The ACS International Center presents....

Opportunities in Germany: Research Collaboration and Beyond

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  German Academic Exchange Service (DAAD) New York

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Dr. Elizabeth Kapatsina is the Manager for Education at the German Chemical Society and works on programs supporting chemistry education at all levels and international cooperation/exchanges, particularly the exchange between the GDCh and North Eastern Section of ACS.
Cathleen S. Fisher is President of American Friends of the Alexander von Humboldt Foundation (AFAvH), the professional partner of the Alexander von Humboldt Foundation in the United States. AFAvH promotes the Humboldt Foundation’s research funding programs and helps to support the over 5,200 U.S. alumni of the Foundation.
Peter R. Kerrigan is the Deputy Director of the German Academic Exchange Service’s (DAAD) New York office and Director of Marketing and Development for DAAD in North America. He is responsible for all areas of marketing of German higher education and research and the DAAD’s scholarship programs in the U.S. and Canada.
Chemistry in Germany: education and research opportunities

Dr. Elisabeth Kapatsina
Department Manager, Education
German Chemical Society – Gesellschaft Deutscher Chemiker
GDCh

ACS-Webinar
„Opportunities in Germany: Research Collaboration and Beyond“

March 1st, 2016
Education Systems USA / DE

Postsecondary Education in Chemistry

University
- research-oriented
- Bachelor (6 semesters)
- Master (4 semesters)
- PhD
- PostDoc

University of Applied Science
- application-oriented
- Bachelor (7 semesters)
- Master (3 semesters)
- PhD: cooperation with universities
Postsecondary Education in Chemistry

Analytical Chemistry
Biochemistry
Business Chemistry
Construction Chemistry
Degree Program “Teaching Chemistry”
Environmental Chemistry
Food Chemistry
Inorganic Chemistry

Medical Chemistry
Nuclear Chemistry
Organic Chemistry
Physical Chemistry
Polymer Chemistry
Technical Chemistry
Theoretical Chemistry
Water Chemistry
Postsecondary Education in Chemistry

higher education entrance qualification

Bachelor

career entry

Master

career entry

PhD

career entry

PostDoc

career entry
Post-secondary Education in Chemistry

- Bachelor
- Master
- PhD
- career entry

54 Universities
24 Universities of Applied Science

7003 first year students
1906

11 % University
61 % University of Applied Science
82 %
16 %

GDCh, Chemiestudiengänge in Deutschland, Statistische Daten 2014, www.gdch.de/statistik
PhD in Germany

**Individual PhD**
- individual professor-student relationship
- no explicit curriculum
- application directly to the professor
- every university in Germany

**Structured PhD Program**
- supervision by a group of professors
- systematic study program
- structured, formal admission
- Max Planck Research Schools
- Research Training Schools
- Graduate Schools

ACS-Webinar  March, 1st, 2016  http://en.gdch.de/
PhD or PostDoc in Germany

Where?
✓ universities
✓ research institutes
✓ graduate schools
✓ industry

Requirements?
PhD → Master
PostDoc → PhD

How long?
PhD: 3,5 years average
PostDoc: 1-3 years

Language?
✓ English
✓ German courses

Financial support?
✓ salary
✓ scholarships funding-guide.de
Have a Look at …

Research in Germany
Land of Ideas
research-in-germany.de

DAAD daad.de
German Academic Exchange Service

DFG dfg.de
German Research Foundation

Alexander von Humboldt Foundation
www.humboldt-foundation.de

BSc / MSc
higher education compass
hochschulkompass.de
or universities’ webpages

Research Institutes
Fraunhofer Association fraunhofer.de
Helmholtz Association helmhotz.de
Leibniz Association wgl.de
Max Planck Association mpg.de
International Cooperations of GDCh

Partner of

Scientific Symposium
Chemical Science and Society Symposium (CS3)
- CN, DE, JP, UK, USA -
  Sino-German Frontiers of Chemistry Symposium
  - CN, DE -
Transatlantic Frontiers of Chemistry (TFOC)
  - DE, UK, USA -

GDCh-NESACS JCF-NSYCC students exchange since 2001

Memorandum of Understanding
2010 ACS
2011 CCS
2012 KCS
www.gdch.de/mem
Why should you come to Germany?

Cutting-edge research facilities in Germany

- variety of Bachelor, Master, PhD & PostDoc positions
- challenging research activities
- numerous funding possibilities
- access to German chemical industry
- cultural diversity & modern lifestyle in the heart of Europe
Thank you for your attention!

Dr. Elisabeth Kapatsina
e.kapatsina@gdch.de

German Chemical Society – Gesellschaft Deutscher Chemiker
GDCh
http://en.gdch.de
Opportunities in Germany: Research Collaborations and Beyond

Webinar presentation for the ACS International Center

Cathleen Fisher, President, American Friends of the Alexander von Humboldt Foundation
Peter Kerrigan, Deputy Director, German Academic Exchange Service (DAAD) New York

March 1, 2016
• Excellent infrastructure, a wide variety of disciplines, well-equipped facilities

• Various forms of research locations:
  – Universities
  – Non-university institutes
  – Companies and institutions run by federal or state authorities

• Approx. 750 publicly funded research institutions in Germany, plus research and development centers run by companies

• Germany is making a sustained and significant investment in higher education and research (e.g. Excellence Initiative)
German Research Performing Organizations

Source: Research in Germany website
## Major German Science Organizations

<table>
<thead>
<tr>
<th>Organization</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alexander von Humboldt Foundation (AvH)</td>
<td>112.5 mill. € (= 147.5 mill. $)</td>
</tr>
<tr>
<td>Fraunhofer-Gesellschaft (FhG)</td>
<td>1.9 bill. € (= 2.5 bill. $)</td>
</tr>
<tr>
<td>German Academic Exchange Service (DAAD)</td>
<td>397 mill. € (= 520 mill. $)</td>
</tr>
<tr>
<td>German Research Foundation (DFG)</td>
<td>2.64 bill. € (= 3.46 bill. $)</td>
</tr>
<tr>
<td>Helmholtz Association (HGF)</td>
<td>3.4 bill. € (= 3.7 bill. $)</td>
</tr>
<tr>
<td>Leibniz Association (WGL)</td>
<td>1.5 bill. € (= 1.97 bill. $)</td>
</tr>
<tr>
<td>Leopoldina</td>
<td>6.5 mill. € (= 8.53 mill. $)</td>
</tr>
<tr>
<td>Max Planck Society (MPG)</td>
<td>1.5 bill. € (1.9 bill. $)</td>
</tr>
</tbody>
</table>
Functions of German Funding Organizations

- Projects
- People
- Mobility
The self-governing organization for science and research in Germany

Funds excellent, project-based research in all disciplines without regard to extra-scientific factors

Budget: approximately $3.46 billion, largely from federal government and states

A key objective is the advancement of early career researchers through numerous custom-tailored funding programs including:

- **research fellowships**, which provide postdoctoral researchers with funding for a maximum two-year research period abroad

- **temporary positions for principal investigators**, which give researchers who have obtained their doctorates their choice of research environment within Germany
Temporary positions for Principal Investigators for excellent postdocs. Funding for a position at a German host institution as project leader for the duration of the project.

- application requirements include a supporting statement from a researcher at your German host institution
- salaries are based on the salary level for postdoctoral researchers and include personnel, consumables, travel costs, lab equipment, publication costs…

The Emmy Noether Program is aimed at highly qualified postdoctoral researchers

- enables researchers to qualify for scientific leadership positions, particularly as university teachers
- involves researchers leading their own independent junior research groups in Germany
- generally runs for five years
- applicants are eligible max 4 yrs. after PhD / 6 years after MD and must have significant international experience
The Alexander von Humboldt Foundation (AvH)

- Supports excellent individual researchers and other professionals from abroad and from Germany
- No quotas for countries or disciplines; selection based solely on applicant’s academic record. Up to 700 fellowships and awards granted annually
- Budget: approx. $147.5 million. ~97% of support is from the German federal government
- “Exzellenz verbindet”—be part of a worldwide network. Alumni network of over 26,000, including 49 Nobel laureates—5,000+ of Humboldtians in the United States
Humboldt Research Fellowship

<table>
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<tr>
<th>POSTDOCTORAL RESEARCHERS</th>
<th>EXPERIENCED RESEARCHERS</th>
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<tbody>
<tr>
<td><strong>Duration of Fellowship:</strong></td>
<td>6-18 months (may be divided into 3 stays)</td>
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<tr>
<td>6-24 months</td>
<td>Doctorate completed &lt;12 years ago</td>
</tr>
<tr>
<td><strong>Eligibility:</strong></td>
<td>Doctorate completed &lt;4 years</td>
</tr>
<tr>
<td><strong>Fellowship Amount:</strong></td>
<td>2,650 EUR per month</td>
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<tr>
<td>3,150 EUR per month</td>
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<tr>
<td><strong>Benefits:</strong></td>
<td><strong>Travel</strong> lump sum for travel to Germany; research stay at another European institute</td>
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<td><strong>Language courses</strong></td>
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<td><strong>Family allowance</strong> for accompanying family members</td>
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<td></td>
<td><strong>Allowance for research costs</strong> for host institute</td>
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<td></td>
<td><strong>Intensive and individual mentoring</strong> in Germany by AvH contacts</td>
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<td><strong>Program</strong> includes study tour, networking meeting, annual meeting in Berlin</td>
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<td><strong>Alumni sponsorship</strong> opportunities</td>
</tr>
</tbody>
</table>
Sofja Kovalevskaja Award- 5 years support to build a research group working on a high-profile, innovative research project of your own choice
  ● valued at up to 1.65 million EUR
  ● targets top-level junior academics from abroad
  ● applicants must have completed their doctorate in the last six years
  ● joint application by applicant and host institution required
  ● next call: Spring 2016

Humboldt Research Award for eminent foreign researchers at the peak of their academic careers and in leading positions
  ● 60,000 EUR for a period of 5 years
  ● Supports research stays in Germany over a period of 6-12 months
  ● By nomination only

German Chancellor Fellowship- for accomplished young professionals up to 12 years after completing their Bachelor’s degree
  ● one year in Germany conducting an independent project of social significance with long-term impact at an institution of choice
  ● deadline Sept. 15, 2016
German Academic Exchange Service (DAAD)

is the largest funding organization in the world supporting international exchange of students and scholars.

DAAD provides:
• Information and counseling about studying & research in Germany
• Scholarships and grants
Research Grants

For PhD candidates, recent PhDs or for individuals wishing to earn a doctoral degree in Germany

- 1 to 10 months with the possibility of an extension
- Must have a well-defined research project
- Invitation by host institution essential

Terms of Award: €1,000/month plus insurance and travel stipend
Bilateral Exchange of Academics

For researchers outside of Germany who hold a doctorate

- 2 weeks to 3 months

Terms of Award:
Cost of stay are paid by DAAD, travel expenses paid by host institution
Study Scholarship

For a full master's degree program at a German university or a year of independent study

Terms of Award:
€ 750/month, plus insurance, travel stipend
Re-invitation Programme for Former Scholarship Holders

For DAAD alumni with a research or study stay in Germany for at least 6 months

- 1 to 3 months
- Must have a well-defined research project
- Invitation by host institution essential

Terms of Award:
€2,000 - €2,300/month plus insurance and travel stipend
RISE Germany
(Research Internship in Science and Engineering)
For Undergraduates

- summer internship (2 to 3 months) in the fields of biology, chemistry, physics, earth sciences and engineering
- RISE interns are matched with doctoral students at a German university or research institute
- The working language will be English

Terms of Award: €650/month, plus insurance, travel stipend
RISE Professional
(Research Internship in Science and Engineering)
For Undergraduates

- summer internship (2 to 3 months) in the fields of biology, chemistry, physics, earth sciences and engineering
- RISE interns are matched with a company in Germany
- The working language is usually English

**Terms of Award:** €750+/month, plus insurance, travel stipend

**Deadline:** January 31
RISE Worldwide
(Research Internship in Science and Engineering)
To host a German student in your lab

- summer internship (2 to 3 months) in the fields of biology, chemistry, physics, earth sciences and engineering
- German RISE interns are matched with doctoral students universities or research institutes around the world
- The working language will be English

Deadline: November/December
For more information visit:  
www.research-in-germany.de

Contact information:

Alexander von Humboldt Foundation:  
www.humboldt-foundation.de

German Academic Exchange Service  
www.daad.de

German Research Foundation  
www.dfg.de
The ACS International Center™ is the essential guide for scientists and engineers looking to study, work, and conduct research overseas.

- **Vetted, curated Information:** on over 600 international STEM scholarships, internships, and travel awards, and collaboration opportunities.

- **Insider tips:** on upcoming calls for proposals, eligibility updates, and deadline extensions

- **Interact with Funders:** with representatives from embassies and international organizations

- **Get Questions Answered:** Learn about the latest information related to scientific mobility
QUESTIONS?
Submit them into your Gotowebinar chat box now*

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