

## HITEC Fellowship – Application Form

**Given Name/First Name**

**Surname/Last Name**

**Master's Degree or equivalent**

In:

Exact Title:

From (University or other institution/city/country):

**Application for**

- a. specific HITEC Project (tick one of the following boxes; project details in the call for applications)
- #1: Simulation of transport processes in asymmetric gas separation membranes
  - #2: Modelling effect of oxidation induced depletion of B and Zr on lifetime on Ni-base superalloy components
  - #3: Influence of inorganic trace elements and their speciation on the conversion of solid fuel particles in gasification atmosphere
  - #4: Fuel Retention in Wf/W Composite Materials for Fusion Applications
  - #5: Tritium permeation barriers for future fusion reactors
  - #6: Self-passivating tungsten “smart” alloys for future fusion power plants
  - #7: Depth-resolved photo emission studies on the interaction of nitrogen with beryllium containing surfaces for fusion
  - #8: Optical diagnostics for improved production of solar modules
  - #9: Prompt gamma signature of actinid
  - #10: Measurements of OCS in the TTL with the airborne Mid-Infrared Cavity enhanced Absorption spectrometer and investigation of its contribution to the stratospheric sulfate aerosol loading (AMICA–OCS)
  - #11: Airborne Imaging and 3-D Tomography of Gravity-Waves
  - #12: Glaciation processes in mixed-phase clouds
  - #13: Development of a small satellite for climate research (DiSSECT)
  - #14: Aircraft measurements and modelling of chemical tracers to quantify transport and mixing in the UTLS
  - #15: Atmospheric oxidation of organic molecular markers: a stable carbon isotopes perspective
  - #16: Oxygenated organic volatile compounds from real plant emissions: formation and partitioning
  - #17: Climate effects of tropopause region aerosol: Process-oriented studies using combined in-situ observations and the chemistry- climate model ECHAM-HAMMOZ
  - #18: Stochastic Short Range Forecasts for Wind and Solar Energy Prediction
  - #19: Multi-Elemental speciation analysis in fine dust by online sequential extraction as novel approach for identification of dust sources
  - #20: Experimental investigation and numerical modelling of dust removal from firewood stoves by electrostatic precipitators
  - #21: Selection of biomasses for biogas production regarding to the nutrient composition

#22: Ultra-long-lived investment projects: the value of R&D expenditures in alternative carbon capture technologies

b. a research field/institute (tick one of the following boxes; details about the research fields in the call for applications)

- # 23 Materials Synthesis and Processing (Forschungszentrum Jülich, [IEK-1](#))
- # 24 Microstructure and Properties of Materials (Forschungszentrum Jülich, [IEK-2](#))
- # 25 Heat and Mass Transfer (RWTH Aachen University, [WSA](#))
- # 26 Energetic conversion of particulate fossil fuels and biomass  
(Bochum University, [Energy Technology](#))
- # 27 Thin-Film Photovoltaics (Forschungszentrum Jülich, [IEK-5](#))
- # 28 Atmospheric Research – Tropopause Region (Forschungszentrum Jülich, [IEK-7](#))

**! If you want to apply for more than one project or research field you will have to fill out a separate form for each project/research field.**

If you need more space for your documentation, you can add a separate, additional page.

**Personal and Research Statement (Motivation for application, max 1-1,5 pages)**

Please describe your research motivation referring to the HiTEC project or describe your research interest in the specific research field chosen. Describe what skills and scientific experience enable you to successfully work in this field as a PhD student.

When writing your personal statement, make sure to cover also the following questions:

- why do you think is HiTEC the right choice for you?
- why do you want to come to Germany, to Jülich or to the universities of Aachen, Bochum, Cologne, Düsseldorf, Wuppertal?

### **Scientific Experience**

Please outline briefly your research projects, completed or ongoing. Describe your experimental background and list the methods you have used in your research; add how familiar you are with the techniques (expert, good, basic).

**Personal Data**

Given Name/First Name

Surname/Last Name

Gender

Male    Female

Date of Birth

Place of Birth

Nationality

Country of Permanent Residence

Marital Status

No. of Children

Mailing Address, where you may be contacted at any time:

c/o

Street

Zip Code/Town/State/Country

Home Address:

Street

Zip Code/Town/State/Country

E-mail Address

Tel.-No.

**Educational Data**

Bachelor Degree

Exact Title

University or other Degree awarding institution (Name, city, country)

From

Until

Degree awarded on

Main Subject/Major

Subsidiary Subject/Minor

Results/Marks

Master's Degree

Exact Title

University or other Degree awarding institution (Name, city, country)

From

Until

Degree awarded on

Award expected

Main Subject/Major

Subsidiary Subject/Minor

Thesis Title

Results/Marks

Further Degrees

Exact Title

University or other Degree awarding institution (Name, city, country)

From

Until

Degree awarded on

Award expected

Main Subject/Major

Subsidiary Subject/Minor

Thesis Title:

Results/Marks

Degrees held (summary)

Awarded on (day/month/year)	Exact Degree Title	Subject/Major	Marks

Further Skills

Publications (if applicable)

Journal Articles

Conference Contributions

Academic Honours, Awards, Fellowships

**Professional Data**

Employer

Address

From

Until

Responsibility/Task

Employer

Address

From

Until

Responsibility/Task

Employer

Address

From

Until

Responsibility/Task

## References

**Two letters of recommendation** from faculty members or others well acquainted with your academic work are required.

Letters of recommendation should be submitted electronically or via postal services directly by the professors. Letters that have been submitted by the applicants themselves will not be accepted. Please be aware that the deadline for your referees to submit their letters of recommendation is the same as the application deadline. **Therefore, you need to make sure that they have enough time to submit their letters before the closing of the call.**

Name

Title

Institution

Address

E-Mail

Tel.-No.

Name

Title

Institution

Address

E-Mail

Tel.-No.

### **Command of the English language**

If your native language is neither English nor German, you must submit a proof of your English language proficiency. This is not required if you have attended a school, university or college where English is the language of instruction. Indicate results of the followings tests, alternatively:

- Test of English as a Foreign Language (TOEFL); reading, listening, speaking, writing; please also indicate year of test.
  - Internet-Based Test (TOEFL iBT):
  - TOEFL Computer-Based Test (CBT):
  - TOEFL Paper-Based Test (PBT):
- Certificate of Proficiency in English (CPE) or Certificate in Advanced English (CAE); please indicate year of test
- International English Language Testing System - Academic Test (IELTS); please indicate year of test

## **Transcripts**

One official transcript from every college or university you have attended should be submitted. To prevent delays, you should arrange with your registrar to provide transcripts as soon as possible or submit preliminary transcripts with as many grades as possible.

## **Documents to be handed in with your application:**

1. Filled out application form (photo optional)
2. Proof of English language proficiency
3. Transcripts (scans)

Please package all documents in one pdf-file.

4. 2 Letters of recommendation, to be sent by the reviewers directly to [b.koester@fz-juelich.de](mailto:b.koester@fz-juelich.de)

I hereby verify that all information given is complete and accurate. I am aware that providing false or incomplete information intentionally may lead to rejection of my application.

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Location, date

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Signature