MGK

Integrated Research Training Group

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Presented by Ivelina Zaharieva, Constantin Schneider

Summary

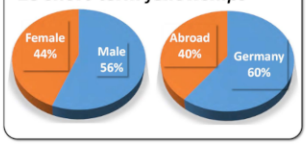
The Integrated Research Training Group (*Integriertes Gradiertenkolleg*, IGK or *Modul Graduiertenkolleg*, MGK) trains and supports doctoral students in their research within the CRC 1078. The structured program combines education and research in the fields of Biophysics, Physics, Theoretical Physics, Structural Biology, Biochemistry, and Chemistry and provides soft skills trainings. The program fills the gaps in the postgraduate education in the interdisciplinary field of biomolecular protonation dynamics, integrating experimentalists and theoreticians. The IGK program is embedded in the existing PhD program "Molecular Science" of the Dahlem Research School (DRS) .

Report

44 graduate students financed by the CRC 1078

- including direct cost allowance
- parental support

18 short-term fellowships



Soft-skill courses:

- ✓ scientific presentations
- ✓ networking
- ✓ peer mentoring
- ✓ decision making
- ✓ motivation strategies
- ✓ time- and selfmenagement
- ✓ leadership skills in academia
- ✓ team communications
- ✓ language and computer courses
- ✓ etc...

Students from different countries (**red** – fellowships; **blue** – CRC members)

Environment of the IGK

Conceptionally, the IGK is supported by the DRS and is embedded into the existing PhD program "Molecular Sciences" of the DRS of the Freie Universität Berlin. The DRS offers soft skill and language training as well as preparation and support for a future academic and non-academic career.

Organisational concept

IGK steering committee

U. Alexiev, Spokesperson	management, control of the regulations, objectives of the IGK, and the study program
P. Hildebrandt, K. Heyne, H. Dau	The IGK committee awards short term fellowships, guides the membership applications to the DRS School of Molecular Science and plans IGK events
I. Zaharieva, Coordinator	PostDoc, works in strong cooperation with the spokesperson, links the IGK committee, the DRS and the IGK members
PhD students: C. Schneider, T. Stensitzki, H. Mohrmann, M. Walter	elected by the PhD students, responsible for the self-organisation

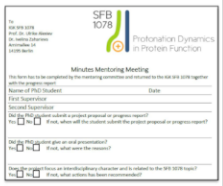
Supervision and mentoring concept

Supervisor 1 — **PIs from CRC 1078** — Supervisor 2

PhD student

Written annual report

Oral presentation of the results



"Minutes mentoring meeting"

Plan for the next year

An alternating schedule of individual mentoring meetings and the one-day graduate colloquium was proposed by the students after a self-evaluation meeting in April 2016.

Qualification concept

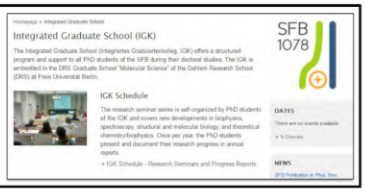
1. ***CRC 1078 Colloquium (every month) and group seminar (every week)***
2. ***CRC 1078 retreat (once a year)***
   - students present their work as posters or short talks
   - poster and talk prizes are awarded, to give credit for excellent work and at the same time to encourage the students
3. ***IGK Seminar day (3-4 times per year)***
   - the host PI gives a general lecture
   - lab visit organized by the host institute
   - 2-3 topic-related talks by PhD students
4. ***Special student discussion meeting and events***
   - workshops (optional participation) focused on a specific protein investigated in the CRC 1078
   - participants discussed their progress in a constructive and relaxed atmosphere

Announcement of an IGK seminar Day

5. ***Biannual Meeting of the German Biophysical Society***
   - 21 PhD students from the IGK presented the results from the collective efforts of the CRC 1078 at the meeting in 2014
   - Another joint participation is planned for September 2016 and in the future.
6. ***Other national and international conferences***
   - The participation of IGK students to scientific meetings is highly encouraged and financed by the IGK program.
   - In the first funding period 27 talks and 96 posters were presented on scientific conferences.

Web page

Detailed web page of the IGK and shared password-protected data facilitate the organization and data exchange between the students.



Public outreach

The IGK strives to enhance public outreach of the CRC 1078 by participating at the annual "Lange Nacht der Wissenschaften" (LNdW) in Berlin. The IGK is presenting the basic concepts and goals of the CRC to the public, starting at the Freie Universität Berlin in 2013 and now also at the Technical University Berlin

Ideas for the second funding period

To further to improve the scientific education of the PhD students and enhance the scientific exchange, we plan to introduce:

- More opportunities for research visits in external labs where special experiments not established in the CRC 1078 can be performed.
- Student self-organized annual retreats (students only) with guest speakers from academia and industry, in addition to the general CRC retreat.
- Extended financial support to the PhD students to attend scientific meetings.