

Advertisement #2

Post-Doctoral Position to Work on Carbon Capture and Conversion (CCC)

Job Description:

The Interdisciplinary Research Center for Hydrogen and Energy Storage (IRC-HES) is looking for a brilliant and dedicated post-doc to support R&D activities in the area of Carbon Capture. Technically, the focus would be on the design and development of contemporary class of more effective, comparatively cheap, and industrially applicable materials for Carbon Capture mainly through adsorption methods.

Job responsibility:

- Design, synthesis, and characterization of high-performance engineering materials for Carbon Capture.
- Conduct adsorption and thermodynamics studies.
- Data analyses, interpretation and reporting.
- Mentorship of Ph.D., M.Sc., and/or B.Sc. students.

The work will involve interacting and collaborating with researchers from universities and private industry.

Desired Requirements:

- The candidate should be technically sound in CCC evaluation and development, thermodynamics, and familiar climate technology and policy.
- The candidate should be expert in CO₂ Capture/Separation technology (Solid sorbent technology).
- The project may also include feasibility studies of CCC using mechanistic modeling and simulation including uncertainty analysis and risk assessment.
- Applicants who graduated from top-ranked universities in the QS world ranking are particularly welcome.
- Ph.D. position in Chemistry & Chemical/Material/Mechanical Engineering or related field.

Research background:

- Experience preferably in designing and developing materials for Carbon Capture applications.
- It is desirable to have background in Carbon Capture technology (post-combustion, pre-combustion) through adsorption/separation processes during Ph.D.
- Applicants who have worked and experience in other CCC technologies are encouraged to apply.

In addition: Excellent publication record in the field of required expertise, ability to develop and implement new research ideas, and to design and perform advanced experiments, excellent speaking, writing and communication skills.

E-mail enquiries prior to making an application are welcome, in which case contact Professor Zain H. Yamani (zhyamani@kfupm.edu.sa)