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Education

- 1997- Claude Bernard University, Ph.D. in Physiology (Neurobiology), (France)
- 1994- Doctor of Veterinary Medicine, (Tunisia). • 1994- Master of Neurosciences, Aix-Marseille II University, France, (France).
- 1996- Claude Bernard University, Certificate in marketing, economy and innovation, (France).
- 2005- Habilitation HDR, Carthage University, Tunisia.

Work Experience

- 1997-1998 Post Doc at Montreal University, Montreal, 1998 (May-December) (Canada).
- 1998- Doctor teaching assistant, Veterinary School of Sidi Thabet, Tunisia.
- 1999-2018- Professor, University of Carthage, Faculty of Sciences, Bizerte, (Tunisia).
- 2007-2011- Head of Department “Life Science”, Faculté des Sciences de Bizerte, University of Carthage, Faculty of Sciences, Bizerte, (Tunisia).
- 2007-2016- Expert, Arab Atomic Energy Agency (AAEA): Nanosciences & Bioeffects of electromagnetic field.
- 2010-2011- Mayor of Metline-Bizerte, Tunisia.
- 2005-2016- Expert, API, Ministry of Industry (Tunisia).
- 2004-2016- Expert, BestConseil Ltd (Tunisia).
- 2010-2016- Expert, APEDDUB (Tunisia).
- 2012-2016- Expert, FACE (Tunisia).
- 2015-2017- Expert, GIZ.

Training

IN TUNISIA

1994-1996 Animal Physiology, Veterinary School of Sidi Thabet (Tunisia) “Adaptation of animals to dehydration (camel)” 1992-1993 Veterinary practice CRDA de Bizerte (Tunisia) “Vaccine of sheep or cattle against brucellosis” 1991-1992 Biochemistry, Veterinary School of Sidi Thabet (Tunisia). “Electrophoresis of a protein mixture, in this case normal sheep serum”

1991-1992 Epidemiology: Cooperative of Dmina, Mateur (Tunisie) “Study of the epidemiology of sheep brucellosis” “Study of the epidemiology of cattle tuberculosis in Mateur and Bizerta: tuberculin reaction”

1990-1991 Microbiology, Immunology and Parasitology,

- Tests used in the diagnosis of bacterial infections. - Diagnostic applications of immunological tests. - Tests used in the diagnosis of viral diseases. - Tests used in the diagnosis of protozoan infections. Laboratoire d'Analyse Médicale, Hôpital Régional de Bizerte (Tunisia)

1989-1990 Zootechnie and Animal Nutrition, Cooperative of Gosset El Bey Mateur, (Tunisia).

IN FRANCE AND CANADA

1993-1994 Master, Hôpital de la Timone, Marseille (France). - MRI of the human brain. - Study of the cerebral connectivity by MRI - Positron Emission Tomography (PET)

- Study the brain reactivity. - Study of aphasia by MRI

1993-1997 PhD in Physiology, Claude Bernard University Lyon I, Lyon (France).

- Intracerebroventricular injection of glucagon in birds. - Study of metabolic rate in birds (ducklings). - Electromyography in birds (EMG). - EEG, ECG.

1997-1998 - Neuroendocrinology, Laboratoire de Neuroendocrinologie de Vieillessement, Pavillon Mailloux Hôpital Notre-Dame, CHUM, Montreal (Canada) Study of the influence of aging on growth hormone in rat. Study of the influence of protein on the somatotrophic system in rat.

1998-2004 - Neurochemistry, au Laboratoire de Physiologie des Régulations Energétiques, Cellulaires et Moléculaires CNRS-UMR 5578, (Université Claude Bernard, Lyon I, France). « Adaptation of the central nervous system and heat production mechanism to cold in ducklings ».

Research Experience

1993-1994 Study of the human white matter by MRI (Aix-Marseille II, France under the supervision of Pr Georges Salamon at la Timone Hospital, France).

1995-1997 Influence of glucagon and catecholamines on nonshivering thermogenesis in bird (Claude Barnard University 1997 under the supervision of Pr Hervé Barré and Pr Jean Marc Pequignot, France)

1999-2012 Laboratory of Animal Physiology at Bizerte Faculty (Tunisia)

-Effects of sub-acute exposure to magnetic field on virus or bacterial genome. -Bio effects of electromagnetic field in rats. -Influence of electromagnetic pollution on birds migration. -Influence of magnetic field on brain nanoparticule in birds. - Treatment of cancer by hyperthermia and mineral nanoparticles.

Teaching Experience

1) 1996-1997, Claude Bernard University Lyon1, France, Electrophysiology: EEG.

2) ** Animal Nutrition Licence, l'IUT A. 1994-1997 Claude Bernard University Lyon1, France

3) ** Endocrinology Institut de Psychologie, Tunis, Tunisia.

4) **Zoonosis 2001-2003 Faculté des Sciences de Bizerte, Tunisia.

5)** Animal Nutrition 2004-2008 CQA 2 (Food security and quality) Faculté des Sciences de Bizerte, Tunisia.

6)** Animal Pathology 2004-2008 CQA 2 (Food security) -Tuberculosis, Brucellosis, Anthrax, Aujeszky disease, Bluetongue, Bovine virus diarrhea, Ecthyma, BSE, Equine influenza, avian influenza, Newcastle disease, Salmonellosis, Faculté des Sciences de Bizerte, Tunisie.

- 7)**Pathology and Parasitology 2004-2018 CQA 2 (Food security) Helminthe, protozoa, coccidian, Toxoplasmosis, Echinococosis, Faculté des Sciences de Bizerte, Tunisie.
- 8)**Thermoregulation in birds, 1995-1998 Endotherm, heat production, mechanism of nonshivering thermogenesis. Claude Bernard University Lyon 1, France
- 9)** Master : Bio effects of electromagnetic field in rat Action mechanism of electromagnetic field in rat. Physiological disruption induced by electromagnetic field. Oxidative stress induced by magnetic field or microwaves. DNA damage induced by magnetic field. 2004-2012 Centre International de Technologie de l'Environnement de Tunis (CITET), Tunis, Tunisie.
- 10) Prion disease (sheep, cattle) Scrapie and Bovine spongiform encephalopathy. 2002-2008 Service Régional d'Hygiène de Bizerte-Tunisia
- 11) **Animal Physiology Neuroanatomy of the brain, Neuroendocrinology, endocrinology. 2004-2018 Faculté des Sciences de Bizerte, Tunisia.
- 12) **Innovation, marketing, scientific & technical assistance (Start-ups). 2007-2013 Incubator of Bizerte, APII, Tunisia.
- 13) **Nanosciences. 2008-2018, Master SSA (14h) & Master SB (21h), Faculty of Sciences Bizerte, Tunisia.
- 14) **Bioeffects of electromagnetic field and food security. 2008-2018, Master SSA (21h), Faculty of Sciences Bizerte, Tunisia.
- 15) **Sensoriel system. 2008-2018, CQA3 (14h), Faculty of Sciences Bizerte, Tunisia.
- 16) **Neurosciences. 2008-2018, Master SB (21h), Faculty of Sciences Bizerte, Tunisia.

Computer Skills

Computer software - 3D software, Word, Excel, Voxel et Statview. Imagery software - Photoshop, Painter et Ofoto. Internet - Langage Html, Medline et Biosis

Fellowship

1993-1997 Tunisian Fellowship: For preparing a Ph.D.

1997-1998 Canadian Fellowship (FRSQ). Postdoctoral position.

2001-2003 French Fellowship. International collaboration: study of the bioeffects of electromagnetic field.

Leadership positions

2000-2004 Coordinator of Teaching (Biology), Faculté des Sciences de Bizerte, Tunisia.

2000-2003 Leadership in JCE (Jeune chambre économique), JCI Metline, Tunisia.

2003-2013 Member of the Scientific Board. colloque « Science et Environnement » Société des Sciences Naturelles de Tunisie section Nord, Tunisia.

2003-2013 Member of the Scientific Board Journée Régionale d'Hygiène Hospitalière de Bizerte, (Tunisia).

2005-2011 Member of the Scientific Board, Faculté des Sciences de Bizerte, Tunisia.

2006-2013 Scientific Board, Pépinière des Entreprises, Menzel Abdelrahmen, Tunisia. Coaching (start-up).

2007-2013 Coaching (Start-up), Ministry of Industry, Tunisia. 2006-2016

Expert at BEST CONSEIL Ltd, Bizerte and Sky process Ltd, Tunisia. - Energy production (Biogaz, biocarburant..) - Food safety and quality: HACCP, microbial analysis. - Environment: sustainability - Veterinary expertise.

2003-2009 Expert at Centre International de Technologie de l'Environnement de Tunis (CITET), Tunis, Tunisia. - Environment: sustainability - Electromagnetic pollution

2007 Organization of a seminar on the bioeffects of electromagnetic field: interaction between food and radiations.

10 May 2007 at Faculté des Sciences de Bizerte in Collaboration with the CNSTN Sidi Thabet and Professeur Monique Lacroix, Laboratoire de Recherche en Sciences Appliquées à l'Alimentation. Institut National de Recherche Scientifique INRS-Institut Armand Frappier, Laval-Québec, Canada.

2007 Seminar on the use of the FACS Calibur, Faculté de Pharmacie de Monastir. Tunisia.

2007 Seminar on the use of the FACS Calibur, Faculté de Sciences de Bizerte. Tunisia.

2007 Beginning of the Technopole of Bizerte (in collaboration with AGROPOLIS)

2000-2009 Leadership in Health (student and teachers) at Faculté des Sciences de Bizerte (Tunisia).

2005-2009 Brainstorming group in nanosciences at Faculté des Sciences de Bizerte (Tunisia).

2009 Workshop "Bioeffects of electromagnetic field" Arabic Atomic Energy Agency, Faculté des Sciences de Bizerte (Tunisia).

Memberships

• Society for Neuroscience 1994 – 1997. • Bioelectromagnetic society 2000 – present. • Society for Naturel Sciences 1999 - present. • Veterinary society (Tunisia) 1995 - present. • Pépinière de Bizerte (Tunisia) 2007-2013. • Well fare (ATSAL-Tunisia): 2012. • Nanosciences commette (Faculté des Sciences de Bizerte, Tunisia): 2005-2012. • VTADU: 2012. • AAEA network member.

Publications

Books

1- Etude de l'absorption percutanée de l'huile essentielle de Lavande (Omn.Univ.Europ.) (French Edition) (French) Myriam Ben Salah, Hafedh Abdelmelek, Mohamed R. Tarhouni. Éditions universitaires européennes (January 13, 2016). ISBN-10 : 363948326X, ISBN-13: 978-3639483260

2- Carthage Lab: Green biosynthesis of quantum dots (Anglais) Broché – 18 décembre 2017. Hafedh Abdelmelek (Auteur). ISBN-10 : 6202272430 ISBN-13: 978-6202272438

3- Dynamique des territoires et des terroirs en Tunisie et en Algérie. Hafedh Abdelmelek, Amel Hanini, Zihad Bouslama. ISBN 978-620-2-27992-5.

4- Amel Hanini, Kamel Kacem, Julie Gavard, Hafedh Abdelmelek, Souad Ammar. Chapter 35: Ferrite Nanoparticles for Cancer Hyperthermia Therapy Handbook of Nanomaterials for Industrial Applications, 2018, Pages 638-661

5- Bioeffects of electromagnetic field (Arabic): Source, nature, and health effects.

Publications

Abdelmelek H, Hanini A, Nebil E. Theories related to Emotional Bank System and Human Brain Double Door. *J Neurosci Neurosurg*. 2018 May; 1(3):115.

Amel Hanini, Hafedh Abdelmelek. The use of nanotechnology in regenerative medicine. *Cryobiology*, Volume 81, April 2018, Page 228

Ammari M, Othman H, Hajri A, Sakly M, Abdelmelek H. Pistacia lentiscus oil attenuates memory dysfunction and decreases levels of biomarkers of oxidative stress induced by lipopolysaccharide in rats. *Brain Res Bull*. 2018 Jun; 140:140-147.

Ammari M, Elferchichi M, Othman H, Sakly M, Abdelmelek H. Effect of sub-chronic ferrous sulfate treatment on motor skills, hematological and biochemical parameters in rats. *Arch Environ Occup Health*. 2017 Oct 25:1-6. doi: 10.1080/19338244.2017.1395788.

Abdelmelek H, Hanini A. STEM Education and Nature: from Neurosciences to Nano Sciences. *Biomed J Sci & Tech Res* 1(4)- 2017. BJSTR.MS.ID.000399. DOI: 10.26717/BJSTR.2017.01.000399

Azzouz A, Hanini A, Bouslama Z, Saili L, Benaceur S, Sakly M, Tliba S, Abdelmelek H. Iron prevents demyelination of frog sciatic nerves. *Environ Toxicol Pharmacol*. 2017 Oct; 55:51-54. doi: 10.1016/j.etap.2017.08.007. Epub 2017 Aug 12.

Amel Hanini, Ahmed Rjeb and Hafedh Abdelmelek. Prion theory: Induction of Prion Diseases by Nanoparticles Conversion (Prpc To Prpsc) Related to Electromagnetic Field. *Open Access J Neurol Neurosurg* 6(1): OAJNN.MS.ID.555676 (2017).

Ben Miled H, Saada M, Jallali I, Ben Barka Z, Tlili M, Alimi H, Sakly M, Ben Rhouma K, Abderrabba M, Abdelmelek H, Tebourbi O, Ksouri R. Variability of antioxidant and biological

activities of *Rhus tripartitum* related to phenolic compounds. *EXCLI J.* 2017 Mar 31; 16:439-447. doi: 10.17179/excli2016-735.

Othman H, Ammari M, Rtibi K, Bensaid N, Sakly M, Abdelmelek H. Postnatal development and behavior effects of in-utero exposure of rats to radiofrequency waves emitted from conventional WiFi devices. *Environ Toxicol Pharmacol.* 2017 Jun; 52:239-247. doi: 10.1016/j.etap.2017.04.016. Epub 2017 Apr 22.

Othman H, Ammari M, Sakly M, Abdelmelek H. Effects of repeated restraint stress and WiFi signal exposure on behavior and oxidative stress in rats. *Metab Brain Dis.* 2017 Oct;32(5):1459-1469. doi: 10.1007/s11011-017-0016-2. Epub 2017 Apr 27.

Othman H, Ammari M, Sakly M, Abdelmelek H. Effects of prenatal exposure to WIFI signal (2.45GHz) on postnatal development and behavior in rat: Influence of maternal restraint. *Behav Brain Res.* 2017 May 30;326:291-302. doi: 10.1016/j.bbr.2017.03.011. Epub 2017 Mar 10.

Ferchichi S, Trabelsi H, Azzouz I, Hanini A, Rejeb A, Tebourbi O, Sakly M, Abdelmelek H. Evaluation of oxidative response and tissular damage in rat lungs exposed to silica-coated gold nanoparticles under static magnetic fields. *Int J Nanomedicine.* 2016 Jun 8;11:2711-9. doi: 10.2147/IJN.S103140. eCollection 2016.

Elferchichi M, Maaroufi K, Ammari M, Sakly M, Abdelmelek H. Effects of combined ferrous sulfate administration and exposure to static magnetic field on brain oxidative stress and emotional behavior. *Arch Ital Biol.* 2015 Mar;153(1):37-45. doi: 10.4449/aib.v153i1.1481.

Elferchichi M, Mercier J, Ammari M, Belguith H, Abdelmelek H, Sakly M, Lambert K. Subacute static magnetic field exposure in rat induces a pseudoanemia status with increase in MCT4 and Glut4 proteins in glycolytic muscle. *Environ Sci Pollut Res Int.* 2016 Jan;23(2):1265-73. doi: 10.1007/s11356-015-5336-3. Epub 2015 Sep 10.

Saili L, Hanini A, Smirani C, Azzouz I, Azzouz A, Sakly M, Abdelmelek H, Bouslama Z. Effects of acute exposure to WIFI signals (2.45GHz) on heart variability and blood pressure in Albinos rabbit. *Environ Toxicol Pharmacol.* 2015 Sep;40(2):600-5. doi: 10.1016/j.etap.2015.08.015. Epub 2015 Aug 17.

Lahbib A, Ghodbane S, Louchami K, Sener A, Sakly M, Abdelmelek H. Effects of vitamin D on insulin secretion and glucose transporter GLUT2 under static magnetic field in rat.

Environ Sci Pollut Res Int. 2015 Nov;22(22):18011-6. doi: 10.1007/s11356-015-4844-5. Epub 2015 Jul 15.

Ghodbane S, Ammari M, Lahbib A, Sakly M, Abdelmelek H. Static magnetic field exposure-induced oxidative response and caspase-independent apoptosis in rat liver: effect of selenium and vitamin E supplementations. Environ Sci Pollut Res Int. 2015 Oct;22(20):16060-6. doi: 10.1007/s11356-015-4802-2. Epub 2015 Jun 12.

Younes NR, Amara S, Mrad I, Ben-Slama I, Jeljeli M, Omri K, El Ghoul J, El Mir L, Rhouma KB, Abdelmelek H, Sakly M. Subacute toxicity of titanium dioxide (TiO₂) nanoparticles in male rats: emotional behavior and pathophysiological examination.

Environ Sci Pollut Res Int. 2015 Jun;22(11):8728-37. doi: 10.1007/s11356-014-4002-5. Epub 2015 Jan 10.

Koh MY, Nguyen V, Lemos R Jr, Darnay BG, Kiriakova G, Abdelmelek M, Ho TH, Karam J, Monzon FA, Jonasch E, Powis G. Hypoxia-induced SUMOylation of E3 ligase HAF determines specific activation of HIF2 in clear-cell renal cell carcinoma. Cancer Res. 2015 Jan 15;75(2):316-29. doi: 10.1158/0008-5472.CAN-13-2190. Epub 2014 Nov 24.

Ghodbane S, Lahbib A, Ammari M, Sakly M, Abdelmelek H. Does static magnetic field-exposure induced oxidative stress and apoptosis in rat kidney and muscle? Effect of vitamin E and selenium supplementations. Gen Physiol Biophys. 2015 Jan;34(1):23-32. doi: 10.4149/gpb_2014027. Epub 2014 Nov 14.

Barhoumi L, Oukarroum A, Taher LB, Smiri LS, Abdelmelek H, Dewez D. Effects of superparamagnetic iron oxide nanoparticles on photosynthesis and growth of the aquatic plant *Lemna gibba*. Arch Environ Contam Toxicol. 2015 Apr; 68(3):510-20. doi: 10.1007/s00244-014-0092-9. Epub 2014 Nov 13.

Lahbib A, Ghodbane S, Maâroufi K, Louchami K, Sener A, Sakly M, Abdelmelek H. Vitamin D supplementation ameliorates hypoinsulinemia and hyperglycemia in static magnetic field-exposed rat. *Arch Environ Occup Health*. 2015;70(3):142-6. doi: 10.1080/19338244.2013.828675.

Ghodbane S, Amara S, Lahbib A, Louchami K, Sener A, Sakly M, Abdelmelek H. Vitamin E prevents glucose metabolism alterations induced by static magnetic field in rats. *Environ Sci Pollut Res Int*. 2014 Nov;21(22):12731-8. doi: 10.1007/s11356-014-3224-x. Epub 2014 Jun 27.

Baratli Y, Charles AL, Wolff V, Ben Tahar L, Smiri L, Bouitbir J, Zoll J, Sakly M, Auger C, Vogel T, Abdelmelek H, Tebourbi O, Geny B. Age modulates Fe₃O₄ nanoparticles liver toxicity: dose-dependent decrease in mitochondrial respiratory chain complexes activities and coupling in middle-aged as compared to young rats. *Biomed Res Int*. 2014;2014:474081. doi: 10.1155/2014/474081. Epub 2014 May 6.

Lahbib A, Ghodbane S, Sakly M, Abdelmelek H. Vitamins and glucose metabolism: The role of static magnetic fields. *Int J Radiat Biol*. 2014 Dec;90(12):1240-5. doi: 10.3109/09553002.2014.930537. Epub 2014 Aug 4. Review.

Amara S, Ben-Slama I, Mrad I, Rihane N, Jeljeli M, El-Mir L, Ben-Rhouma K, Rachidi W, Sève M, Abdelmelek H, Sakly M. Acute exposure to zinc oxide nanoparticles does not affect the cognitive capacity and neurotransmitters levels in adult rats. *Nanotoxicology*. 2014 Aug;8 Suppl 1:208-15. doi: 10.3109/17435390.2013.879342. Epub 2014 Feb 13.

Amara S, Slama IB, Mrad I, Rihane N, Khemissi W, El Mir L, Rhouma KB, Abdelmelek H, Sakly M. Effects of zinc oxide nanoparticles and/or zinc chloride on biochemical parameters and mineral levels in rat liver and kidney. *Hum Exp Toxicol*. 2014 Nov;33(11):1150-7. doi: 10.1177/0960327113510327. Epub 2014 Feb 5.

Azzouz I, Trabelsi H, Hanini A, Ferchichi S, Tebourbi O, Sakly M, Abdelmelek H. Interaction between nanoparticles generated by zinc chloride treatment and oxidative responses in rat liver. *Int J Nanomedicine*. 2014;9:223-9. doi: 10.2147/IJN.S55974. Epub 2013 Dec 27.

Maaroufi K, Had-Aissouni L, Melon C, Sakly M, Abdelmelek H, Poucet B, Save E. Spatial learning, monoamines and oxidative stress in rats exposed to 900 MHz electromagnetic field in

combination with iron overload. *Behav Brain Res.* 2014 Jan 1;258:80-9. doi: 10.1016/j.bbr.2013.10.016. Epub 2013 Oct 18.

Amara S, Slama IB, Omri K, Ghoul JE, El Mir L, Rhouma KB, Abdelmelek H, Sakly M. Effects of nanoparticle zinc oxide on emotional behavior and trace element homeostasis in rat brain. *Toxicol Ind Health.* 2013 Jun 6. [

Amara S, Khemissi W, Mrad I, Rihane N, Ben Slama I, Mir LE, Jeljeli M, Ben Rhouma K, Abdelmelek H, Sakly M. Effect of TiO₂ nanoparticles on emotional behavior and biochemical parameters in adult Wistar rats. *Gen Physiol Biophys.* 2013 Jun;32(2):22934.

Trabelsi H, Azzouz I, Sakly M, Abdelmelek H. Subacute toxicity of cadmium on hepatocytes and nephrocytes in the rat could be considered as a green biosynthesis of nanoparticles. *Int J Nanomedicine.* 2013;8:1121-8.

Maaroufi K, Ammari M, Elferchichi M, Poucet B, Sakly M, Save E, Abdelmelek H. Effects of combined ferrous sulphate administration and exposure to static magnetic field on spatial learning and motor abilities in rats. *Brain Inj.* 2013;27(4):492-9.

Banaceur S, Banasr S, Sakly M, Abdelmelek H. Whole body exposure to 2.4 GHz WIFI signals: effects on cognitive impairment in adult triple transgenic mouse models of Alzheimer's disease (3xTg-AD). *Behav Brain Res.* 2013 Mar 1;240:197-201.

Mbainabeye Jérôme, Ezzedine Ben Braik, Mohamed Ben Salem, Moshen Sakly and Hafedh Abdelmelek. Analysis and Characterization of the Electrical Conductivity Behavior of the Sciatic Nerve using Wavelet Transform and Signal Processing. *International Journal of Electronics Communication and Computer Engineering* Volume 3, Issue 4,: 2278–4209 (2012)

Soumaya Ghodbane, Salem Amara, Catherine Garrel, Josiane Arnaud, Véronique Ducros, Alain Favier, Mohsen Sakly, Hafedh Abdelmelek. Selenium supplementation ameliorates static magnetic field-induced disorders in antioxidant status in rat tissues. *Environmental Toxicology and Pharmacology*, Volume 31, Issue 1, January 2011, Pages 100106.

Elferchichi M, Mercier J, Bourret A, Gross R, Lajoix AD, Belguith H, Abdelmelek H, Sakly M, Lambert K. Is static magnetic field exposure a new model of metabolic alteration? Comparison with Zucker rats. *Int J Radiat Biol.* 2011 Jan 10.

Lahbib A, Elferchichi M, Ghodbane S, Belguith H, Chater S, Sakly M, Abdelmelek H. Time-dependent effects of exposure to static magnetic field on glucose and lipid metabolism in rat. *Gen Physiol Biophys.* 2010 Dec;29(4):390-5.

Elferchichi M, Mercier J, Coisy-Quivy M, Metz L, Lajoix AD, Gross R, Belguith H, Abdelmelek H, Sakly M, Lambert K. Effects of exposure to a 128-mT static magnetic field on glucose and lipid metabolism in serum and skeletal muscle of rats. *Arch Med Res.* 2010 Jul;41(5):309-14.

Amara S, Douki T, Garrel C, Favier A, Rhouma KB, Sakly M, Abdelmelek H. Effects of static magnetic field and cadmium on oxidative stress and DNA damage in rat cortex brain and hippocampus. *Toxicol Ind Health.* 2010 Sep 13.

Ammari M, Gamez C, Lecomte A, Sakly M, Abdelmelek H, De Seze R. GFAP expression in the rat brain following sub-chronic exposure to a 900 MHz electromagnetic field signal. *Int J Radiat Biol.* 2010 May;86(5):367-75.

Elferchichi M, Mercier J, Coisy-Quivy M, Metz L, Lajoix AD, Gross R, Belguith H, Abdelmelek H, Sakly M, Lambert K. Effects of exposure to a 128-mT static magnetic field on glucose and lipid metabolism in serum and skeletal muscle of rats. *Arch Med Res.* 2010 Jul;41(5):309-14.

Amara S, Douki T, Garrel C, Favier A, Rhouma KB, Sakly M, Abdelmelek H. Effects of static magnetic field and cadmium on oxidative stress and DNA damage in rat cortex brain and hippocampus. *Toxicol Ind Health.* 2010 Sep 13.

Ammari M, Gamez C, Lecomte A, Sakly M, Abdelmelek H, De Seze R. GFAP expression in the rat brain following sub-chronic exposure to a 900 MHz electromagnetic field signal. *Int J Radiat Biol.* 2010 May;86(5):367-75.

Amara S, Garrel C, Favier A, Ben Rhouma K, Sakly M, Abdelmelek H. Effect of static magnetic field and/or cadmium in the antioxidant enzymes activity in rat heart and skeletal muscle. *Gen Physiol Biophys.* 2009 Dec;28(4):414-9.

Amara S, Douki T, Garel C, Favier A, Sakly M, Rhouma KB, Abdelmelek H. Effects of static magnetic field exposure on antioxidative enzymes activity and DNA in rat brain. *Gen Physiol Biophys.* 2009 Sep;28(3):260-5.

Ben Salah M, Abderraba M, Tarhouni MR, Abdelmelek H. Effects of ultraviolet radiation on the kinetics of in vitro percutaneous absorption of lavender oil. *Int J Pharm.* 2009 Dec 1;382(1-2):33-8.

El May A, Snoussi S, Ben Miloud N, Maatouk I, Abdelmelek H, Ben Aïssa R, Landoulsi A. Effects of static magnetic field on cell growth, viability, and differential gene expression in *Salmonella*. *Foodborne Pathog Dis.* 2009 Jun;6(5):547-52.

Maaroufi K, Had-Aissouni L, Melon C, Sakly M, Abdelmelek H, Poucet B, Save E. Effects of prolonged iron overload and low frequency electromagnetic exposure on spatial learning and memory in the young rat. *Neurobiol Learn Mem.* 2009 Oct;92(3):345-55.

Chater S, Douki T, Favier A, Sakly M, Abdelmelek H. Changes in antioxidant status and biochemical parameters after orally cadmium administration in females rats. *Acta Biol Hung.* 2009 Mar;60(1):79-88.

Maaroufi K, Ammari M, Jeljeli M, Roy V, Sakly M, Abdelmelek H. Impairment of emotional behavior and spatial learning in adult Wistar rats by ferrous sulfate. *Physiol Behav.* 2009 Feb 16;96(2):343-9.

Chater S, Douki T, Favier A, Garrel C, Sakly M, Abdelmelek H. Influence of static magnetic field on cadmium toxicity: study of oxidative stress and DNA damage in pregnant rat tissues. *Electromagn Biol Med.* 2008; 27(4):393-401.

Ammari M, Lecomte A, Sakly M, Abdelmelek H, de-Seze R. Exposure to GSM 900 MHz electromagnetic fields affects cerebral cytochrome c oxidase activity. *Toxicology.* 2008 Aug 19;250(1):70-4. Epub 2008 Jun 11.

Ammari M, Jeljeli M, Maaroufi K, Sakly M, , Roy V, Abdelmelek H. Static magnetic field exposure affects behavior and learning in rats. *Electromagn Biol Med.* 2008;27(2):185-96.

Chater S, Douki T, Garrel C, Favier A, Sakly M, Abdelmelek H. Cadmium-induced oxidative stress and DNA damage in kidney of pregnant female rats. *C R Biol.* 2008 Jun;331(6):426-32. Epub 2008 Apr 22.

Ammari M, Brillaud E, Gamez C, Lecomte A, Sakly M, Abdelmelek H, de Seze R. Effect of a chronic GSM 900 MHz exposure on glia in the rat brain. *Biomed Pharmacother.* 2008 Apr-May;62(4):273-81. Epub 2008 Mar 26.

Amara S, Abdelmelek H, Garrel C, Guiraud P, Douki T, Ravanat JL, Favier A, Sakly M, Ben Rhouma K. Preventive effect of zinc against cadmium-induced oxidative stress in the rat testis.. *J Reprod Dev.* 2008 Apr;54(2):129-34. Epub 2007 Apr 10.

Amara S, Douki T, Ravanat JL, Garrel C, Guiraud P, Favier A, Sakly M, Ben Rhouma K, Abdelmelek H. Influence of a static magnetic field (250 mT) on the antioxidant response and DNA integrity in THP1 cells. *Phys Med Biol.* 2007 Feb 21;52(4):889-98.

Salem Amara, Hamed Abdelmelek, Catherine Garrel, Pascale Guiraud, Thierry Douki, Jean-Luc Ravanat, Alain Favier, Mohsen Sakly and Khémais Ben Rhouma. Zinc Supplementation Ameliorates Static Magnetic Field-Induced Oxidative Stress in Rat Tissues. *Environmental Toxicology and Pharmacology*, 23(2)193-197(2007).

Miryam Elferchichi, Hamed Abdelmelek, Mohsen Sakly. Effects of sub-acute exposure to static magnetic field on iron status and hematopoiesis in rats. *Turkish Journal of Hematology.* Volume: 24 Issue: 2 64-68 (2007).

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