



ICHARuS

Investigation and Control
of Hydrogen Flames Across the Scales

CALL FOR APPLICATIONS

12 PhD positions in the Marie Skłodowska Curie Action - Doctoral Network

- DC1:** TITLE: Modelling of Plasma Assisted Combustion
LOCAL SUPERVISOR: prof. Maria Grazia De Giorgi
HOST ISTITUTION: University of Salento (IT)
- DC2** TITLE: Investigation of chemical pathways in hydrogen combustion
LOCAL SUPERVISOR: prof. Benedicte Cuenot
Prof. Andrea Giusti; CO-SUPERVISOR: N. Barleon;
HOST ISTITUTION: CERFACS (Fr) / IC (UK)
- DC3** TITLE: Hydrogen flame response to combined electrical and acoustic modulations
LOCAL SUPERVISOR: prof. Thierry Schuller
HOST ISTITUTION: INPT
- DC4** TITLE: Data-driven closures for large-eddy simulation of turbulent hydrogen combustion with electric fields
LOCAL SUPERVISOR: prof. Antonio Andreini
HOST ISTITUTION: UNIVERSITY OF FLORENCE
- DC5** TITLE: Large-eddy simulation modelling of multi-mode hydrogen combustion with magnetic fields
LOCAL SUPERVISOR: Dr Ivan Langella
HOST ISTITUTION: TECHNISCHE UNIVERSITEIT DELFT
- DC6** TITLE: Modelling of plasma-assisted combustion for the control of combustion instabilities
LOCAL SUPERVISOR: prof. Benedicte Cuenot
CO-SUPERVISOR: N. Barleon
HOST ISTITUTION: CERFACS

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- DC6** TITLE: Modelling of plasma-assisted combustion for the control of combustion instabilities
LOCAL SUPERVISOR: prof. Benedicte Cuenot
CO-SUPERVISOR: N. Barleon
HOST ISTITUTION: CERFACS
- DC7** TITLE: Experimental characterization of stability of swirl flame under plasma discharges,
LOCAL SUPERVISOR: prof. Antonio Ficarella;
CO-SUPERVISOR: Maria Grazia De Giorgi
HOST ISTITUTION: University of Salento
- DC8** TITLE: Experimental Studies of the interaction of instable flames and NRP forcing
LOCAL SUPERVISOR: Prof. Oliver Paschereit;
CO-SUPERVISOR: Prof. Myles Bohon
HOST ISTITUTION: Technische Universität Berlin
- DC9** High-fidelity CFD modelling of stability and control of gas turbine hydrogen burners
LOCAL SUPERVISOR: prof. Andreini Antonio
HOST ISTITUTION: University of Florence
- DC10** TITLE: Study of piloting and fuel staging for hydrogen injectors
LOCAL SUPERVISOR: Klaus Peter Geigle
HOST ISTITUTION: DLR, Enrollment: University of Stuttgart
- DC11** TITLE: Investigation of electromagnetic effects at the small scales
LOCAL SUPERVISOR: Prof. Andrea Giusti
HOST ISTITUTION: Imperial College, UK
- DC12** TITLE: Direct numerical simulations of turbulent flames under external electromagnetic fields
LOCAL SUPERVISOR: Prof. Andrea Giusti
HOST ISTITUTION: Imperial College, UK

APPLICATION PROCESS

In order to apply, send an email to both info@icharus.eu and mariagrazia.degiorgi@unisalento.it
The mail subject has to be ICHARUS DC X (X being the number of the project). Please include a letter of interest, a CV and at least one recommendation letter as one pdf file (max file size 5 MB).

Applicants should send multiple application emails if applying for more than one position