Invitation of Applications for China Scholarship Council (CSC) Program for Doctoral Candidates

The Karlsruhe Institute of Technology (KIT) with its Institute of Meteorology and Climate Research/Atmospheric Environmental Research (KIT/IMK-IFU) at Campus Alpin in Garmisch-Partenkirchen, Germany and The Southern University of Science and Technology (SUSTech) with its School of Environmental Science and Engineering in Shenzhen, China jointly invite doctoral candidates (Chinese) in the field of hydrometeorological modeling for applying scholarship from China Scholarship Council and for a duration of four years.

The doctoral candidate will participate in a transdisciplinary Sino-German research project entitled “Mitigating the Risk of compound extreme Flooding events: a trade-off analysis framework for coastal metropolises and its application (MitRiskFlood)”, which is jointly funded by the Ministry of Science and Technology of China (MOST) and the German Ministry of Education and Research (BMBF).

The overarching goal of the MitRiskFlood is to develop resilient adaptation measures to address future increasing flood risk under climate change and rapid socioeconomic development in two selected coastal megacities, i.e., Shenzhen and Shanghai for the purpose of effectively mitigating the potential devastating consequences of compound events. This comprises event-based urban-scale atmospheric modeling, quantitative risk and uncertainty assessment of compound floods, social-economic evaluation of different mitigation and adaptation strategies, and identification of a sustainable solution. The research is performed for two regions in Shenzhen and Shanghai and is realized in close cooperation with Chinese universities and local stakeholders.

Requirements
- Applicants fulfilling the requirements of CSC regarding scholarship applications (e.g., with Chinese nationality)
- Above average university degree in natural-science (MSc), preferably in meteorology, hydrology, physical geography, as well as an excellent scientific record
- Demonstrated expertise in meteorological and/or hydrological modeling (preferably WRF), alternatively (or additionally) in statistical downscaling
- Competent with FORTRAN and either Python or R; good knowledge of UNIX/Linux including scripting; ability to work with high-performance computing systems
- Self-reliant and responsible working style, flexibility and the capacity of team work
- Pleasure and commitment to an international orientation of research (China)
- Good knowledge of spoken and written English

Applications
Applications (please only in English) including the usual attachments (CV, BSc, MSc and other certificates, motivation letter, publication list, etc.) should be submitted as a single pdf-file until 15 March 2021 to Dr. Patrick Laux (patrick.laux@kit.edu) and in copy to Prof. Harald Kunstmann (harald.kunstmann@kit.edu) and Prof. Zhan Tian (tianz@sustech.edu.cn)
Additional Information:

- The PhD candidate will jointly trained by KIT/IMK-IFU, University of Augsburg, and SUSTech and will get PhD degree from University of Augsburg after successful defense.
- The PhD candidate will conduct the research mostly at KIT/IMK-IFU Germany. Research stays at SUSTech China are possibly depending on planed research within the project.
- The living cost will be covered by applied scholarship from the China Scholar Council and the research related cost will be covered by the project.
- The introduction to the China Scholar Council program for doctoral candidates and the application guidelines is given by the link of https://www.campuschina.org/content/details3_74779.html
- The call for applications in Germany can be found by following http://www.demoe.org/article/read/12015-20210121-5296 and the call opens from 10th March 2021 until 30th March 2021, and the results will be announced in May 2021.
- The introduction to the research group at KIT/IMK-IFU is given by the links of https://www.imk-ifu.kit.edu/english/climhydro.php https://www.uni-augsburg.de/en/fakultaet/fai/geo/prof/georkl/uber-uns/p-laux/
- The introduction to the research group at SUSTech is given by the link of https://faculty.sustech.edu.cn/tianz/