**APPLICATION FORM**

|  |  |
| --- | --- |
| Family name |  |
| Given name |  |
| Date of birth |  |
| Gender | |  | | --- | | **Female** | | **Male**  **Non-binary** | |
| Nationality |  |
| Address |  |
| Email |  |
| M.Sc. degree title and subject (e.g., mechanical engineering, chemical engineering, chemistry, ...) and Institution awarding the title |  |
| M.Sc. degree (already achieved) | |  | | --- | | **Yes, on DD/MM/YYYY** | | **No** | |
| If M.Sc. already achieved: final mark |  |
| If M.Sc. degree NOT achieved yet, please provide expected date of awarding (the degree must be achieved before the PhD enrollment date) | **DD/MM/YYYY** |
| Duration of the B.Sc. program [years] |  |
| Duration of the M.Sc. program [years] |  |
| English language certification and achieved level. This is not necessary for applicants:  - who are citizens of nations where English is one of the official languages;  - who have been awarded or will be awarded academic qualifications by an institute in which all teaching activity is carried out in English**.** |  |

Please select the DC position you are applying for (MAX 4 selections are allowed).

| **DC** |  | **Title** | **Apply** |
| --- | --- | --- | --- |
| DC1 | **CNRS** | Development of a reduced virtual chemical scheme for modeling combustion of NH3 & CH3OH, including pollutant formation |  |
| POLIMI |
| DC2 | **POLIMI** | Numerical and experimental study of combustion of H2-enriched natural gas premixed laminar flames |  |
| CNRS |
| DC3 | **CNRS** | Experimental study of the combustion of NH3 and its blends with H2 for swirled turbulent flow conditions |  |
| TUDA |
| DC4 | **TUDA** | Experimental investigation of multi-regime combustion of carbon e-fuels and their blends with traditional fuels for laminar and turbulent flow conditions |  |
| CNRS |
| DC5 | **POLIMI** | Detailed kinetic mechanisms of CH3OH, DME and OME, including formation of carbonaceous particles (soot) |  |
| ULB |
| DC6 | **TUDA** | Modelling and simulation of multi-regime turbulent combustion and pollutant formation of carbon e-fuels and their blends with traditional fuels |  |
| CNRS |
| DC7 | **CNRS** | Uncertainty Quantification of kinetic mechanisms and assessment of radiative heat transfer in NH3 reactive mixtures |  |
| POLIMI |
| DC8 | **CNRS** | Modeling and simulation of turbulent flames in distributed combustion regime via a hybrid RANS (Reynolds averaged Navier Stokes approach) / LES (Large Eddy Simulation) formulation |  |
| ULB |
| DC9 | **ULB** | Reduction and optimization of kinetic mechanisms for applications in MILD combustion |  |
| POLIMI |
| DC10 | **TUDA** | Modeling and simulation of turbulent combustion of liquid e-fuels based on the Transported FDF approach |  |
| POLIMI |
| DC11 | **POLIMI** | Advanced modelling of single droplet evaporation and combustion of liquid carbon e-fuels |  |
| TUDA |
| DC12 | **ULB** | Advanced MILD combustion technologies for NH3 and NH3/H2 mixtures in micro gas turbine combustors |  |
| CNRS |
| DC13 | **POLIMI** | Co-firing of e-fuels with conventional and renewable fuels for transportation applications |  |
| ULB |
| DC14 | **ULB** | H2/NH3 combustion in a reverse-flow, pressurized, rich-quench-lean combustor |  |
| TUDA |
| DC15 | **ULB** | Techno-economic and global life cycle assessment of e-fuels in energy-intensive industrial applications |  |
| POLIMI |

*Documents to be included in the application*

Each applicant should prepare an application package including:

|  |  |
| --- | --- |
| This application form |  |
| CV using the European template |  |
| Degree transcripts |  |
| List of publications, including M. Sc. Thesis (if available) |  |
| Copy of up to three publications (if applicable) |  |
| Certificate of English language, if necessary |  |
| Signed copy of passport or identity card |  |
| Motivation letter |  |
| Contact details of two referents (including the academic mentor) |  |

**Protection of personal data**

Please confirm you have read and ACCEPTED the conditions on the treatment of personal data reported in the privacy consent document that can be downloaded [HERE](http://desire-msca.eu/wp-content/uploads/2025/02/INFO_PRIVACY_UE2016_679.pdf).

YES, I confirm

NO, I do NOT confirm

Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_