

Postdoctoral opportunities in laser diagnostics for reacting flows at KAUST



The Advanced Laser Diagnostics and turbulent combustion lab, affiliated with the Clean Combustion Research Center at KAUST has an immediate opening for a qualified postdoctoral researcher in the area of laser diagnostics for reacting flows. The appointee will have the opportunity to contribute to the development and application of Raman spectroscopy and filtered Rayleigh scattering (FRS) for applications in reacting flows. Responsibilities of the candidate will include: (i) development and application of Raman spectroscopy for carbon-free combustion; (ii) development and application 2D Raman scattering and FRS in high-pressure reacting flows (iii) development and application of Raman spectroscopy for temperature and species measurements in high-pressure catalytic reactors.

The appointee will work in an interdisciplinary team with expertise in combustion, chemistry and fluid mechanics. As part of the postdoctoral tenure, the appointee will assist with the supervision of graduate students, and collaborate with visiting scientists from other institutions. The successful candidate will conduct independent research under the mentorship of Professor Magnotti, and will be expected to publish in the open literature.

Qualifications

Successful candidates must have a Ph.D. in engineering, applied physics or other close fields. Strong verbal and written communication skills in English, and the ability to work in an interdisciplinary and international team are required. Candidates should have a proven record of original contributions in laser diagnostics for combustion research. Preference will be given to candidates with experience in Raman spectroscopy, FRS, CARS, LIGS, or related techniques.

Benefits

Competitive salary, free housing, medical, dental and life insurance, relocation allowance and yearly air travel allowance. No income tax is paid in Saudi Arabia. Applications will be reviewed until the position is filled.

How to Apply

Prospective candidates should email Professor Gaetano Magnotti (gaetano.magnotti@kaust.edu.sa) a package that includes: (i) a brief cover letter describing their background and interest in the position, (ii) a C.V., (iii) two representative publications, and (iv) names and email addresses of three referees.