

The **Jülich Aachen Research Alliance (JARA)** is an innovative cooperation model between RWTH Aachen University and Forschungszentrum Jülich.

RWTH Aachen University is one of Germany's pre-eminent Universities of Excellence and is renowned for its high-quality teaching and world-class research. Assuming profound responsibility towards society, RWTH addresses bold scientific questions and translates its knowledge into meaningful applications. In a dynamic, creative, and international environment, RWTH develops solutions to tackle both current and future challenges.

Forschungszentrum Jülich is a magnet for outstanding scientists, emerging talents, and management professionals. As a member of the Helmholtz Association, we tackle grand societal challenges and conduct research for a digitized society, a climate-friendly energy system, and a resource-efficient economy. We are passionate about excellence and our open campus inspires collaboration between people from all over the world. Join more than 7,400 staff members in one of Europe's largest interdisciplinary research centers and help us shape change!

Joint appointment of a full professor (W3) at Forschungszentrum Jülich and RWTH Aachen University

Director (f/m/x) at the Institute of Climate and Energy Systems (ICE-2) at Forschungszentrum Jülich

in line with the Jülich model to be appointed as

Full Professor (W3) (f/m/x) for Techno-Economic Energy Systems Assessment RWTH Aachen University – Faculty of Mechanical Engineering

The place of work will be Jülich.

We are seeking a highly qualified individual as director of the recently restructured Institute of Climate and Energy Systems, Jülich Systems Analysis (ICE-2), at Forschungszentrum Jülich. This role will also encompass responsibilities for research and teaching in the field of "Techno-Economic Energy Systems Assessment". The research area of this W3 professorship will include the interface between energy technology and socio-economic assessment. The professorship will be established according to the Jülich model and will be embedded at RWTH Aachen University and Forschungszentrum Jülich as part of the Jülich Aachen Research Alliance (JARA), complementing existing institute divisions and professorships. ICE-2 shall in the future include another director complementing this position with a socio-economic expertise.

ICE-2 shall focus on technology-open techno-economic analysis of energy systems, transitioning from specific technologies towards socio-economic assessment of integrated energy systems and advising energy policy. System analysis requires innovative methodology approaches to cope with the challenges ahead, including the development of the energy systems modeling as is done in ETHOS suite. It should also broaden its scope to consider next to hydrogen-economy, bio-economy, integration of carbon management, material resources, and circularity leveraging the high-performance computing infrastructure at FZJ. A better integration with climate modeling performed in ICE-3 and ICE-4 is envisaged. The focus on scenario generation and transformation pathway analysis shall be continued. The modeling and analysis of systems is based on simulation and optimization approaches using state-of-the-art numerical methods, thus ideally complementing method development and experimental facilities in other institute divisions.

The candidate we are looking for has proven expertise in techno-economic modeling and assessment, ideally in the interface between technology development and socio-economic analysis. The person should have shown the ability to be innovative in their research field. The very high scientific quality of the candidate's work is demonstrated, e.g., by publications in highly ranked journals and/or patents and experience in leading publicly-funded large-scale projects.

The successful candidate will be able to establish, maintain, and efficiently use collaborative networks within FZJ and RWTH as well as with other partner institutions nationally and internationally. Excellent integration and communication skills in a scientific and political environment are essential, particularly with regard to the societal impact of research.

Research activities of this institute division will be pursued in close collaboration with other institute divisions at FZJ, especially with those developing new energy technologies, those who design and operate energy systems, and those modeling climate.

A collaborative approach to research and teaching is also expected with the Faculty of Mechanical Engineering and the School of Business and Economics at RWTH Aachen University in line with the Jülich model. Active involvement in the profile areas of RWTH Aachen University (in particular, the profile area Energy, Chemical and Process Engineering [ECPE]) will be encouraged.

Requirements include a university degree, a doctoral degree, and additional research experience, e.g., evidenced through a habilitation (post-doctoral lecturing qualification) or equivalent accomplishments as a university researcher or junior professor or in a research position in a university, a research institution, in industry, administration, or in another societal setting. The candidate should bring the ability to manage and co-lead a large interdisciplinary and diverse institute division. Furthermore, good teaching skills are also expected. The application should include the usual supporting documents (CV, certificates, list of publications, teaching experience, brief summary of previous research activities, including details of third-party funding, and a research proposal for the position advertised).

Applications should be in English and addressed to Prof. Dr.-Ing. Wolfgang Schröder, Dean of the Faculty of Mechanical Engineering at RWTH Aachen University, and to Prof. Dr. Ir. Peter Jansens, Member of the Board of Directors of Forschungszentrum Jülich. The deadline for applications is November 1, 2024. Please apply online via the RWTH appointment portal: www.berufungsportal.rwth-aachen.de.

We welcome applications from all suitably qualified candidates regardless of gender. RWTH Aachen University and Forschungszentrum Jülich are certified family-friendly employers and have dual career programs in place. We are committed to encouraging women in their careers and therefore particularly welcome applications from women. Female applicants are given preference if they are equally suitable, competent, and professionally qualified, unless a fellow candidate is favored for a specific reason. Applications from suitable candidates with disabilities are explicitly encouraged. Upon acceptance of the position, support will be offered through a comprehensive human resource development program.

For further information on joint applications, visit <https://go.fzj.de/appointments>.