

TUM SEED Center

Announcement of a Doctoral Scholarship at KNUST “Energy-Water-Food Nexus”

Call for Applications

The TUM SEED Center is an Excellence Centre for Exchange and Development, funded by DAAD and the German Federal Ministry for Economic Cooperation and Development from 2020 to 2029. The TUM SEED Center conducts research and offers higher education at the intersection of Sustainable Energies, Entrepreneurship and Development (SEED) in the Global South. The TUM SEED Center consists of the Technical University of Munich (TUM) and ten leading technical universities across the Global South, including Bahir Dar University (Ethiopia), Bandung Institute of Technology (Indonesia), Burkina Institute of Technology (Burkina Faso), Kwame Nkrumah University of Science and Technology (KNUST, Ghana), Indian Institute of Technology Bombay (India), Jomo Kenyatta University of Agriculture and Technology (Kenya), Makerere University (Uganda), Namibia University of Science and Technology (Namibia), Pontificia Universidad Católica del Perú (Peru), and Stellenbosch University (South Africa). Through its international and interdisciplinary doctoral program, the TUM SEED Center fosters academic exchange and facilitates excellent research.

Candidates with MSc/MPhil degrees (with one year research) with excellent academic track records and strong motivation are invited to apply for the **doctoral scholarship** focused on the Energy-Water-Food (EWF) Nexus. This scholarship is part of a research initiative aimed at addressing the interconnected challenges of sustainable energy, water management, and food security, contributing to the United Nations Sustainable Development Goals (SDGs). The selected candidate will conduct interdisciplinary research on the EWF Nexus, exploring innovative solutions to optimize resource use and enhance resilience in socio-ecological systems. The doctoral research will be supervised by a team from KNUST (led by Prof Francis Kemausuor) and TUM (Dr Daphne Keilmann-Gondhalekar). **The duration of the scholarship program is 4 years, starting from the 2025/26 Academic year.**

Scholarship Details:

- Duration: 4 years, starting from the beginning of the 2025/26 academic year
- Monthly stipend
- Additional benefits: participation in research seminars/workshops hosted at TUM or the partner universities, the possibility of a research stay at TUM, and support for attending international conference.

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Responsibilities:

- Conduct original research on the Energy-Water-Food Nexus
- Participate actively in the activities of the doctoral programme and research network
- Engage with stakeholders and partner institutions for data collection and dissemination
- Present research findings at conferences and publish in peer-reviewed journals

SEED doctoral scholars are expected to:

- Demonstrate a strong commitment to the work as a doctoral student.
- Participate and contribute to the activities of the TUM SEED Center (e.g. annual symposia)
- Engage in academic exchange (i.e., visit and collaborate with partner universities)

Application requirements:

- Master's degree in Environmental Science, Engineering, Energy Studies, or related fields
- Excellent academic record and research potential
- Strong motivation to work on interdisciplinary challenges at the nexus of energy, water, and food systems
- Commitment to contributing to sustainable development in Ghana and the Global South
- Ability to engage in international collaboration and academic exchange

Qualified women and individuals with disabilities are particularly encouraged to apply. To apply, please upload your CV, a strong letter of motivation highlighting the fit to the TUM SEED Center, a research proposal of maximum 3 pages outlining your intended research focus within the Energy-Water-Food Nexus, copies of academic transcripts and degree certificates (in English) through the online form: <https://shorturl.at/GWdEW> by **31 May 2025**.

Only shortlisted candidates will be contacted. The shortlisted candidates will be invited for an online interview with Prof Francis Kemausuor and his team. The Selection Commission of the TUM SEED Center will make the final decision in line with DAAD criteria.

If you have any questions regarding the announcement, please contact Prof Francis Kemausuor (fkemausuor.soe@knust.edu.gh).

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