



Karlsruhe Institute of Technology

Karlsruher Institute of Technology
Personalservice (PSE)

Kaiserstraße 12
76131 Karlsruhe

<http://www.pse.kit.edu>

**Postdoctoral Position (f/m)
for DFG project “Sequential Decision Making under System-inherent Uncertainty”**

Job description: within the research project: “**Sequential Decision Making under System-inherent Uncertainty:Mathematical Optimization Methods for Time-dynamic Applications**” funded by the Deutsche Forschungsgemeinschaft (DFG).

The position focuses on research in the following subjects:

- Development of a generic framework for sequential decision making under incomplete information for a unified comprehension of optimization approaches under uncertainty (Stochastic Programming, Robust Optimization, and Online Optimization)
- Enhancements of distributional analysis methods for algorithm quality and integration of robustness measures
- Retrieval of an information pool for algorithm behaviour in basic applications
- Integration of optimization methods in simulation models

Qualification: Applicants must hold a master's degree, or equivalent in Mathematics, Computer Science, or a related discipline with a focus on Operations Research or optimization theory. Favourably, applicants also hold a doctoral degree (PhD) in one of these disciplines. Applicants should have a profound knowledge and interest in Discrete Optimization as well as Mathematical Programming. Also required are very good programming skills as well as knowledge in the design of optimization algorithms. Acquaintance with Stochastic Programming, Robust Optimization, and Online Optimization is advantageous.

Salary: The remuneration occurs on the basis of the wage agreement of the civil service in TV-L.

Institute: Institute of Operations Research (IOR), research group Discrete Optimization and Logistics

Contract duration: limited, 3 years

Starting date: as soon as possible

Application up to: 30.09.2017

Contact person in line-management: For further information please contact Dr. Fabian Dunke, E-Mail: fabian.dunke@kit.edu.

Application: KIT kindly requests that applications including cover letter, curriculum vitae, transcript of records, thesis, and doctoral thesis (if applicable), be submitted **in electronic form** to **Prof. Dr. Stefan Nickel**,
E-Mail: stefan.nickel@kit.edu.

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KIT is an equal opportunity employer. Women are especially encouraged to apply. Applicants with disabilities will be preferentially considered if equally qualified.

KIT is certified as a family-friendly university (familienfreundliche Hochschule) and offers part-time employment, leaves for family-related reasons, dual career options, and individual coaching for family-work balance.