



Call for Application for SE²A International Fellowships

The Cluster of Excellence **SE²A – Sustainable and Energy Efficient Aviation** is an interdisciplinary DFG-funded research center pushing forward technologies and integrative strategies to make future air traffic efficient while meeting the competing demands for continuous growth and environmental sustainability at the same time. In this research alliance, scientists at the TU Braunschweig, Leibniz University Hannover, the German Aerospace Center (DLR), and the National Metrology Institute of Germany (PTB) have joined forces in this extraordinary scientific undertaking.

Within the three core research areas: Assessment of the Air Transport System (ICAA), Flight Physics and Vehicle Systems (ICA B), Energy Storage and Conversion (ICA C), the cluster offers additional financial support to advance highly innovative ideas and approaches by experienced researchers from abroad.

Who can apply?

Submit an application if you are a researcher from abroad with above average qualifications. The successful applicant has completed his or her doctorate less than twelve years ago, and has already established an own research profile with an independent publication record, demonstrating academic performance well above the average of the respective discipline. The applicant is working at the level of an Assistant Professor, Junior Research Group Leader, Associate Professor or in equivalent research positions, including positions in non-university research institutions. The SE²A International Research Fellowship for experienced researchers allows the applicant to carry out long-term research, usually one year, in special cases two years, at one of the Cluster sites in Niedersachsen, Germany. Applicants choose their own topic of research in the field of sustainable and energy-efficient aviation. The proposed academic host must be Principal Investigator of the Cluster.

The proposal must

- clearly define own, original ideas on advanced scientific methodologies and/or new knowledge
- be of high scientific quality and mention the state of the art
- clearly identify how the fellowship will add to the Cluster research at project and global level.

The fellowship is flexible and can be divided up into as many as two stays within two years. As the Cluster strongly promotes participation of women in engineering sciences, applications of female scientists are especially welcome.

What we offer:

Successful applicants will receive a monthly payment of Euro 3170 for covering all extra cost of the scientific long-term visit. In addition, the travel costs needed for travelling to/from the Cluster site for the long-term visit will be reimbursed. The fellowship holder will be expected to perform his or her research work at the host institute. The successful applicant will be fully integrated into the Cluster's communication streams.

Application process

Applicants prepare the **research proposal** of 4-6 pages (pt 11) comprising the statement of purpose and motivation, the original idea of methodical and contextual contribution to the chosen cluster area, own preliminary work (publications related to the proposed topic), working program, time line, research

needs (consumables, laboratory infrastructure), and planned interdisciplinary collaborations within the cluster.

Applicants must provide **personal details** including full CV, academic certificates and transcripts, other supporting certificates, and a complete list of publications, divided into the three categories of a) reviewed journal publications and equivalent, b) scientific books and book chapters, c) other publications.

Signatures and attachments: The research proposal must be signed by the applicant. The applicant must provide a confirmation by the host that she/he will cover all consumables and investments as needed for the research stay. The host receives a lump sum of 800 € per month to cover all expenses arising from research work. The letter shall also explain in how far the proposed fellowship will enhance scientific progress within the Cluster.

Applicants can submit their proposals twice a year, i.e. by 31 March or 30 September to se2a@tu-braunschweig.de

Personal data and documents related to the application process will be stored electronically.

For further information please visit our website www.tu-braunschweig.de/se2a

Review process

The proposal will be reviewed by independent experts in the field of the application. On this basis the SE²A Board will select the successful proposal based on its original concept, scientific quality, and the expected contribution to the SE²A Cluster.

Funding decisions will be communicated to the applicants as soon as possible, but within 6 months at the latest.