

# Advertisement #1

**Search for a post-doc to work on oxy-hydrogen combustion systems with carbon capture**

## **Job Description**

The KFUPM Interdisciplinary Research Center for Hydrogen and Energy Storage (IRC-HES) is seeking an outstanding and motivated post-doc to support R&D activities in the area of oxy-hydrogen combustion systems with carbon capture. The post-doc will perform research on combustion systems, advancing the state of knowledge, publishing high-impact papers, and driving innovation. The role involves developing technologies of oxy-hydrogen combustion systems with carbon capture that enable cost-effective zero-emission operation. The aim is to develop and test, experimentally and numerically, novel/efficient burner designs for clean combustion in gas turbines with carbon capture, as well as hydrogen mobility in internal combustion engines. Knowledge of experimental test-rig and burner design as well as CFD codes for combustion modeling is essential. Hands-on experience in hydrogen mobility and oxy-combustion is expected.

PhD in Mechanical Engineering from top-ranked universities in the QS ranking is particularly welcome.

Informal e-mail inquiries prior to applying are welcome, in which case, please contact Professor Zain H. Yamani ([zhyamani@kfupm.edu.sa](mailto:zhyamani@kfupm.edu.sa)).