

Direct Link: https://www.AcademicKeys.com/r?job=243220 Downloaded On: Aug. 21, 2024 6:24pm Posted Aug. 16, 2024, set to expire Dec. 15, 2024

Job Title	Postdoctoral Fellow: Electrolyzer and Fuel Cell Technologies
Department	Clean Energy Research Platform
Institution	KAUST
	Thuwal, , Saudi Arabia
Date Posted	Aug. 16, 2024
Application Deadline	Open until filled
Position Start Date	Available Immediately
Job Categories	Post-Doc
Academic Field(s)	Mechanical Engineering
	Energy Technology
	Chemical/Petroleum
Apply By Email	mani.sarathy@kaust.edu.sa
Job Description	



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The KAUST Clean Energy Research Platform (CERP) is seeking a postdoctoral candidate to aid in the research activities related to electrolyzer and fuel cell technologies for the production and utilization of green hydrogen and e-fuels as part of the Kingdom transition to a low-carbon economy. The candidate will either manage or support research projects involving electrolyzer/fuel cell technologies, from most mature Alkaline and PEM technologies to emerging ones such as SOEC, PCEC and AEM. Projects include testing of these technologies at cell and stack levels up to kW scale, erection of a pilot system comprising one of these technology from design to manufacturing to operation, as well as the development of a benchmarking database of the available technologies from lab to industrial scales. The candidate might also get involved in the development of modelling tools at different scales to predict the operational behavior of these technologies. The candidate will write technical papers and present his/her work at program reviews and technical conferences. The candidate must be able to work independently as well as in a research team.

The candidate will work under the guidance of Mani Sarathy (Chair of Clean Energy Research Platform and Professor of Chemical Engineering). The tema's research interest revolves around developing sustainable and energy and chemical technologies with decreased net environmental impact. A highly emerging thrust of our research is production and utilization of green/low-carbon hydrogen and e-fuels. We published over 50 papers in the last 2-3 years in the top engineering and science journals. Previous postdoctoral researchers affiliated with us now work as Faculty members in UK, USA, Middle East, and Asia, and also have leading roles in multi-national corporations. We are constantly looking for new members to join our family to help each individual to realize their fullest potential for excellence.

ESSENTIAL DUTIES

- Manage or support several projects related to electrolyzer technologies (ALK, PEM, AEM, SOEC, PCEC)
 - Cell and Stack testing (up to kW scale)
 - Design, Manufacturing and Operation of pilot systems (kW to MW scale)
 - Modelling work (cell/stack/system levels)
 - Development of a benchmarking database of the available electrolyzer technologies
- Contribute to the development and leverage of the research facility dedicated to electrolyzer and fuel cells activities
- Work effectively with members of a research team, supporting staff and collaborators outside of KAUST, including colleagues at leading international combustion research groups.
- Present work at working group meetings and conferences.



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ESSENTIAL SKILLS, KNOWLEDGE, AND ABILITIES

- Strong background in Electrochemistry applied to Energy with a strong focus on data science and numerical simulations.
- Strong background in Material Sciences for Energy with a focus on materials for electrolyzers and/or fuel cells
- Expertise in electrolyzer and/or fuel cell technologies.
- Strong experience with electrolyzer and/or fuel cell testing at cell, stack and/or system scales.
- Ability to take guidance from leadership and refine research directions accordingly.
- Ability to work in a team environment

APPOINTMENT, SALARY AND BENEFITS

Salary: Highly competitive salary depending on qualification and seniority. No income tax is paid in Saudi Arabia.

Other benefits: Free furnished housing, free health care (medical and dental), annual vacation, air transportation to KAUST and return after the end of contract.

CONTACTS, APPLICATION MATERIAL AND DEADLINE

Interested applicants should send (i) a detailed CV and (ii) contacts of three references

NOTE: This is a one-year term appointment with the possibility of extension to a maximum of four years. The position will remain open until filled, but the candidate is expected to join the team as soon as possible.

King Abdullah University of Science and Technology (KAUST) is an international, graduate-level research university located on the Red Sea in the Kingdom of Saudi Arabia. Dedicated to inspiring a new age of scientific achievement that will benefit the region and the world, KAUST aims to contribute to the very best of future research.



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Contact Information

Please reference Academickeys in your cover letter when applying for or inquiring about this job announcement.

- Contact Mani Sarathy Clean Energy Research Platform KAUST Thuwal Saudi Arabia
- Contact E-mail mani.sarathy@kaust.edu.sa