

CURRICULUM VITAE

Prof. Dr MOHAMMED ABD-LEFDIL

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LANGUAGES: Arabic, English, French and Spanish.

POSITIONS, CHARGES AND FORMATIONS

- Assistant Professor at UM5, 1984-1986.
- Associate Professor at University of Montpellier- France, 1987-1990.
- Professor of Physics at UM5 since 1994
- Director of MANAPSE Laboratory since 2005. www.fsr.ac.ma/MANAPSE/
- Expert-evaluator of the Ministry of Higher Education and Scientific Research of Morocco.
- Reviewer (Journal of Renewable and Sustainable Energy, Solar Energy, Journal of Materials Science, Thin Solid Films, Optical Materials, Materials Chemistry and Physics, Materials Science in Semiconductor Processing ...).
- Chairman, Jury member and reviewer of more than 60 Ph.D. theses.
- Coordinator of the Master on Physics of matter, Modeling and Applications and Master Renewable energies and storage
- Member of the organizing committee and scientific council of several national and international congresses.
- Training in Italy in May 2005 (Alarico-Center and University Calabria- Italy) on nanomaterials and nanotechnologies
- Training in South Korea in November 2013 on the synthesis of silicon ingots, solar cells, solar modules and their certification;
- Stays as a visiting Professor in several laboratories specialized on PV in Germany (Fraunhofer (Fribourg), ZST (Stuttgart)), in France (Montpellier, Strasbourg, ...), in Spain (Madrid, Barcelona, Pamplona, ...) and in Canada (INRS-Montréal).

AREAS OF EXPERTISE

As Teacher: Materials Physics, Photovoltaic conversion, Quantum mechanics, Biophysics and Fundamental physics).

As Researcher: Thin films, nanoparticles, materials, semiconductors for photovoltaic conversion, detection and storage.

RESEARCH PROJECTS

- PF 7 EuroSunMed: EuroMediterranean cooperation on research and training in sun based renewable energies (Grant agreement n° 608593) **(2013 - 2017)**
- Project UM5-INRS (Canada): Development of thin layers of CZTS by pulsed laser ablation and their integration in multi-layer solar cells with high photo-conversion efficiency. **(2015-2018)**
- Member of Erasmus + project: Higher Education- International Capacity Building, Title: Strengthening Capacities of South-Mediterranean Higher Education Institutions in the Field of Solar Energy by Enhancing Links among Applied Research, Business, and Education/ MEDSOL),(Application reference number: 573722-EPP-1-2016-1-FR-EPPKA2-CBHE-JP) **(2016-2019)**
- Member of Phosphate R & D Project (OCP Foundation) "Phosphates: a strategic choice for the development of Lithium-ion and high-density sodium storage batteries (LiNa) **(2016-2019)**.
- Member of RISE Infinite Cell: International cooperation for the development of cost-effective kesterite/silicon next generation tandem solar CELLS (GA n° 777968) **(2017-2021)**.
- Member of H2020 CoSt redUction and enhanced PERformance of PV systems Super PV (GA 792245) **(2018→2022)**.

SCIENTIFIC PRODUCTION

Patents: 05 patents

**Ex. : Brevet n° WO 2017/ 03942A1 Organisation Mondiale de la Protection Intellectuelle,
International Application PCT/MA2016/000014 (2017)**

Synthesis of a novel material: Titanium (+III) phosphite $Ti_2(HPO_3)_3$, anode for lithium-ion batteries
<https://patents.google.com/patent/WO201703942A1/fr>

Publications

- Until now, **111 publications according to the Scopus Database.**
- More than 150 International and national communications.

Ph.D. and master theses

- Supervision and co-supervision of more than 25 theses.
- Supervision of more than 30 Master theses.