

Pr. Moulay Youssef El Hafidi

36 years, married with three children
Lotissement Soufiane, N° 37, 3rd floor
Sidi Maarouf, 20190
Casablanca Morocco
+212 679 313 814
Youssef.elhafidi@univh2c.ma



CURRICULUM VITAE

PROFESSIONAL EXPERIENCE

- Since 2014** Hassan II University of Casablanca, Morocco
Assistant Professor, Department of Physics - Condensed Matter Physics Laboratory.
- 2009-2013** ECOMAG Sarl, Morocco
Founder and General Manager of permanent magnets and magnetic rubber Leader.
- 2010-2012** EDILON)(SEDRA, France
Exclusive representative of the multinational E)(S in Morocco
Expertise : Products for urban transportation and railways
References : ONCF and Yapi Merkezi
- 2011-2012** Faculté Polydisciplinaire de Khouribga, Morocco
Vacant Professor for fundamental and professional license levels (Electromagnetism and Business Management modules)
- 2009-2011** Hassan II Mohammedia - Casablanca University
Vacant Professor for master and professional license levels (Business Management and Network Management modules)
- 2005-2009** PROCTER & GAMBLE, Morocco
Operations Department Head (Detergents manufacturing)
 - Leading a multidisciplinary team (50 employees including engineers, staff, technicians and contractors)
 - Managing complex technical projects involving cross-functional teams and more than 3MM\$ (production cyclones installation, 5 tons boiler installation, new high pressure pump, new initiatives commissioning and qualification ...)Support team Manager (Diapers manufacturing)
 - Establishing Preventive maintenance System
 - Optimizing spare parts costProcess engineer (Diapers manufacturing)
 - Implementing and monitoring of daily production key indicators (Volume, Speed, Process Reliability, MTBF, SCRAP, quality defects, process compliance...)
 - Leading Loss elimination projet to avoid Raw materials and Finished products losses.

EDUCATION

- 2008-2011** Hassan II Mohammedia - Casablanca University, Morocco

	PhD in applied physics Faculty of Sciences Ben M'Sik Expertise: Magnetic treatment of hydrocarbons, water and magnetic refrigeration.
2004-2005	Paris Dauphine University, France Master in Business Intelligence
2001-2004	Ecole Nationale Supérieure des Mines de Nancy, France Civil Mining engineer in Industrial engineering Expertise: Decision making and production systems
1999-2001	Lycée Ibn Taimia, Marrakech Morocco Preparatory classes for High engineering schools
1998-1999	Ecole Royale de l'Air, Marrakech Morocco Scientific Bachelor.

CONFERENCES

1. Z.ElMaddahi, **M. Y. El Hafidi**, M. El Hafidi, “ *Magnetic properties of spin chain assembly under the influence of an external field*”, 2ème édition de la Conférence Internationale des Matériaux Fonctionnels et leurs Applications Technologiques (CIMFAT 2017), 13 Oct. 2017.
2. A. Boubekri, **M. Y. El Hafidi**, M. El Hafidi, "Magnetocaloric properties of anisotropic Heisenberg systems with spin $\frac{1}{2}$ and spin 1", 2ème édition de la Conférence Internationale des Matériaux Fonctionnels et leurs Applications Technologiques (CIMFAT 2017), 13 Oct. 2017.
3. **M. Y. El Hafidi**, “Calculation Model on Magnetocaloric Effect (MCE) and Refrigerant Capacity (RC) in Composite materials at Room Temperature”, 2017 Eleventh International Conference on Composite Science and Technology (ICCST/11), American University of Sharjah, Sharjah, UAE, April 4-6, 2017.
4. **M. Y. El Hafidi**, “Existing scale deposits removal by magnetic water treatment: Theoretical study and experiment”, 2017 International Conference on Water, Energy and Environment (ICWEE 2017), American University of Sharjah, Sharjah, UAE, Feb.28 – Mar.2, 2017.
5. **M. Y. El Hafidi**, “Portable magnetic repulsive device coupled with hybrid system (aero generator / photovoltaic panel)”, 2017 International Conference on Water, Energy and Environment (ICWEE 2017), American University of Sharjah, Sharjah, UAE, Feb.28 – Mar.2, 2017.
6. Boubekri, Abderrazak, **M. Y. El Hafidi**, El Hafidi, Mohamed, “Magnetocaloric Effect and Magnetic refrigeration: analytical and numerical study”, International Congress on Advanced Technologies (ICAT'2017), Safi-Morocco, 2017.
7. **M. Y. El Hafidi**, “Optimized Gd₅Si₂Ge₂ magnetic refrigerator working with CNT-water nanofluid”, "3rd Euro-Mediterranean Conference on Materials and Renewable Energies, EMCME-3, Marrakech-Morocco, November 2-6, 2015.

8. **M. Y. El Hafidi**, “Free energy produced by generators with Nd₂Fe₁₄B permanent magnets and horizontal axis wind turbine”., "3rd Euro-Mediterranean Conference on Materials and Renewable Energies, EMCME-3, Marrakech-Morocco, November 2-6, 2015.

PUBLICATIONS

1. **M.Y. El Hafidi** , A. Boukebri, M. El Hafidi, “Calculation model on magnetocaloric effect (MCE) and relative cooling power (RCP) in composite materials at room temperature”, Journal of Magnetism and Magnetic Materials, 449, 500-504 (2018).
2. **M.Y. El Hafidi**, M. El Hafidi, “Existing Scale Deposits Removal by Magnetic Water Treatment: Theoretical Study and Experiment”, Int J Water Wastewater Treat, 3, 3, (2017).
3. A. Boubekri, **M.Y. El Hafidi** and M. El Hafidi, “Magnetocaloric properties of a spin-1 anisotropic ferromagnetic Heisenberg system within the pair approximation”, J. Phys. Commun. 1 (2017) 055003.
4. Z. ElMaddahi, A. Farchakh, **M. Y. El Hafidi**, M. El Hafidi, “Magnetic and thermodynamic properties of a simple-wall hexagonal spin nanotube”, computational condensed matter, 13, 77-82 (2017).
5. **M.Y. El Hafidi**, M. El Hafidi, “Modeling of a room temperature magnetic refrigerator based on nanofluid”, , Global Journal of Physical Chemistry, Volume 2, Issue 2, 110-118 (2011).
6. **M.Y. El Hafidi**, M. El Hafidi, “Design and performance study of permanent magnet fuel saver”, Moroccan Journal of Condensed Matter, 13 number 1 (2011).

PATENTS

1. “Générateur électrique portable à répulsion magnétique alimenté par un système hybride (Aérogénérateur/ Panneau photovoltaïque)”, **M.Y. El Hafidi**, MA Patent 39675 (2017).
2. “Economiseur magnétique des hydrocarbures”, **M.Y. El Hafidi**, MA Patent 32266 (2009).

RESEARCH INTERESTS

Expertise fields

Nano magnetism, Permanent magnets, Magnetism applications, Magnetic fuel treatment, Magnetic water treatment, Magnetic refrigeration, Magnetic repulsion engine, free motors.

Additional related fields

Quantum mechanics, Statistical physics, Spintronics.