

„Energy and environment - My idea for tomorrow“

Call for applications for doctoral students of all disciplines

How do we want to live tomorrow? What will climate protection and the energy transition look like in the future?

Are you pursuing the question of how our energy future and environment could be shaped with your doctorate? Then you are invited to apply for the Energy Campus. We are looking for young researchers who contribute to a sustainable and livable future with their vision as part of their doctorate.

All ideas are welcome

Are you developing resource-conserving storage systems that create flexibility in the future energy system? Or are you working on environmentally friendly materials for energy generation and transport? Perhaps you also have an idea which motivates people to reduce their personal CO₂ footprint, e.g. by researching human behaviors and creating incentive systems? Do you know how to make tomorrow's agriculture more sustainable and climate-friendly? Are you concerned with sector coupling and the view towards a holistic energy system for Germany, embedded in Europe? Do you know how a practicable charging management system for electric vehicles should look, or what the mobility of the future should entail? Are you developing the app of the future that conveniently displays energy requirements for consumers and energy suppliers alike? Or do you know how an entire neighbourhood can become smart and energy self-sufficient...

Apply now!

Send us an excerpt from your doctoral work, regardless of its current stage. If you are unsure whether the topic of your thesis is appropriate in terms of content, just give us a call or write a short e-mail. The call for proposals is deliberately broad in scope in order to address doctoral students from all disciplines. We are looking forward to your ideas on the new energy world!

Target group

The call for ideas is open to doctoral students from all disciplines, institutes, and universities.

You're working on your doctorate, and we're here to award prizes!

We invite the best applicants to the "**Energy Campus**" **symposium**. During the event, you will have the opportunity to learn first-hand about the latest research and development trends, make valuable contacts and present your submission.

The three most innovative ideas will be awarded 4,000 EUR (1st place), 2,000 EUR (2nd place) and 1,000 EUR (3rd place) and, after consultation with the authors, will be published in the print edition of "et" ("Energiewirtschaftliche Tagesfragen").

In addition, you can present your contributions to a selected audience of high-ranking decision-makers from business, industry, research and politics and representatives of associations and NGOs.

We invite all participants to our foundation events (on- and offline) and to the closed LinkedIn alumni group. This way, you become part of a community and can exchange ideas with other doctoral students and potential employers from your field of interest.

Contact person

Aline Sommer

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**Symposium "Energie-Campus" of the Stiftung Energie & Klimaschutz as part of the
"Energie und Umwelt - Meine Idee für morgen"**

Friday, 29th of November 2024

High Performance Computing Center Stuttgart (Höchstleistungsrechenzentrum HLRS),
Nobelstraße 19, 70569 Stuttgart, www.hlrs.de

Agenda (held in German)

12:30	Registration
13:00	Computer room tour and CAVE demo (3D visualization lab) in two groups
14:00	Welcome Prof. Dr.-Ing. Kai Hufendiek Head of the Institute of Energy Economics and Rational Energy Use (IER), University of Stuttgart
14:15	"Digitally sustainable - is that possible?" Prof. Dr.-Ing. Michael Resch Director of the High Performance Computing Center Stuttgart (HLRS) and the Institute for High Performance Computing (IHR) at the University of Stuttgart
15:00	AnswerAI - GenAI@NETZ Karen auf der Horst Presentation of the new network monitoring app based on GenAI, strategies for evaluating RAG systems and practical insights into the project
15:45	Coffee break
16:00	Presentation of the submissions Pitches of selected contributions (can be held in English)
17:00	Coffee break
17:15	Presentation of the submissions
18:00	Award ceremony Prizes for the most innovative contributions
18:30	Ending of the event with a little snack

Information for applicants

Your submission consists of three pdf files:

- Cover page: Title of the submission, contact details (your name, institute, field of study, address, e-mail and daytime phone number where we can reach you)
- Summary of your doctorate (this part will be passed on to the jury): with title, but anonymous, i.e. without your name and the name of your institute. Language: English or German, length: maximum five DIN A 4 pages. The work may contain graphics or pictures. Literature/sources do not have to be indicated, but should be traceable in case of queries.
- Short presentation (2-3 slides) with an overview of your submitted work (not part of the evaluation). You can submit this file as soon as you are admitted to the symposium.

The deadline for submissions is Sunday, 27th of October 2023 at 11:59 p.m.

Please send your submissions by e-mail to the Energy & Climate Protection Foundation:
kontakt@energie-klimaschutz.de.

You will find out whether your submission has been admitted to the competition by the 4th of November 2024. Participation is free of charge.

The "**Energy Campus**" **symposium** and the announcement of the winners will take place on **Friday, 29th November 2024 in Stuttgart**. The works are evaluated by a high-ranking jury from industry and research. Criteria for the award are originality of your approach, relevance for energy system transformation and climate protection, scientific quality and presentation.

The submissions and the work results contained therein remain your intellectual property. Of course, we will take your publication blocks into account. Papers accepted for the symposium will only be published on the Energy & Climate Protection Foundation's website after prior approval by the submitting parties.

By participating in the final symposium, you agree that any photographs or film recordings made in connection with the event may be published without any claim to remuneration.

JURY

Prof.-Ing. Kai Hufendiek – President of the Jury



As head of the Institute of Energy Economics and Rational Energy Use (IER), Kai Hufendiek has been teaching and researching at the University of Stuttgart since 2014. In addition to the holistic analysis and evaluation of energy systems and individual energy technologies with regard to their economic, technological, social and ecological effects, his research focuses on methods for the design and operational optimization of operation and market integration of centralized and decentralized energy systems and energy efficiency in industry and commerce. In addition, he is the coordinating director of the STRise research network, which brings together the interdisciplinary systems analysis expertise of the University of Stuttgart (IER and ZIRIUS), the German

Aerospace Center (DLR) and the Center for Solar Energy and Hydrogen Research Baden-Württemberg (ZSW) at the Stuttgart site.

After studying mechanical and process engineering in Stuttgart and Manchester, he received his doctorate from the Faculty of Energy Technology at the University of Stuttgart. Afterwards he gained industrial experience in various management positions at a large energy supply company, especially in development tasks in energy trading and sales. He was also responsible for the implementation of various research projects in the field of intelligent energy systems and electromobility.

Professor h.c. Dr.-Ing. Joachim Knebel



Professor h.c. Dr.-Ing. Joachim Knebel is head of Division 3 'Mechanical and Electrical Engineering' at the Karlsruhe Institute of Technology (KIT) and is thus responsible for the two KIT Faculties of Mechanical Engineering (MACH) and Electrical Engineering and Information Technology (ETIT), the three Helmholtz programs 'Materials and Technologies for the Energy Transition', 'Nuclear Fusion', and 'Nuclear Waste Management and Safety', and a total of 34 scientific institutes.

Within the Helmholtz Association of German Research Institutes, he is, among other things, the contact person for the initiative "Energy System 2050", which investigates the integration of essential technology elements into the energy system and

develops solutions to successfully integrate the renewable energies, some of which fluctuate strongly, into the German and European energy supply. He represents the KIT on the board of directors for the Research Association for Renewable Energies (FVEE) and the national Copernicus project "New Energy Network Structures for the Energy System Transformation (ENSURE)".

Joachim Knebel is founding director of the international initiative "Affordable Energy for Humanity (AE4H)", which is committed to affordable access to energy for all people.

Prof. Dr. Axel Groß



Prof. Dr. Axel Groß studied physics in Göttingen and Santa Barbara/ USA. After completing his doctorate at the Technical University (TU) of Munich, he worked from 1993 to 1998 as a research associate at the Fritz Haber Institute of the Max Planck Society in Berlin on the dynamics of molecule-surface interaction. In 1996 he spent six weeks researching at the Naval Research Lab in Washington D.C. / USA.

In 1998 Groß took up a C3 professorship for theoretical physics/surface physics at the Physics Department of the TU Munich (until 2004). In 1999 he habilitated at the TU Berlin with the topic "Ab initio Dynamics Calculations of Reactions on Surfaces" and received the teaching qualification for the subject Theoretical Physics. In

2004, Groß took over a C4 professorship and the management of the Institute for Theoretical Chemistry at the University of Ulm. After a further research stay at the Chemistry Department in Santa Barbara, he became Vice Dean of the Faculty of Natural Sciences at the University of Ulm from 2006 to 2008, then Dean of Studies in Chemistry until 2009 and Dean of the Faculty of Natural Sciences from 2009 to 2012.

From 2012 to 2014, Groß was spokesman for the Surface Physics Association of the German Physical Society. From 2012 to 2015 he was Vice President for Research at the University of Ulm.

In 2011 he was one of the founding directors of the Helmholtz Institute Ulm for Electrochemical Energy Storage (HIU) and a member of its board of directors until 2015. Since 2016 he has been a member of the German Research Foundation's Expert Forum on Chemistry. Since 2019 he has been one of the three spokespersons of the Cluster of Excellence "Energy Storage beyond Lithium", which was jointly established by the University of Ulm and the Karlsruhe Institute of Technology.

Dr. habil. Jörg Jasper



Jörg Jasper is Head of Energy Economics and Positioning at EnBW Energie Baden-Württemberg AG. He is responsible for fundamental energy industry issues with a focus on electricity generation (conventional and renewable), gases and regulation.

He is also responsible for EnBW's strategies for electricity generation and gases and, together with his team, develops the content of EnBW's positioning. He has been with EnBW since 2006.

Jörg Jasper was and is a member of several committees, including EURELECTRIC, BDEW (Chairman of the Power Generation Steering Committee), the World Energy Council Germany and others.

Jörg Jasper studied economics and holds a doctorate and habilitation in economics. He is a lecturer in Energy Economics at the TU Ilmenau.

Please note our information on data protection:

In the past, you have been interested in our events and newsletters and have asked to be added to our mailing list. Originally, the address data either originates from public sources or you have provided us with it at an earlier time. We process the data you provide solely for the purpose of sending out invitations to events or information about the work of our foundation (such as newsletters, reports, references to online activities, etc.) in accordance with Art. 6 Para. 1 of the Basic Data Protection Regulation.

Your data will not be passed on to third parties. If you no longer wish to receive notifications or invitations from us, please let us know by post to the address below or by e-mail to kontakt@energie-klimaschutz.de. We will then delete your data immediately.

Furthermore, you have a right to information about the data we have stored about you, a right to correction, a right to data portability and the right to have your data deleted at any time and without giving reasons. If you are of the opinion that we are not processing your data in accordance with data protection regulations, you have a right of appeal to the supervisory authority. The body responsible for processing your data is Stiftung Energie & Klimaschutz, Durlacher Allee 93, 76131 Karlsruhe.