05/07/2012
10	Master	Synthèse et caractérisation d'oxyde de molybdène et de lanthane $La_2Mo_2O_9$	University of Carthage	29/11/2012
11	Master	Synthèse et caractérisation de sels de cuivre préparés en milieu polyol	University of Carthage	16/02/2012
12	Master	Synthèse et caractérisation de nanopoudres de grenat $Y_3Fe_5O_{12}$	University of Carthage	24/11/2011
13	Master	Synthèse et caractérisations de nanoparticules de manganite d'yttrium $YMnO_3$	University of Carthage	07/12/2010
14	Master	Synthèse et étude structurale d'un nouveau Fluoroferrate hybride: $[H_2dap]_2 \cdot (FeF_6) \cdot (F) \cdot 3H_2O$	University of Carthage	16/02/2009
15	Master	Synthèse et étude structurale d'un nouveau fluorozirconate hybride $[C_8H_{12}N]_4 \cdot (Zr_2F_{12})$	University of Carthage	14/07/2008