What’s after the PhD?

Funding Opportunities and Career Options at KIT

Dr. Stefan Götze (KHYS)
Agenda

I  What are your options after you completed your PhD?
II What are your options if you (maybe) want to stay in academia?
III How does KIT support your career after the PhD?
About KHYS

- Founded in 2007 in the context of the “Initiative for Excellence“
- Central service unit
- Allocated to Vice President Higher Education and Academic Affairs

Target groups

- Doctoral candidates
- Postdocs
- Those interested in doing a PhD at KIT
- Supervisors
- Coordinators of doctoral programs
## KHYS — overview of tasks

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What are your options after you completed your PhD?
Your basic career options (... and your hardest choice)

ACADEMIA
- Universities
- Research Institutes

OUTSIDE ACADEMIA
- Industry
- Entrepreneurship
- Non-Profit

PhD
The Pro’s and Con’s of Staying in Academia (I)

Learning
Creativity
Excitement
Autonomy
Meaning
The Pro’s and Con’s of Staying in Academia (II)

+ Learning
  + Creativity
  + Excitement
  + Autonomy
  + Meaning

- Risk
The Pro‘s and Con‘s of Staying in Academia (III)

- Full Professorships: 45,000 (total)
- 20% of all PhDs
- $t = \text{av. 10 years}$
- Germany: 25,000
- KIT: 480 (per year)
Anzahl der hauptberuflichen Professoren und Professorinnen an deutschen Hochschulen im Jahr 2013 nach Fächergruppen

Rechts-, Wirtschafts- und Sozialwissenschaften: 10.896
Ingenieurwissenschaften: 9.316
Mathematik, Naturwissenschaften: 8.961
Sprach- und Kulturwissenschaften: 6.353
Humanmedizin/ Gesundheitswissenschaften: 3.742
Kunst, Kunstwissenschaft: 3.654
Agrar-, Forst- und Ernährungswissenschaften: 1.019
Zentrale Einrichtungen (inklusive Hochschulkliniken): 635
Sport: 259
Veterinärmedizin: 178

Hinweis: Deutschland

Quelle: Statistisches Bundesamt; ID 247329
Weitere Angaben zu dieser Statistik, sowie Erläuterungen zu Fußnoten, sind auf Seite 24 zu finden.
The Pro’s and Con’s of Staying in Academia (IV)

Learning
Creativity
Excitement
Autonomy
Meaning

Risk
Max Weber: [...] The question whether [...] an assistant, will ever succeed in moving into the position of a full professor or even become the head of an institute [...] is simply a hazard. Certainly, chance does not rule alone, but it rules to an unusually high degree. I know of hardly any career on earth where chance plays such a role.
The Pro‘s and Con‘s of Staying in Academia (IV)

Learning | Risk
Creativity | Instability
Excitment | Restlessness
Autonomy | Income
Meaning

Karlsruhe House of Young Scientists (KHYS)
The Pro‘s and Con‘s of Staying in Academia (V)

Please keep in mind:

Learning | Risk
Creativity | Instability
Excitement | Restlessness
Autonomy | Income
Meaning

… can be found in other professions as well!
The Pro‘s and Con‘s of Staying in Academia (VI)

- Recommended Readings:
  - Max Weber ,Science as a vocation`
II What are your options if you (maybe) want to stay in academia?
The three most typical paths for staying in academia

- Full Professorship
- Outside Academia
- PhD
  - Habilitation
  - Junior Professor
  - Junior Research Group
  - Post-Doc Period
The ultimate prize: A full professorship

Still the only way of staying permanently in German academia

Responsibilities

- Research
- Teaching (9 SWS)
- Supervision and Exams
- Contribution to academic self-administration

Requirements

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<th>Formal</th>
<th>Essential</th>
<th>Valueable</th>
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</table>
| • University degree  
• Proficiency in research and teaching  
• Academic achievements | • Significant Publications  
• Grants  
• Networks  
• Mobility | • Strategic Fit  
• Project Management Experience  
• Innovative research agenda |
Paths to a professorship

Full Professorship

Outside Academia

PhD

Post-Doc Period

Junior Professor

Junior Research Group

Habilitation
The traditional (and still most common) path to a professorship: The Habilitation

- Highest-order exam at German universities
- Exam includes
  - Habilitation treatise (or equivalent proof of research) (i.e. a second dissertation)
  - Lecture followed by colloquium
  - Course

- Significance for later appointments varies across disciplines

- Funding:
  - Assistent position (Institute or research project)
  - Third-party grants (see below)
Alternative paths to a professorship (I):
The „Junior Professorship“ (Juniorprofessur)

► Since 2002

► Intention: alternative route to full professorship (instead Habilitation) through independent research and teaching

► Responsibilities mostly equivalent to full professors but …
  ► Limited contract (max. 6 years, mid-term evaluation)
  ► Smaller salary

► Facts:
  ► ca. 1,440 Juniorprofessuren (Germany, 2012)
  ► KIT: 15 Juniorprofessuren (2014)
  ► Conditions vary between states / universities
  ► 1/3 of all Junior Professors habilitate in parallel
Funding

- University positions
- Third Party Grants:
  - Carl-Zeiss-Stiftung (Carl-Zeiss-Juniorprofessur)
  - Volkswagen Stiftung (Lichtenberg-Professur)
Alternative paths to a professorship (II): Leading a Junior Research Group

► Junior Research Group (JRG):
  ► independent research unit led by a researcher with a PhD
  ► autonomous budget

► Head of JRG:
  ► managerial responsibilities
  ► research (but no teaching)
  ► limited contract

► Facts:
  ► Germany 550 JRGs
Funding for JRGs

Emmy Noether-Programm (DFG)

- most important funding instrument (2/3 of all German JRGs)
- **Eligibility:** 2 - 4 years after completion of PhD
- **Funding (modules):** Position, overheads, assistants, workshops, international collaboration (Mercator-Fellow), marketing
- **Length of Funding:** 5 – 6 years
- **Rolling applications**

ERC Starting Grants

- **Eligibility:** 2-7 years after completion of PhD
- **Funding:** max. € 1.5 Mio
- **Length of Funding:** max. 5 years
- **Annual calls**
The runway for an academic career: The Postdoc period
What is a Post-Doc?

► **General meaning:** period after PhD

► **KIT:** Transitional period (t = 3 years) for the purpose of professional orientation

„KIT 2025“: At KIT, the status of a Post-Docs is principally limited to **three years** in total. Up to this point the latest, it will be **settled** how the **individual’s career** will progress (i.e. inside or outside the KIT, as a Junior Professor, as a head of a Junior Research Group, with a Habilitation, within a research project, or a permanent position within the KIT).
What should the strategic Post-Doc do?

(De facto) requirements for professorships:
• Significant publications
• Grants
• Networks
• Mobility
• Project Management Experience
What should the strategic Post-Doc do?

(De facto) requirements for professorships:
- Significant publications
- Grants
- Networks
- Mobility
- Project Management Experience

RAISE YOUR PROFILE

Research and publications

Prepare next steps

International Research Stays & Conferences

Building Competences
Funding instruments for the Post-Doc period (I)

- **Principal Options:**
  - (Short-term) employment as an assistant at institutes or within research projects
    
    Please note: state-funded positions are cumulatively **limited to six years** by current law!
  - Third-party grants

- **Third Party Grants including position**
  - Deutsche Forschungsgemeinschaft (DFG)
    - „Sachbeihilfe“ (Position, Assistents, Workshops etc)
  - Helmholtz-Gemeinschaft („Post-Doc Programm“)
  - European Research Council (ERC Starting Grant)
  - Carl-Zeiss-Förderprogramm für Postdoktoranden
  - Projektförderung für Postdoktoranden der Fritz Thyssen-Stiftung
  - Stipendium für jüngere Postdocs der Fritz Thyssen-Stiftung
  - Freigeist-Fellowships der VolkswagenStiftung
  - Evonik Stiftung – Evonik Stipendien
  - Fonds der Chemischen Industrie - Liebig Stipendium
Funding instruments for the Post-Doc period (II)

► Third Party Grants excluding position

► Stipendienprogramm für Postdoktoranden (Daimler und Benz Stiftung)

► Ministerium für Wissenschaft, Forschung und Kunst Baden-Württemberg (MWK) (Eliteprogramm)
Funding instruments for Post-Doc period (III)

► International Mobility

► DAAD - Postdoctoral Researchers International Mobility Experience (P.R.I.M.E.)
   (Bewerbungsschluss: 31. März 2014)

► Deutsche Akademie der Naturforscher Leopoldina – Leopoldina-Postdoc-Stipendium

► Alexander von Humboldt-Stiftung: Feodor Lynen-Forschungsstipendium

► Promotion of young female scientists

■ Margarete von Wrangell-Habilitationsprogramm (MWK)

■ Internationale UNESCO-L’Oréal-Stipendien „For Women in Science“

■ UNESCO-L’Oréal-Förderprogramm für Wissenschaftlerinnen mit Kindern
Examples of Post-Doc Funding Instruments (I)

► „Helmholtz-Postdoc-Programm“

Eligibility: Postdocs bis max. 1 Jahr nach Promotion
Funding: bis zu 100.000 EUR/Jahr (für max. 3 Jahre)
Call / Deadline: tba (May/June)
Requirements:

- Application together with KIT-scientist/professor
- Matching Funds
- Pre-selection by KIT
- Research stay abroad expected
Examples of Post-Doc Funding Instruments (II)

- **Eliteprogramm für Postdoktoranden der BW-Stiftung**

  **Eligibility:** Postdocs

  **Funding:** 100,000 EUR for two years (but not usable for position);

  **Call/Deadline:** tba (May)

  **Requirements:**
  - Innovative research program
  - Matching Funds (position funded by KIT, 10% of grant sum)
  - Pre-selection by KIT
  - Center of (working) life in Baden-Württemberg
III How does KIT support your career after the PhD?
## Information and advice for your career

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<td>General career and funding options</td>
<td><a href="mailto:jana.schmitt@kit.edu">jana.schmitt@kit.edu</a></td>
</tr>
<tr>
<td>PEBA</td>
<td>Self-assessment, Mentoring</td>
<td><a href="mailto:katrin.klink@kit.edu">katrin.klink@kit.edu</a></td>
</tr>
<tr>
<td>FOR</td>
<td>Funding Instruments (part. JRG), Awards</td>
<td><a href="mailto:janine.maurer@kit.edu">janine.maurer@kit.edu</a></td>
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<tr>
<td>RSM – Company &amp; Career Service</td>
<td>Industrial job market, Applications</td>
<td><a href="mailto:diana.jaeckel@kit.edu">diana.jaeckel@kit.edu</a></td>
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Funding for your international activities

Academia

Outside Academia

KHYS: Research Travel Grant

KHYS: International Collaboration Package

Post-Doc Period

PhD

Junior Research Group

Junior Professor

Habilitation
KHYS Research Travel Grant

Objective
► Research stay abroad
► 3-6 months

Target group
► Doctoral researchers
► Postdocs

Type of funding
► Financial support (travel and living expenses)

Requirements
► Continued employment by the KIT institute/work group during the stay abroad
Internationalization Program (KHYS) (I)

International Collaboration Package

Objective
► Promote the mobility and networking of doctoral researchers and sustainably establish these
► Intensification of international collaboration

Target group
► KIT doctoral researchers
► Heads of certified KIT Junior Research Groups

Type of funding
► Maximum of €12,000 per package

Next call: late 2015/early 2016
Internationalization Program (KHYS) (II)

International Collaboration Package

One or several of the three modules can be selected (focus on Module 3)

► **Module 1**: Strategic meetings at the cooperation partner’s organization
  → Travel and subsistence expenses for up to two KIT scientists for a period of up to five days

► **Module 2**: Sounding-out meetings at KIT
  → Catering costs for these meetings

► **Module 3**: Short term stays of KIT doctoral researchers at the cooperation partner (2-6 weeks)
  → Travel and subsistence expenses
Instruments supporting your (advanced) academic career at KIT

- YIN
- KIT Multi-Track
- KIT Associate Fellow
Instruments supporting your academic career at KIT

**Head of a Certified KIT Junior Research Group**

- Position gained through competition
- min. 1 assistent

**Young Investigator Network (YIN)**

- Training
- Networking
- Insider Advice

**KIT Multi Track-Procedure**

- Predictable career path

**KIT Associate Fellow**

- Formal participation in doctoral examination
Thank you for your attention!
Any questions?

stefan.goetze@kit.edu
jana.schmitt@kit.edu