

POSITION TITLE: ASSISTANT PROFESSOR IN SOLID STATE CHEMISTRY

UNIVERSITY MOHAMMED VI POLYTECHNIC, UM6P

Located at the heart of the future Green City of Benguerir, Mohammed VI Polytechnic University (UM6P), a higher education institution with international standards, is established to contribute to the development of Morocco and the African continent. Its vision is honed around research and innovation at the service of education and development. This unique nascent university, with its state-of-the-art campus and infrastructure, has woven a sound academic and research network, and its recruitment process is seeking high quality academics and professionals in order to boost its quality-oriented research environment in the metropolitan area of Marrakech.

MATERIALS SCIENCE, ENERGY AND NANOENGINEERING, MSN

The Materials Science, Energy, and nano-engineering (MSN) is a department at Mohammed VI University that aims to make use of innovative research and education in order to promote solution development and entrepreneurship (in the context of Moroccan and African challenges), while training the next generation top scientists, innovators and entrepreneurs.

Research at MSN is organised in five divisions: Energy efficiency, Surface technology, Polymers and composites, Metallurgy, and Phosphates & sustainability.

With some 50 researchers and PhD students and several national and international partners, MSN is emerging as a strong actor in the Moroccan materials research scene. In 2019, the department will launch a Master program in Materials science and engineering as well as several executive master programs.

DESCRIPTION OF THE POSITION

The successful candidate must demonstrate potential to effectively develop and maintain research programs. The expertise of the candidate should demonstrate high and successful ability of investigating new materials and give a complete description of the structure and their properties. The candidate must have a strong commitment to excellence as he/she will be responsible of enhancing the quality of the research programs related to materials and nanomaterials in the department. Main tasks include fundamental research and guiding of the development of new potential functional materials and give a complete description and a better understanding of the structure in order to obtain successful results and toward innovative materials. Tasks might include the re-design of experimental setups as well as the guidance of PhD students in achieving their project goals. Participate in research conducted in collaboration with external partners. This research will be fast paced with high visibility and potential of commercialization of successfully developed technology.

Position Responsabilités:

- Synthesis and fundamental characterization of materials
- Integrate the new materials and Nano-materials into advanced technologies
- Investigate new materials in term of structure and properties using the powerful technique Rietveld refinement and related analysis
- Propose and execute novel research projects
- Review literature and identify state-of-the art
- Attend technical conferences and summarizes technical highlights
- Provide ideas, suggestions and guidance to colleagues

- Operate analytical equipment such as Raman, SEM, UV-visible, magnetism, conductivity, BET, XRD for material characterization

SELECTION CRITERIA

A preferred candidate should have:

- PhD in Chemical Engineering, Materials Science, Materials chemistry and related fields
- An h-index >10
- 4 to 5 years of hands-on research experience in designing new functional materials
- Experience in diffraction data collection and crystal structure analysis using Rietveld Refinement technique.
- Understanding other solid state characterization techniques, such as DSC, TGA, UV-vis spectroscopy, Raman spectroscopy and related techniques and analysis
- Raman and Hyper-Raman scattering (Spectral Active Modes (IR, Raman and Hyper-Raman Analysis)
- Experience in fundraising from government and international agencies and/or industry.
- Excellent leadership and project management skills with ability to foster teamwork.
- Exceptional managerial, technical, analytical, evaluative and follow-through skills, preferably in a research arm of a higher education institution or government laboratory.
- Experience in supervising undergraduate students, graduate students, and/or Post Doctoral fellows.
- Strong communication skills with the ability to write, speak, and present effectively to a wide variety of audiences including academics and industry representatives.
- Ability to forge collaborative relationships with peers and to work effectively and collaboratively with diverse stakeholders at various organizational levels.
- Very good command of oral and written English and French

APPLICATION PROCEDURE

- Applications must be sent to: recrutement@um6p.ma, before April 30, 2019 in a single electronic zipped folder with the mention of the job title in the mail's subject. The folder must contain:
- A cover letter indicating the position applied for and the main research interests.
- A detailed CV.
- A brief research statement.
- Contact information of 3 references (applicants are assumed to have obtained their references' consent to be contacted for this matter).
- The short-listed candidates will be invited to meet the university selection committee.

COMPENSATION PACKAGE

- Best in class salaries
- 30% annual bonus on gross salary.
- Research budget allowance to professor
- Best in class :
 - IP sharing policy (33% for professor)
 - MOOCs policy (60% for professor)
 - Consulting policy (100% for professor when teaching time is completed)
- Complete benefits including housing, tuition fees, life & medical insurance, retirement, maternity leave and sabbatical.