GeoGraduates
Guidelines for Structured Training of Doctoral Researchers at the Helmholtz Centre Potsdam GFZ German Research Centre for Geosciences
Preamble: Researching and conducting doctoral studies at the GFZ

The research infrastructure and international expertise at the GFZ offers an inspirational, unique environment for geoscientists in Germany. It forms the framework for the qualification of a new generation of excellently trained and internationally active young scientists.

To structure the training of the doctoral researchers, the GFZ works together with the Geo.X partner universities in Berlin and Potsdam (FU Berlin, TU Berlin, HU Berlin, University of Potsdam), as well as additional associate universities by means of joint professorships (e.g. RWTH Aachen, TU Braunschweig, LMU Munich). The DFG-sponsored graduate college, GRK 1364 “Shaping Earth’s Surface in a Variable Environment”, which is coordinated by the University of Potsdam and received a second financing phase, has already existed since 2006. Since 2011, the “Geo.SIM” Helmholtz College has existed, within the context of which doctoral researchers of FU Berlin, the University of Potsdam and GFZ conduct research together. In order to continue the successful training of doctoral researchers, the GFZ is participating in two DFG-sponsored international graduate colleges from 2015, “NatRiskChange” and “StRATEGy”, where it is working in cooperation with Argentinean university partners and the University of Potsdam.

With this, the GFZ is offering especially qualified university graduates attractive opportunities to prepare a dissertation in geosciences. In order to ensure that standard framework conditions apply at the GFZ to all doctoral researchers, that the dissertations are supervised in a competent and responsible manner and optimum development opportunities are opened up for careers within and outside of science, the following binding rules of procedure have been compiled regarding the structured doctoral researcher training at the GFZ. The rules are closely based on the guidelines for the completion of PhD projects within the Helmholtz Association.

GFZ doctoral researchers are all doctoral researchers who are either committed to the GFZ on the basis of a temporary employment contract or are working on their dissertation at the GFZ with a residency certificate, such as scholarship students. The community of these doctoral researchers at the GFZ is referred to as GeoGraduates. Furthermore, doctoral researchers without an employment contract and residency certificate are also regarded as GFZ doctoral researchers if they are significantly supervised by a scientist of the GFZ in their PhD project.
**Selection process for doctoral researchers**

- The most suitable applicants are invited to an interview, in which the potential formal and technical advisor will also participate. A requirement-based and structured procedure underlies the selection decision.

- Prospective doctoral researchers who have obtained external funding (e.g. DAAD, foundations) are requested to establish contact with the respective Head of Section in a research area of their choice. The candidate will be invited to an interview.

**Requirements for doctoral researchers**

- The candidate must, as a rule, have completed a degree with an overall mark of "very good" (Master's degree, diploma). Excellent graduates of a university of applied sciences can also be admitted for doctoral training at the GFZ in accordance with the regulations of the respective university.

- The dissertation is centred on independently working on a research topic, for which the doctoral researcher and advisor jointly bear responsibility.

- According to the rules of the Geo.X partner universities and the associated universities through jointly appointed professorships, the option basically exists of composing a monograph in English or German language as the dissertation thesis. With regard to a scientific career, the GFZ recommends that doctoral researchers additionally publish their results in internationally recognised and high-ranked journals. The doctoral researcher is responsible for obtaining the information about the requirements for a cumulative dissertation at their respective university and possible teaching and seminar obligations at an early stage within the context of the dissertation and fulfilling them.

- It is mandatory for doctoral researchers of the GFZ to register for dissertation studies at the respective university within three months after the start of the dissertation.
Performance of the dissertation project

- The allocation of doctoral theses can only take place by professors or habilitated scientists who are working at the GFZ. They must ensure that after completion of the work, a proper dissertation process at a university is ensured. Relevant evidence must be provided in the form of the approval by the respective faculty regarding the dissertation application.

- If the financing is not secured for a term of three years, the approval of the Executive Board is required for the allocation of a dissertation position and for performing a dissertation at the GFZ. Therefore, a relevant application must be submitted by the advisor, via the Director of Department, to the Executive Board, which contains the name of the candidate, the planned start of the dissertation and the preliminary topic of the paper.

- The supervision of the doctoral researcher takes place by a Doctoral Researcher Committee, which is usually comprised of three people: (1) The formal advisor with a link to a university and the right to award doctorates ("First Advisor"), (2) the technical advisor with the advisory and support function ("Second Advisor") and (3) a mentor, with an advisory and support function. Either both the First Advisor and Second Advisor, however, at least one, is employed at the GFZ.

- The Doctoral Researcher Committee meets with the doctoral researcher twice in the first year and once per year thereafter, provided that no requirement exists for meeting more frequently on an extraordinary basis.

- A mentor ("friend") usually belongs to the Doctoral Researcher Committee. The First Advisor and Second Advisor advise the doctoral researcher in the selection of an appropriate mentor. Furthermore, the doctoral researcher can suggest a person himself/herself. The mentor is intended to provide feedback on the dissertation and personal development of the doctoral researcher, mediate in case of conflicts and be available for questions from the doctoral researcher. So that the mentor can provide the best possible support, he/she should have a doctorate and bring along well-founded experience in the (inter-)national scientific landscape.

- In addition to the employment contract, within three months after the start of the dissertation, an Advisory Agreement will be concluded between the advisors, the doctoral researcher and the mentor. In addition to personal details, this agreement contains details about the working title of the dissertation, the type of financing and term of the contract, a work plan and timetable, including the starting date of the dissertation and dates for the supervision meetings with the Doctoral Researcher Committee, a mutual commitment to comply with good scientific practice, the names of the members of the Doctoral Researcher Committee, including their institutional
affiliation, as well as the university link of the doctoral researcher, with reference to the respective applicable PhD regulations.

- The Advisory Agreement must be submitted without asking to the Human Resources Department (V1) at GFZ within a three-month period after the start of the contract or start of work at the GFZ. Should an Advisory Agreement already exists with a University, this agreement will automatically replace the GFZ Advisory Agreement and has to be submitted in copy to the Human Resources Department.

- The doctoral researcher acknowledges the "GeoGraduates" Guidelines for Structured Training of Doctoral Researchers at the GFZ and consents to the collection, use and processing of the foregoing personal details in compliance with the data protection regulations. With the Advisory Agreement, the doctoral researcher automatically becomes a member of GeoGraduates and undertakes to hand over scientific data in the wider sense that is gathered during the PhD project at the GFZ (measurement data, modelling data etc.) to the advisor.

- The specification of the dissertation topic is the responsibility of the advisor. The dissertation thesis should be thematically related to the research programme of the GFZ and allow a relevant contribution to it to be anticipated. The advisor and the doctoral researcher jointly bear the responsibility for the prompt performance of the thesis. Depending on the university regulation, the advisor is responsible for the scientific evaluation alone or with one or several advisors, who may also be external scientists.

- If an advisor leaves the GFZ and the doctoral researcher remains, the handover of the advisory must be recorded in writing. An individual agreement shall be made regarding how the planned time period for the dissertation will be met in spite of the change of advisor.
Financing of the dissertation project

- The financing of the doctoral researcher remuneration usually takes place with third-party funds, which are obtained within the context of externally sponsored research projects. The duration of the financing of doctoral researcher positions depends on the criteria of the third-party fund providers, with externally obtained funds. The doctoral researcher should be promised the financing for the entire dissertation period advised in the Advisory Agreement, usually three years, prior to the start of the dissertation, subject to the doctoral researcher performing the expected scientific activity.

- The period for a dissertation should preferably not exceed three years. Usually, an employment contract for three years is concluded at the beginning of the dissertation. Longer-term financing require the self-initiative of the doctoral researcher and the advisor.

- If a thesis cannot be completed within three years, this must be notified to the Executive Board in writing no later than three months prior to the end of the third year, whereby it must specifically be stated what the cause of the delay is and in which time period completion can possibly be achieved. In justified cases, the Executive Board reserves the right to provide bridge financing of the doctoral contract of usually three months.

- In order to provide an incentive for a quick completion of the PhD theses, the GFZ is prepared to provide all doctoral researchers, who complete their thesis in less than three years, with a full-time position (EG 13 TVöD) for the time period not used. The confirmation of acceptance by the respective responsible examination board is regarded as the completion of a dissertation. For an overall grade "very good" or "with distinction", doctoral researchers get an additional job offer for three or six months on a full-time basis from the GFZ. In principle, the implementation is carried out on the first day of the following calendar month.
Framework conditions for the dissertation project

- A representative body for doctoral researchers, the PhD representatives, exists at the GFZ, which is elected by the doctoral researchers. The PhD representatives organise an annual PhD Day at the GFZ, at which active participation is mandatory for all GeoGraduates. Furthermore, the PhD representatives support the doctoral researchers at the GFZ in case of possible conflicts. In addition to this, each doctoral researcher has the right to contact his/her professor of confidence with any concerns.

- In order to ensure that the scientific training of the doctoral researcher is as comprehensive as possible, it should be made possible for him/her to participate in at least one international congress during the term of the doctoral researcher contract with the GFZ. The intention of this is to introduce doctoral researchers to the scientific community.

- Doctoral researchers are basically entitled to participate in technically relevant summer/winter schools and seminars. Furthermore, the GFZ offers interdisciplinary qualification opportunities in English (e.g. courses in time management, rhetoric and presentation, scientific writing and publication), which are organised in a cooperation between the PhD representatives, the library and the Human Resources Department (V1). In addition to this, doctoral researchers can make use of the support and courses offered by those universities at which they are registered (e.g. Potsdam Graduate School PoGS at the University of Potsdam).

- In addition to this, doctoral researchers can make use of individual counseling by the Human Resources Department (V1) as support, in order to deal with specific challenges during the course of the PhD project or the transition to the postdoc phase or an employment outside science in a structured manner.

- Candidates are already actively informed about measures and instruments to assure family friendliness and equal opportunities at the GFZ within the context of the selection interview.
Quality assurance

- Doctoral researchers and advisors bear the responsibility for promptly sending the concluded Advisory Agreement and a final dissertation report (also with discontinuations) to the Human Resources Department (V1) in writing. The final report ("Abschlussbericht") is prepared by the advisor and contains the following details: Title of the dissertation thesis, members of the Doctoral Researcher Committee, submission and examination date, grade, a copy of the dissertation certificate and any details regarding employment after completing the dissertation and a new address.

- With the final report, the doctoral researcher shall provide evidence that the library at the GFZ has been notified about the already-published link to the full text of the dissertation thesis/has received the dissertation thesis as a PDF document and that the data collected during the dissertation phase have been properly handed over to the doctoral advisor.

- After providing the final report and participation in written final feedback by the Human Resources Department (V1) regarding success factors and hindrances in the dissertation process, the doctoral researcher receives a certificate about the participation in the interdisciplinary qualification services offered at the GFZ.

These rules come into force effective 1 January 2018 and replace the rules dated 1 August 2015.