Special provisions stipulated by the Materials Science and Geosciences Department amending the TU-Darmstadt's "General Provisions of the Regulations Applying to the Award of Doctorates" dated 12 January 1990, in the form of the 8th amendment thereof dated 21 December 2017 (appendix to the statutes 2018-II p. 3)- PO/AT according to the decision of the departmental commission dated 08 December 2021

Inofficial translation! Only the German version "Besondere Bestimmungen des Fachbereichs Material- und Geowissenschaften" is legally binding!

### 1. Amendments to § 1, Par. 1:

- (1) The department awards the academic degrees of "Doktor-Ingenieur" ("Dr.-Ing.") and "Doctor rerum naturalium" ("Dr. rer. nat.") in the fields of materials science and applied geosciences. The factors determining which degree will be awarded are the subject matters of doctoral candidates' dissertation and the major field of their predoctoral program of scientific studies.
- (2) Upon application by doctoral candidates, the PhD board shall render a decision regarding the academic degree to be awarded them. Such applications shall be submitted no later than the dates on which applicants' requests for the award of a doctorate are submitted (§ 8, Par. 1, of the "General Provisions of the Regulations Applying to the Award of Doctorates"). Applicants shall have the opportunity to respond to decisions deviating from the degrees requested on their applications. The PhD board may set dates, by which such responses must be submitted.

### 2. Amendments to § 2 Par. 4:

Doctoral candidates in the field of materials science may apply for membership in the Materialium Graduate School. The graduate school shall serve to improve the general conditions for the award of doctorates and the arrangement of the advisor-candidate relation.

## 3. Amendments to § 4 Par. 1:

For the Examination Committee holds: At least one of the members of the Examination Committee shall not be member of the Materials Science and Geosciences Department. The members from the group of full-time professors of the Materials Science and Geosciences Department must constitute the majority of the Examination Committee.

### 4. Amendments to § 7, Par. 3:

(1) The following minimum grades shall govern individuals' acceptances as doctoral candidates: Completion of their study programs, with a final grade of at least 2.5. In cases to be justified by their dissertation supervisor, individuals having poorer final grades may be granted acceptance to doctoral candidacy if the PhD board shall determine that they possess competences meeting the requirements for the award of a Master's Degree in one of the courses of study offered by the Materials Science and Geosciences Department of TU Darmstadt.

# 5. Amendments to § 7 Par. 5c:

Admission without a Master degree ("fast-track" doctoral program) may be granted in the case of candidates who have completed their B.Sc. with a grade-point average of 1.5 or better and have passed an aptitude assessment procedure with a positive result. The PhD board may decide an exemption from the grade-point average rule, if it assesses a B.Sc. degree as outstanding in spite of a poorer grade-point average. In the course of the aptitude assessment procedure need to be substantiated:

- 1. Receipt of 90 credit points within a consecutive Master course offered by the Materials Science and Geosciences Department of TU Darmstadt.
- Fulfillment of the requirements of a Master degree without taking into account of the credit points for a Master thesis.
- 3. Submission of a written research program that is defended in a lecture.

The PhD board shall then render a final decision regarding their admission to a doctoral program, duly allowing for the vote of the supervisor of their doctoral dissertation.

### 6. Amendments to § 7a Par. 3:

In case of a degree deviating from the field of the subject of the doctorate, the doctoral board decides as a support for the doctorate, to which extent mandatory lectures from modules of the Master courses of the Materials Science and Geosciences Department have to be registered and passed.

The extent of these courses shall not exceed 12 credit points (ECTS). The PhD board decides on the selection of the courses based on a common suggestion of the doctoral candidate and the advisor.

If one or more exams are not passed, the PhD board may revoke the acceptance as a doctoral candidate. Hardship arrangements are possible upon request.

## 7. Amendments to § 9, Par. 4:

- (1) If research accomplishments are documented through several publications, the dissertation can be formed out of several scientific publications and submitted as a cumulative dissertation.
- (2) The parts of a cumulative dissertation must have a connection with regards to content. This connection has to be demonstrated conclusively by a common introduction and a synopsis of the publications with discussion and summary.
- (3) The dissertation shall consist of at least three publications or accepted manuscripts. The doctoral candidate has to represent at least two of these works as first author and be responsible for the predominant part of these manuscripts.
- (4) The publications have to take place in international, scientific and specialist-reviewed professional journals with peer-review system.
- (5) The referee reports must contain a statement about the quality of the journals.
- (6) The publications shall not be older than 5 years at the time of submission of the dissertation.

#### 8. Amendment to § 10, Par. 1:

When applying for acceptance as a doctoral candidate (see § 7), the candidate suggests a doctoral mentor. The position of a doctoral mentor shall be adopted by a scientist who satisfies the rules of § 11 of the General Provisions of the Regulations Applying to the Award of Doctorates and who is member of TU Darmstadt.

### 9. Amendment to § 11, Par. 3:

At least one referee has to be member of the department. Referee and co-referee must not be member of the same research group.

### 10. Amendment to § 17, Par. 1:

Any department professor, or other member of the department qualified as a higher-education instructor ("Habilitation"), may participate in closed sessions rendering decisions on the results of oral examinations. The final grade will be determined by the members of the Examination Committee.

### 11. Amendment to § 17, Par. 2:

The minimum requirement for award of a doctorate with the overall rating of "passed with distinction" shall be:

- 1. At least two referee reports give consideration to a rating of "passed with distinction".
- 2. There are no content-related obligations according to § 17, Par. 3 with regards to the publication of the dissertation.
- 3. The oral examination was passed with at least a "very good" result.
- 4. The vote of the Examination Committee may at most contain one dissenting vote or abstention.

# 12. Amendments to § 27:

These special provisions shall become effective on the day following their publication in the appendix to the statutes of TU Darmstadt. The previous special provisions expire. Upon application, doctoral programs that were in progress as of that date may be concluded in accordance with those special provisions in effect on the date of the respective candidates' acceptance to doctoral candidacy. In questionable cases, the PhD board shall decide which provisions shall apply.

Darmstadt, <date of the signature>

Prof. Dr. Karsten Albe

Dean of the Materials Science and Geosciences Department