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**Regulations of Karlsruhe Institute of Technology (KIT) for
the Award of the Doctoral Degree in Engineering (Dr.-Ing.)
at the KIT Department of Mechanical Engineering**

Please note that this English translation is a service provided by KIT for your information only. The German version exclusively shall have legally binding character.

Regulations of Karlsruhe Institute of Technology (KIT) for the Award of the Doctoral Degree in Engineering (Dr.-Ing.) at the KIT Department of Mechanical Engineering

dated June 26, 2017

Pursuant to Art. 10, par. 2, clause 5 and Art. 20, par. 2, clause 1 of the Act on Karlsruhe Institute of Technology (KIT Act – KITG), as amended on July 14, 2009 (Bulletin, pp. 317), last amended by Art. 4 of the Act on the Change of State University Tuition Fees and Other Acts of May 09, 2017 (Bulletin, pp. 245, 250) and Art. 38, par. 4 of the Act of Baden-Württemberg on Universities and Colleges (Landeshochschulgesetz – LHG), as amended on January 01, 2005 (Bulletin, pp. 1), last amended by Art. 3 of the3 of the Act on the Change of State University Tuition Fees and Other Acts of May 09, 2017 (Bulletin, pp. 245, 250) the Senate of Karlsruhe Institute of Technology (KIT) adopted the following statutes on June 19, 2017.

The President expressed his approval according to Art. 20, par. 2, KITG in conjunction with Art. 38, par. 4, clause 1, LHG, on June 26, 2017.

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Section 1: General Provisions

Article 1 Doctoral Degree

- (1) The KIT Department of Mechanical Engineering of Karlsruhe Institute of Technology (KIT) (hereinafter referred to as KIT Department) awards the academic degree of a Doktor/Doktorin der Ingenieurwissenschaften (Dr.-Ing., Doctor of Engineering) in a regular doctoral procedure.
- (2) The KIT Department can award the honorary degree of Doktor/Doktorin der Ingenieurwissenschaften ehrenhalber (Dr.-Ing. E.h., Honorary Doctor of Engineering) (Art. 24).
- (3) The KIT Department can renew a doctoral degree certificate awarded by it after 25 years (Art. 25).

Article 2 Doctoral Admissions Committee

- (1) The Doctoral Admissions Committee is appointed by the KIT Department Council. The Doctoral Admissions Committee consists of a Chairperson and another two members. A deputy each shall be appointed by the KIT Department Council. Members and deputies may be professors according to Art. 44, par.1, cl. 1, No. 1, LHG, executive scientists according to Art. 14, par. 3, KITG, *apl. Professors*, and *Privatdozenten/Privatdozentinnen* of the KIT Department. The term of office is four years. Reappointment is permitted.
- (2) In the case of meetings of the Doctoral Admissions Committee in connection with research misconduct, an Ombudsperson with an advisory vote is to be consulted according to the "Statutes for Safeguarding Good Research Practice at Karlsruhe Institute of Technology (KIT)".

Article 3 Persons Authorized to Participate in Doctoral Procedures

- (1) Professors according to Art. 44, par. 1, clause 1, No. 1, LHG, executive scientists according to Art. 14, par. 3, KITG, *apl. Professors*, and *Privatdozenten / Privatdozentinnen* are authorized in principle to participate in doctoral procedures. They may also be employed by a university outside of the state of Baden-Württemberg or by a state-owned or state-recognized equivalent university abroad.
- (2) Moreover, (early-stage) researchers of Karlsruhe Institute of Technology (KIT) who were granted the status of a "KIT Associate Fellow" may be permitted to participate in doctoral procedures. The proceeding and the rights and obligations of the "KIT Associate Fellow" shall be subject to the "Verfahrensordnung des Karlsruher Instituts für Technologie (KIT)

zur Errichtung des Status eines „KIT Associate Fellow“ (Rules of Procedure of Karlsruhe Institute of Technology (KIT) for Establishment of the Status “KIT Associate Fellow”).

- (3) Professors of Universities of Applied Sciences or Baden-Württemberg Cooperative State Universities may also be appointed supervisors or reviewers according to Art. 15, par. 3. Their appointment as supervisor is subject to the approval of the doctoral agreement by the KIT Department Council according to Art. 10, cl.3.
- (4) The rights of participation of professors according to Art. 44, par. 1, clause 1, No. 1, LHG and of executive scientists according to Art. 14, par. 3, KITG shall not be affected by retirement. Other persons authorized to participate in doctoral procedures, who no longer work at KIT, may participate in a doctoral procedure for up to four semesters after their leave. This also applies to *Privatdozenten / Privatdozentinnen* who are no longer authorized to teach at KIT. Article 6, par. 8 of the “Verfahrensordnung des Karlsruher Instituts für Technologie (KIT) zur Errichtung des Status eines “KIT Associate Fellow“ (Rules of Procedure of Karlsruhe Institute of Technology (KIT) for Establishment of the Status “KIT Associate Fellow“) shall remain unaffected.
- (5) If a person authorized by a KIT Department to participate in doctoral procedures has concluded a doctoral agreement according to Art. 10 and his/her membership with the KIT Department ends afterwards, he/she shall continue to be a person authorized by the KIT Department to participate in doctoral procedures according to the present Regulations until the doctoral procedure for which the doctoral agreement has been concluded is completed, but not for a period longer than five years. The Doctoral Admissions Committee may extend the maximum period outlined in clause 1 upon request in writing by the person authorized to participate in doctoral procedures.

Article 4 Requirements for Admission to the Doctorate

- (1) Unless otherwise provided for below, admission to the doctorate requires successful completion
 - a) of a master’s program
 - b) or of a degree program with a standard study period of at least four academic years at a university or university of education
 - c) or of a degree program based on an undergraduate program at a university, university of education, or another university that has the right to award doctoratesin a subject in the area of
 - engineering sciences,
 - natural sciences,
 - informatics, or
 - mathematics

with an above-average result. The above-average result is reflected by an overall result of 'very good' (1.5) or better, an overall grade corresponding to the ECTS grades A or B, or by the applicant providing proof of being among the best 35 percent of his/her year.

- (2)** On the justified request in writing by the candidate, the Doctoral Admissions Committee may recognize completion of studies in a subject other than those listed in par. 1 for admission to the doctorate, provided that the subject in which the degree was achieved is primarily related to the topic of the doctoral thesis and all remaining requirements outlined in par. 1 are fulfilled. In these cases, the Doctoral Admissions Committee shall assess equivalence of the documented study and examination achievements to the requirements of par. 1 and, if necessary, define supplementary requirements as outlined in par. 4. The request for recognition and assessment of equivalence of the documented study and examination achievements shall be submitted in writing to the Doctoral Admissions Committee either together with the request for acceptance as a doctoral candidate according to Art. 11 or not later than twelve months prior to the request for admission to the doctoral procedure according to Art. 13.
- (3)** A degree reached at a foreign state-owned or state-recognized college equivalent to a university, which meets the requirements outlined in par. 1 or 2, will be recognized as equivalent by the Doctoral Admissions Committee taking into account the valid recommendations made by the Central Office for Foreign Education regarding the equivalence of degrees. In cases of doubt, the Central Office for Foreign Education shall be consulted. The Doctoral Admissions Committee may define supplementary requirements as outlined in par. 4.
- (4)** For proof of the candidate's scientific qualification, admission to the doctorate in the cases of paragraphs 2 and 3 may be subject to supplementary requirements to be defined by the Doctoral Admissions Committee. These supplementary requirements that are to be in line with the requirements of the subject shall not exceed the amount of 20 credits. The requirements shall be fulfilled prior to admission to the doctoral procedure.
- (5)** Highly qualified holders of bachelor's degrees or graduates of a state examination program other than outlined in par. 1 as well as diploma degree holders of Universities of Applied Sciences and Cooperative State Universities can be admitted to the doctorate, if they have completed their studies in the subjects outlined in par. 1 or in subjects that are equivalent according to par. 2. As a rule, a high qualification as specified in cl. 1 is reflected by the graduate belonging to the best ten percent of his/her year. This must be proved by the respective university's confirmation. A person authorized by the KIT Department to participate in doctoral procedures according to Art. 3 must have agreed to act as a supervisor and the candidate must have proved in an aptitude test procedure according to par. 6 that he/she is qualified to perform scientific work in the doctoral subject. Admission shall be refused, if the candidate has already failed to pass an

aptitude test procedure for a doctorate or an equivalent test at a university or equivalent college.

- (6) To prove their scientific qualification, graduates according to par. 5 shall submit to the Doctoral Admissions Committee a request in writing for an aptitude test procedure, if they aim for a doctorate. The candidate shall successfully pass three examinations that are assigned not more than 20 credits in total and shall prepare a scientific paper. The contents of the examinations and the scientific paper shall be specified by the Doctoral Admissions Committee in agreement with the supervisor authorized to participate in doctoral procedures according to Art. 10. The scientific paper must be equivalent in scientific contents to a master's thesis in a degree program offered by the KIT Department. A graduation thesis of a university, University of Applied Sciences, or Cooperative State University may be recognized as a scientific paper in agreement with the supervisor authorized to participate in doctoral procedures according to Art. 10, provided that it meets the requirements specified in clause 4. Examinations and preparation and assessment of the scientific paper shall be subject to the Studies and Examination Regulations of Karlsruhe Institute of Technology (KIT) for the Master's Program of Mechanical Engineering. For proof of scientific qualification, no separate certificate is issued. The aptitude test procedure shall be completed within three semesters. Upon written request by the candidate, the Doctoral Admissions Committee may extend this period. If the procedure is not completed successfully within the period given, the candidate shall be deemed to have failed in proving that he/she is qualified to perform scientific work in the doctoral subject according to par. 5.
- (7) Upon written request by the candidate, the Doctoral Admissions Committee shall decide on recognitions in connection with paragraphs 1 to 6.
- (8) In justified exceptional cases and upon written request by the candidate, the Doctoral Admissions Committee may grant exemption from the requirements specified in paragraphs 1 to 6 and specify ancillary conditions.

Article 5 Doctorate under Joint Supervision with a Department of a Foreign University

- (1) A doctorate may be supervised jointly with the department of a foreign university, the objective being to convey intercultural competencies to the doctoral candidate and enabling him/her to deal with different science systems and university cultures.
- (2) The doctoral candidate shall be accepted for the doctorate by both departments and supervised by a supervisor each. Joint supervision shall be agreed upon by the universities involved in an agreement signed by the Rectors or Presidents and the supervisors of the doctoral candidate at the cooperating universities. This agreement

shall require approval by the KIT Department Council. By way of derogation from the remaining provisions of the present Regulations, such an agreement may cover in particular:

1. The composition of the Doctoral Examination Committee,
 2. the language in which the doctoral thesis is to be written and the oral examination is to be held,
 3. the grades for assessing the doctoral achievements, and
 4. the publication of the doctoral thesis.
- (3) Joint supervision of doctoral candidates may also be agreed upon by the universities involved under conditions of par. 2 in a framework agreement. This framework agreement requires approval by the KIT Department Council. An agreement on the joint supervision of a doctoral candidate that corresponds to a framework agreement according to clause 1 shall not require approval by the KIT Department Council according to par. 2, clause 3.
- (4) The universities shall jointly award the doctorate. The doctoral degree may only be held alternatively in the German or in the foreign form. Both universities shall issue a separate doctoral degree certificate. Both doctoral degree certificates shall indicate that the doctoral procedure was of binational character and that the doctoral degree certificate shall be valid together with the other certificate only.

Article 6 Doctorate in Cooperation with a University of Applied Sciences

If Karlsruhe Institute of Technology (KIT) and a University of Applied Sciences cooperate in a doctoral procedure, professors of the Universities of Applied Sciences shall participate in doctoral procedures as supervisors and examiners with the same rights and obligations. This especially applies to structured PhD programs in which the doctoral procedure is supervised jointly. Further organization of cooperation shall be subject to the respective agreement. This agreement requires approval by the KIT Department Council.

Article 7 Participation of External Doctoral Candidates

External doctoral candidates are doctoral candidates working on their doctoral thesis at KIT without being employed by KIT and without direct affiliation to an organizational unit of KIT. They shall be integrated in the working group of the supervisor, for instance, by participation in seminars for doctoral candidates or research seminars or by participation in conferences and summer schools.

Article 8 Ombudspersons

In cases of conflicts or disputes between the doctoral candidate and supervisor during the doctoral procedure, both may contact the Ombudspersons appointed by the KIT Senate. In this respect, it is referred to the “Satzung zur Bestellung von Ombudspersonen für Doktorandinnen und Doktoranden sowie Betreuerinnen und Betreuer des Karlsruher Instituts für Technologie (KIT)” (statutes on appointment of Ombudspersons for doctoral candidates and supervisors of Karlsruhe Institute of Technology (KIT)).

Article 9 Inspection of Records

The right to inspection of records shall be subject to the legal provisions and in particular to Art. 29 of the “Verwaltungsverfahrensgesetz für Baden-Württemberg” (Baden-Württemberg Administrative Procedure Act – LVwVfG).

Section 2: Doctoral Agreement and Doctoral Procedure

Article 10 Doctoral Agreement

The doctoral candidate and a person authorized to participate in doctoral procedures according to Art. 3 as supervisor shall conclude a doctoral agreement in writing specifying the details outlined in Art. 38, par. 5, cl. 3, LHG, at least. If the supervisor is not a member of the KIT Department, the doctoral agreement must be signed by another professor employed full-time by or working at the KIT Department based on the Jülich model. A doctoral agreement as outlined in cl. 2 requires the approval by the KIT Department Council. The person authorized to participate in doctoral procedures according to cl. 2, second part, also is the supervisor of the doctoral candidate in addition to the supervisor specified in cl. 1.

Article 11 Acceptance as Doctoral Candidate

- (1)** A candidate meeting the requirements for admission to the doctorate according to Art. 4 and aiming for a doctorate shall apply to the Chairperson of the Doctoral Admissions Committee in writing for acceptance as doctoral candidate.
- (2)** The following documents shall be attached to this application:
 1. Proof/proofs according to Art. 4,
 2. description of the candidate’s professional and scientific career,
 3. information on the preliminary topic of the doctoral thesis,
 4. a declaration in writing according to Annex 5a of the present Regulations,
 5. a copy of the doctoral agreement as outlined in Art. 10,
 6. proof of registration as a doctoral candidate with the Karlsruhe House of Young Scientists (KHYS), and

7. the doctoral degree certificate, if the doctoral candidate has already been conferred a doctoral degree.

- (3) If the proofs outlined in par. 2 have been presented and there is no reason to refuse acceptance according to par. 4, the Doctoral Admissions Committee declares acceptance of the doctoral candidate. As a rule, the Doctoral Admissions Committee shall decide on acceptance of the doctoral candidate within a period of six weeks upon receipt of the application. With the acceptance of the doctoral candidate, the KIT Department expresses its general willingness to scientifically supervise the doctoral candidate and assess his/her doctoral thesis. Acceptance of the doctoral candidate shall be notified in writing to the latter, together with information on the rights to appeal.
- (4) The Doctoral Admissions Committee shall refuse acceptance of the doctoral candidate, if
1. the topic chosen for the doctoral thesis belongs to a subject area that is not properly represented by the KIT Department or
 2. a reason for refusal exists according to Art. 14, par. 2.

The candidate shall be notified in writing of the refusal, with the reasons and information on the rights to appeal being indicated. Prior to this, the candidate shall be given the opportunity to comment on the facts relevant to the decision.

- (5) Acceptance as a doctoral candidate may be subject to supplementary requirements specified by the Doctoral Admissions Committee, if certain prerequisites for admission to the doctorate according to Art. 4 still remain to be fulfilled. The Doctoral Admissions Committee shall decide on whether the requirements are fulfilled and the doctoral candidate shall be notified in writing of this decision. If the supplementary requirements are not met or not met in due time, acceptance may be revoked by the Doctoral Admissions Committee; par. 4, clauses 2 and 3 shall apply.
- (6) Initially, the doctoral candidate is accepted for five years, with this acceptance expiring at the end of the semester following these five years. The resulting obligation pursuant to Art. 3, cl. 3 shall be terminated. The status of a doctoral candidate may be extended by another year by the Chairperson of the Doctoral Admissions Committee on written request by the doctoral candidate.
- (7) In case a supervisor can no longer fulfill his/her task for an important reason, the Doctoral Admissions Committee shall hear the doctoral candidate and, if possible, appoint as a supervisor another competent person authorized by the KIT Department to participate in doctoral procedures according to Art. 3. The pedagogic and scientific scope of assessment of an eligible person authorized to participate in doctoral procedures according to Art. 3 must be considered when establishing the supervision relationship with the doctoral candidate.

Article 12 Doctoral Thesis

- (1)** The doctoral thesis shall deal with a scientific topic related to the areas of work of the KIT Department. It shall provide evidence of the doctoral candidate's qualification to carry out independent scientific work and to clearly present the results. The doctoral thesis shall advance scientific knowledge and present the topic in a comprehensive and consistent way. The doctoral thesis shall begin with a title page in the form specified in Annex 1a of these Regulations and contain a list of all scientific publications of the doctoral candidate. For monographic dissertations, prior publications of the doctoral candidate may be used.
- (2)** The doctoral thesis must be written in either German or English. In justified cases, the Doctoral Admissions Committee may permit the doctoral candidate to write the doctoral thesis in French on the latter's written request. When writing the doctoral thesis in a foreign language, it must be preceded by an abstract in German. Except for technical terms in a foreign language, the doctoral thesis must be written in a uniform language.
- (3)** The doctoral thesis may also be based on prior publications or work submitted for publication. It must contribute to an advancement of knowledge corresponding to that of a monographic doctoral thesis and correspond to the requirements outlined in par. 1. Prior publications or work submitted for publication must be related coherently in terms of their topic and may be incorporated in the doctoral thesis, provided that the doctoral candidate is the sole author or has independently developed a major part of it as a co-author. Prior publications or work submitted for publication must be put into context. Major results of prior publications or work submitted for publication must be presented. The doctoral thesis must contain a separate, detailed, and complete literature and methods part as well as introductions to the chapters and a summary of results. Tables, figures, the list of references, and the set of formulas must be laid out in a uniform way. A mere stringing together of prior publications or work submitted for publication shall not be sufficient. It must be clearly visible which parts of the doctoral thesis have already been published or submitted for publication.
- (4)** If the doctoral candidate is co-author of a prior publication cited according to par. 1, clause 5 or of an incorporated prior publication as specified in par. 3, clause 3 and if he/she has developed independently a major part of it as a co-author, independent development of a major part shall be assured in No. 7 of Annex 5b of the present Regulations.
- (5)** Only work that has never been used completely or in major parts for a graduation before will be accepted as a doctoral thesis.

Article 13 Application for Admission to the Doctoral Procedure

- (1) Whoever fulfills the requirements for admission to the doctorate according to Art. 4, may apply for admission to the doctoral procedure. The application shall be submitted in writing to the KIT Dean. Prior acceptance as a doctoral candidate is not required. The application for admission to the doctoral procedure must contain the title of the doctoral thesis and the address of the doctoral candidate.
- (2) The following documents must be enclosed with the application:

 1. Certificates and documents according to Art. 11, par. 2, Nos. 1, 2, and 7,
 2. the doctoral thesis in triplicate and an electronic version of the doctoral thesis,
 3. an affirmation in lieu of oath according to Annex 3 of the present Regulations,
 4. an applicant's signed copy of the instructions provided by KIT on the meaning and penal consequences of an affirmation in lieu of oath in accordance with Annex 4 of the present Regulations,
 5. a declaration in writing according to Annex 5b of the present Regulations stating in particular that the "Regeln zur Sicherung guter wissenschaftlicher Praxis am Karlsruher Institut für Technologie (KIT)" (Rules for Safeguarding Good Research Practice at Karlsruhe Institute of Technology (KIT)) have been observed, and
 6. proposals of reviewers according to Art. 15, par. 3.
- (3) A doctoral candidate who failed in a previous doctoral procedure may apply only once again for admission to the doctoral procedure and do so within one year upon notification of failure in the previous doctoral procedure. Resubmission of a previously rejected doctoral thesis shall not be allowed, if the resubmitted version is identical to the previously submitted version. It is permitted to submit a revised version of the previously rejected doctoral thesis.
- (4) As long as the doctoral procedure is not completed by a negative reviewer's report on the doctoral thesis or the oral examination has not started, the doctoral candidate can withdraw the application for admission to the doctoral procedure. In this case, the application shall be deemed as not having been submitted.

Article 14 Start of the Doctoral Procedure

- (1) The Chairperson of the Doctoral Admissions Committee shall check the documents submitted for admission according to Art. 13, par. 2 and determine whether the subject of the doctoral thesis falls into the responsibility of the KIT Department. In case the submitted documents are complete and the subject of the doctoral thesis falls into the responsibility of the KIT Department, the procedure is started, unless the Doctoral Admissions Committee decides that there is a reason for refusal according to par. 2. The start of the doctoral procedure is notified in writing to the doctoral candidate.

- (2) The Doctoral Admissions Committee decides to refuse the start of the doctoral procedure, if
1. the requirements for admission to the doctorate according to Art. 4 are not fulfilled,
 2. no person authorized by the KIT Department to participate in doctoral procedures according to Art. 3 declares to be scientifically responsible for the area covered by the doctoral thesis,
 3. the applicant has already made more than one unsuccessful attempt to achieve the doctorate,
 4. a doctoral degree was revoked for legal reasons,
 5. reasons exist for the revocation of the doctoral degree according to the legal provisions,
 6. the applicant is not worthy of a doctorate due to a major violation of the principles of good research practice,
 7. the applicant has already been conferred the doctoral degree in engineering (Dr.-Ing.), or
 8. if a contractual relationship against payment of the applicant exists or existed, which covers commercial advising relating to the doctorate and may result in at least one component of the doctorate not being developed on his/her own.
- (3) In case of a refusal, Art. 11, par. 4, clauses 2 and 3 shall apply.

Article 15 Doctoral Examination Committee

- (1) Upon the initiation of the doctoral procedure, the Doctoral Admissions Committee shall appoint the Doctoral Examination Committee.
- (2) The Doctoral Examination Committee consists of the Chairperson and reviewers. The Chairperson must be a professor employed full-time by or working at the KIT Department based on the Jülich model. He/she must not work at the same institute as the reviewers.
- (3) Two reviewers, i.e. a main reviewer and a second reviewer, shall be appointed by the Doctoral Admissions Committee. The reviewer may be any person authorized to participate in doctoral procedures according to Art. 3, who is competent in the respective subject. The main reviewer shall be the person authorized to participate in doctoral procedures, who concluded the doctoral agreement specified in Art. 10. He/she shall be member of the KIT Department. In the case of two supervisors according to Art. 10, cl. 2, the supervisor specified in Art. 10, cl. 2, second part shall be the main reviewer and the supervisor specified in Art. 10, cl. 1 shall act as second reviewer; in these cases, an additional reviewer must be appointed. At least one reviewer must be a professor employed full-time by or working at the KIT Department based on the Jülich model. At least one reviewer must be member of an institute or sub-institute of KIT or of another

university other than the institute at which the doctoral candidate has written his/her thesis. The Chairperson of the Doctoral Examination Committee may not be appointed reviewer. The Doctoral Admissions Committee shall not be bound to the proposals submitted by the doctoral candidate according to Art. 13, par. 2, No. 6 when appointing the reviewers.

- (4) If required by the doctoral thesis in particular due to its interdisciplinary character or large thematic scope, another person authorized to participate in doctoral procedures from each of the mainly responsible subject areas of the doctoral thesis shall be appointed as another reviewer. Upon appointment, he/she will also be member of the Doctoral Examination Committee.
- (5) In case a KIT Associate Fellow as specified in Art. 7, par. 1 of the “Verfahrensordnung des Karlsruher Instituts für Technologie (KIT) zur Errichtung des Status eines “KIT Associate Fellow““ (Rules of Procedure of Karlsruhe Institute of Technology (KIT) for Establishment of the Status “KIT Associate Fellow“) participates in the doctoral procedure, an additional reviewer is appointed according to Art. 7, par. 3 of the “Verfahrensordnung des Karlsruher Instituts für Technologie (KIT) zur Errichtung des Status eines “KIT Associate Fellow““ (Rules of Procedure of Karlsruhe Institute of Technology (KIT) for Establishment of the Status “KIT Associate Fellow“).
- (6) In case another reviewer according to par. 3, cl. 5, second part or par. 4 or/and an additional reviewer according to par. 5 is appointed, the doctoral candidate shall submit to the Chairperson of the Doctoral Admissions Committee another copy each of the doctoral thesis for hand-over to the other or additional reviewer.
- (7) The persons authorized to participate in doctoral procedures at KIT according to Art. 3 and appointed reviewers by the Doctoral Admissions Committee may refuse appointment for an important reason only.

Article 16 Acceptance and Assessment or Rejection of the Doctoral Thesis

- (1) Each reviewer shall submit to the Chairperson of the Doctoral Admissions Committee an independent and justified review on the doctoral thesis at the latest three months upon appointment as reviewer. The review contains the justified recommendation of acceptance or rejection of the thesis and in case of its recommended acceptance an assessment as specified in par. 2.
- (2) The grade to be given for a doctoral thesis recommended for acceptance may be:

sehr gut	(very good)	(magna cum laude)	= 1,
gut	(good)	(cum laude)	= 2, or
genügend	(sufficient)	(rite)	= 3.

The grades of 1.5 (gut bis sehr gut (good to very good)) and 2.5 (genügend bis gut (sufficient to good)) are permitted.

- (3)** In the case of particularly outstanding achievements, the reviewer may propose in his/her review to award the overall rating “mit Auszeichnung” (with distinction) (summa cum laude) when a corresponding result is achieved in the oral examination. This proposal must be justified.
- (4)** As soon as all reviews have been submitted, the Chairperson of the Doctoral Admissions Committee shall inform the persons authorized by the KIT Department to participate in doctoral procedures according to Art. 3 that the doctoral thesis and the reviews of the reviewers will be made accessible to them for a period of 14 days. Within the period mentioned, persons authorized by the KIT Department to participate in doctoral procedures according to Art. 3 may, in written form, object to the doctoral thesis and its assessment, with the reasons being indicated.
- (5)** In case all reviewers have recommended acceptance of the doctoral thesis and no objection has been made, the Doctoral Examination Committee shall declare acceptance of the doctoral thesis and determine the grade as the unrounded arithmetic mean of the grades of the reviewers. In case of an objection, the Doctoral Examination Committee, after having heard the reviewers, shall decide whether the objection is to be considered in assessing the doctoral thesis. The Doctoral Examination Committee may decide to request another review before the decision will be made. If the objection is to be considered, the Doctoral Examinations Committee shall decide on the acceptance or rejection of the doctoral thesis. If acceptance of the doctoral thesis is agreed upon, every member of the Doctoral Examination Committee shall propose a grade according to par. 2. From these proposals, the unrounded arithmetic mean shall be determined as the grade of the doctoral thesis.
- (6)** In case the doctoral thesis is recommended to be rejected by one, but not all reviewers, the Chairperson of the Doctoral Admissions Committee, upon proposal by the Doctoral Examination Committee, shall appoint a person authorized to participate in doctoral procedures according to Art. 3 as another reviewer, who then will also be member of the Doctoral Examination Committee. In this case, the display period according to par. 4, cl. 1 shall begin upon receipt of the additional review only. If no objection is made, the Doctoral Examination Committee shall decide on the acceptance or rejection of the doctoral thesis. In case of a tie, the vote of the Chairperson shall decide. In case the Doctoral Examination Committee agrees on the acceptance of the doctoral thesis, it shall determine the unrounded arithmetic mean from the grades proposed by all reviewers as the grade of the doctoral thesis. In case of an objection, par. 5, clauses 2, 4 through 6 shall apply.

- (7) In case all reviewers recommend rejection of the doctoral thesis and no objection is made, the Doctoral Examination Committee shall decide on acceptance or rejection of the doctoral thesis. Par. 5, cl. 3 shall apply. In case the doctoral thesis is accepted, par. 5, clauses 5 and 6 shall apply. In case of an objection, par. 5, clauses 2, 4 through 6 shall apply.
- (8) In case a reviewer found deficiencies in the doctoral thesis without rejecting it in general, he/she may apply with the Chairperson of the Doctoral Examination Committee for the elimination of the deficiencies as a prerequisite for the recommendation of acceptance of the doctoral thesis. The Chairperson of the Doctoral Examination Committee requests the doctoral candidate to resubmit the doctoral thesis within a period of six months after elimination of the deficiencies. At the written request of the doctoral candidate, the Chairperson of the Doctoral Examination Committee can extend the period specified in cl. 2 by three months in justified exceptional cases. In case the doctoral candidate fails to observe this period for the resubmission of the doctoral thesis, the thesis shall be deemed to have been recommended for rejection by the reviewer according to cl. 1. In case the period for the resubmission of the doctoral thesis is observed, its initially submitted version is the basis for assessment, with the doctoral candidate's independent contribution to the elimination of the deficiencies being considered. After hearing the reviewers and their approval of the elimination of deficiencies according to cl. 1, the doctoral thesis shall be deemed to have been recommended for acceptance according to par. 1, cl. 2.
- (9) The Doctoral Examination Committee approves the doctoral thesis for publication after the elimination of the deficiencies according to par. 8, if applicable.
- (10) In case the doctoral thesis has been rejected, the candidate shall be notified in writing by the KIT Dean, with the reasons and information on the rights to appeal being indicated. With this, the doctoral procedure is terminated unsuccessfully. A copy of the doctoral thesis, together with the reviews, shall be kept in the files.
- (11) A reviewer who has recommended rejection of the doctoral thesis may demand that he/she is not mentioned in the publication of the thesis.

Article 17 Oral Examination

- (1) In case the doctoral thesis has been accepted, the Chairperson of the Doctoral Admissions Committee shall fix the date and place of the oral examination. The oral examination shall take place on one of the campuses of KIT. The place and date of the oral examination and the members of the Doctoral Examination Committee according to Art. 15, par. 2 shall be notified to the doctoral candidate in writing. The time span between

the receipt of this information and the date of the oral examination must not be less than 14 days. A shorter period may only be fixed in agreement with the doctoral candidate.

(2) If one member of the Doctoral Examination Committee cannot participate in the oral examination, the Chairperson of the Doctoral Examination Committee shall appoint a person authorized to participate in doctoral procedures according to Art. 3 as deputy, who will take part in the oral examination instead of the absent member. The doctoral candidate must be informed immediately, but at the beginning of the oral examination at the latest, about the changed composition of the Doctoral Examination Committee. In cases of clause 1, the Chairperson of the Doctoral Admissions Committee, in agreement with the Doctoral Examination Committee, may fix a date other than that specified in par. 1, cl. 1 for the oral examination instead of appointing a deputy. Par. 1, clauses 2 through 4 shall apply.

(3) Apart from the members of the Doctoral Examination Committee, the Chairperson of the Doctoral Examination Committee shall invite the following persons to the oral examination:

1. The President and the Members of the Executive Board not responsible for business and human resources,
2. the Head of the Division to which the institutes of the KIT Department belong,
3. the KIT Deans of the other KIT Departments,
4. the KIT Department members authorized to participate in doctoral procedures according to Art. 3; KIT Associate Fellows shall be invited only, if the doctoral candidate is a member of the Fellow's own junior research group.

The Doctoral Admissions Committee may invite additional persons authorized to participate in doctoral procedures according to Art. 3 from other KIT Departments, if the doctoral thesis is of interdisciplinary character.

(4) During the colloquium, the members of the Doctoral Examination Committee act as examiners. The colloquium takes place under the direction of the Chairperson of the Doctoral Examination Committee.

(5) The oral examination takes place as a colloquium of about 80 minutes' duration, in cases of cl. 3 of about 90 minutes' duration. The colloquium shall start with a public presentation of about 30 minutes by the doctoral candidate about his/her doctoral thesis. It may be followed by a public discussion of about ten minutes, which will not be considered in the assessment of the oral examination. It is followed by a non-public disputation of 50 minutes with the members of the Doctoral Examination Committee and the scientists present according to par. 3. The disputation shall cover topics and methods relating to the doctoral thesis of the doctoral candidate as well as basic problems of the subject area. For an important reason lying in the person of the doctoral candidate, the

presentation specified in cl. 2 and/or the discussion outlined in cl. 3 may not be public ex officio or on the doctoral candidate's written request.

- (6) The oral examination takes place in the German language or in another language agreed upon with the examiners.
- (7) The general course of the oral examination is recorded in the minutes.
- (8) Directly after the colloquium, the members of the Doctoral Examination Committee shall assess the oral examination of the doctoral candidate in a final session. The present scientists according to par. 4 shall participate in this assessment with an advisory function. Each member of the Doctoral Examination Committee shall separately and independently award a grade according to Art. 16, par. 2; an insufficient examination shall be given the grade "nicht bestanden (4.0)" (failed).
- (9) The final grade of the oral examination shall be the unrounded mean of the individual grades according to par. 8, cl. 3. The oral examination shall be passed, if this grade is 3.0 or better.
- (10) Apart from the persons named in pars. 3 and 4, the audience of the disputation, but not of the final session of the Doctoral Examination Committee, may include members of the KIT Department or of another KIT Department, who have completed their university studies, if seats are available and the doctoral candidate has agreed. The Chairperson of the Doctoral Examination Committee decides on the admission of an audience. Audience may be excluded ex officio for an important reason.
- (11) The time and place of the oral examination shall be announced to the members of the KIT Department.
- (12) In case the doctoral candidate does not participate in the oral examination at the fixed date without giving an important reason, the oral examination shall be deemed to have been failed.

Article 18 Repetition of the Oral Examination

- (1) If the doctoral candidate fails in the oral examination, he/she may apply once for a repetition of the oral examination six months upon the failure in the previous oral examination at the earliest.
- (2) If the oral examination is not passed repeatedly or in case the doctoral candidate does not apply for a repetition of the oral examination within a period of one year upon failure in the previous oral examination, the doctoral procedure then shall be unsuccessfully terminated.
- (3) The candidate shall be informed about the unsuccessful termination of the doctoral procedure according to Art. 11, par. 4, cl. 2. If the oral examination is failed due to a lacking application for a repetition of the oral examination within the period specified in

par. 2, Art. 11, par. 4, cl. 3 shall apply in addition. Together with the documents, the doctoral thesis shall remain in the files.

- (4) Upon written request by the doctoral candidate, the Doctoral Admissions Committee shall decide on justified exceptions from the provisions outlined in paragraphs 1 and 2.

Article 19 Withdrawal from the Oral Examination

- (1) In case the candidate is unable to take part in the oral examination due to sickness or another important reason, the Doctoral Admissions Committee shall approve withdrawal from the oral examination on written request. This request shall be addressed immediately to the Doctoral Admissions Committee, with the reason of the withdrawal being indicated and the corresponding proofs being attached. In case of sickness, a medical certificate containing the medical information necessary to assess the inability to take part in the examination shall be added.
- (2) In case withdrawal from the oral examination is approved, a new date shall be fixed for the examination. Otherwise, the oral examination shall be deemed to have been failed; Art. 11, par. 4, clauses 2 and 3 shall apply.

Article 20 Overall Grade for the Doctorate

- (1) At the final session following the colloquium, the Doctoral Examination Committee shall determine the overall grade for a successful doctorate.
- (2) The overall grade is the weighted mean of the grade of the doctoral thesis and the grade of the oral examination, with the doctoral thesis having weight 2 and the oral examination having weight 1. The unrounded arithmetic means as specified in Art. 16, par. 5, 6, or 7 and Art. 17, par. 9, cl. 1 shall be used as grades for the doctoral thesis and oral examination. The overall grade for the doctorate may be
 - for a weighted mean up to 1.5 and including 1.5 "sehr gut" (very good, magna cum laude)
 - for a weighted mean from 1.5 up to and including 2.5 "gut" (good, cum laude),
 - for a weighted mean from 2.5 up to and including 3.0 "bestanden" (passed, rite).
- (3) By way of exception in case of outstanding results, the Doctoral Examination Committee may unanimously decide to award the overall grade "mit Auszeichnung" (with distinction; summa cum laude), if the results are 1.0 and at least one of the reviewers proposed to

do so according to Art. 16, par. 3. If these requirements are not fulfilled, a total grade according to par. 2 will be awarded.

- (4) The overall grade for the doctorate, the assessment of the doctoral thesis, and the grade for the oral examination shall be communicated to the doctoral candidate by the Chairperson of the Doctoral Examination Committee after the final session.
- (5) The Chairperson of the Doctoral Admissions Committee shall forward to the doctoral candidate a notification in writing with information on the rights to appeal and contents outlined in par. 4.
- (6) On the doctoral candidate's written request, the KIT Department shall issue a preliminary certificate of the successful completion of the doctorate with the overall grade being indicated.

Article 21 Publication of the Doctoral Thesis and Submission of the Deposit

Copies

- (1) Within one year after passing the oral examination, the doctoral thesis shall be published by the doctoral candidate in a version approved by the Doctoral Examination Committee according to Art. 16, par. 9. Depending on the type of publication, the following copies or files shall be handed over to the KIT Library within the period indicated above:
 - a) A machine-readable file meeting the requirements specified by the KIT Library in case of publication in an electronic version with unrestricted access by public data networks via the repository of the KIT Library,
 - b) twelve printed and archivable copies in case of publication by photoprint. This also applies to doctoral theses published in a scientific series that is not published by a publishing house,
 - c) three printed copies in case of publication by a publishing house and availability in bookstores, if a minimum circulation of 150 copies and/or unrestricted access to the doctoral thesis in electronic form on the Internet is ensured, or
 - d) three copies in case of publication in a scientific journal.

The KIT Library shall certify in writing the publication and compliance with the delivery obligation.

- (2) In addition, one bound copy each shall be submitted to the reviewers and the Dean's Office of the KIT Department.
- (3) The versions submitted in accordance with par. 1, cl. 2, a or b must have a title page according to Annex 1b of these Regulations or contain bibliographic data on the doctoral thesis. The copies published according to par. 1, cl. 2, c or d must be accompanied by the notation that the publication represents a doctoral thesis approved by the KIT Department of Mechanical Engineering of Karlsruhe Institute of Technology (KIT) and

must indicate the date of the oral examination. In case the reviewers approve a title other than that of the examination copy, this title shall be indicated in the doctoral thesis.

- (4)** In cases of par. 1, cl. 2, a, the doctoral candidate shall transfer to Karlsruhe Institute of Technology (KIT) the permanent right to make the doctoral thesis available in data networks within the limits of the statutory tasks of the KIT Library. The KIT Library shall check the delivered version of the doctoral thesis for legibility and agreement with the requirements of the KIT Library according to par. 1, cl. 2, a. Delivery of files that do not meet these requirements shall not be deemed a publication and delivery.
- (5)** In cases of par. 1, cl. 2, b, the doctoral candidate shall transfer to Karlsruhe Institute of Technology (KIT) the permanent right to produce and disseminate further copies of the doctoral thesis.
- (6)** In justified individual cases of delivery according to par. 1, cl. 2, a and on written request by the doctoral candidate, the Chairperson of the Doctoral Admissions Committee may deem the obligations outlined in par. 1 to be also fulfilled when the doctoral thesis can be made publicly accessible with a certain delay only due to a non-disclosure notice resulting from patent application or due to a publication in a journal. In this case, the doctoral candidate must have fulfilled all delivery requirements, the time of latest publication must be indicated in the non-disclosure notice, and it must be possible for the publication to be made by the KIT Library without any further interference by the doctoral candidate. Fulfilling of the above requirements will be certified in writing by the Chairperson of the Doctoral Admissions Committee. A non-disclosure notice may be applied for using the form given by the KIT Library for a period of up to two years, which may be extended twice by another year, but for not more than a duration of four years after the signature date. The application for extension of the non-disclosure notice shall be made two weeks prior to its expiry at the latest. On the certificate according to par. 1, cl. 3, the KIT Library will indicate the existence and duration of the non-disclosure notice.
- (7)** The doctoral candidate shall declare in writing to the KIT Library that the version submitted is identical in terms of contents with the version approved by the Doctoral Examination Committee according to Art. 16, par. 9.
- (8)** In case the deadline specified in par. 1 is missed, any and all rights acquired in the doctoral procedure shall expire. Upon written request by the doctoral candidate, the Chairperson of the Doctoral Admissions Committee may extend the deadline specified in par. 1 up to a total duration of three years in justified cases. Further extension shall be excluded. The KIT Library shall be informed in writing about this decision.

Article 22 Award of the Doctorate and Doctoral Degree Certificate

- (1)** The doctoral degree certificate shall be issued with the date of the oral examination, signed by the President and the KIT Dean, and provided with the seal of Karlsruhe Institute of Technology. Its layout corresponds to that in Annex 2.
- (2)** In addition to the doctoral degree certificate, a doctoral degree report shall be issued. It contains the title of the doctoral thesis, the overall grade of the doctorate with the Latin translation given in brackets, and the positions held, academic degrees, titles, and names of the reviewers. It shall be signed by the KIT Dean and provided with the seal of the KIT Department.
- (3)** The doctorate is awarded by the KIT Dean handing over the doctoral degree certificate. The doctoral degree certificate will be handed over only after the publication of the doctoral thesis and delivery of the deposit copies according to Art. 21.
- (4)** Prior to the award of the doctoral degree certificate, neither the doctoral degree nor the title of doctor with an addition, such as “designatus (des.)” (designated) or “in spe” (to be) shall be used.

Article 23 Invalidity of the Doctorate and Revocation of the Doctoral Degree

- (1)** If, prior to the delivery of the doctoral degree certificate, it is established that the doctoral candidate is guilty of deception when proving his/her doctoral achievements or that essential prerequisites for the admission to the doctorate have erroneously been taken for granted, the Doctoral Admissions Committee may declare the doctoral procedure to be completed without success after the corresponding decision by the KIT Department Council. The KIT Dean shall inform the President about this decision.
- (2)** In case the requirements for admission to the doctorate were not fulfilled without the doctoral candidate wishing to deceive in this regard and if this is established after delivery of the doctoral degree certificate only, the Doctoral Admissions Committee can agree on this deficiency having been remedied.
- (3)** The doctoral degree may be revoked by the Doctoral Admissions Committee after a corresponding decision by the KIT Department Council, if it is found out later that it was achieved by deception. As for the rest, the legal provisions shall apply.
- (4)** Prior to the decision of the Doctoral Admissions Committee on the invalidity of the doctorate and on the revocation of the doctoral degree, the candidate shall be given the opportunity to comment on the facts relevant to this decision.
- (5)** Incriminating decisions of the Doctoral Admissions Committee according to pars. 1 and 3 shall be notified in writing to the candidate, with the reasons and information on the rights to appeal being indicated.

- (6) Return of the doctoral degree certificate, doctoral degree report, and of the preliminary certificate according to Art. 20, par. 6 shall be subject to Art. 52, LVwVfG.

Section 3: Honors

Article 24 Honorary Doctorate

- (1) On the request of a member of the KIT Department, it may award the academic degree of a “Doktor der Ingenieurwissenschaften ehrenhalber“ (Dr.-Ing. E.h.) or “Doktorin der Ingenieurwissenschaften ehrenhalber“ (Dr.-Ing. E.h.) (Honorary Doctor of Engineering Sciences) to persons who are no members of Karlsruhe Institute of Technology (KIT) or of one of its bodies in recognition of outstanding scientific merits within the KIT Department’s fields of teaching and research.
- (2) The KIT Senate shall decide on the award of the honorary doctorate upon proposal by the Executive Board in agreement with the KIT Department or upon proposal by the KIT Department in agreement with the Executive Board. The KIT Department Council shall deliberate on the proposal in two readings. For preparation, it shall establish an advisory commission of at least three members of the KIT Department. The decision on the proposal to be submitted to the KIT Senate shall require a three-fourths majority of the present members of the KIT Department Council.
- (3) The honorary doctorate shall be awarded by the KIT Dean handing over the certificate of honor which points out the scientific merits of the honored person. The certificate shall be signed by the President and the KIT Dean and shall be provided with the seal of Karlsruhe Institute of Technology (KIT).

Article 25 Doctoral Jubilee

The KIT Department may renew a doctoral certificate, if this is deemed appropriate considering the special merits for science or the exceptionally close relationship of the person to be honored with Karlsruhe Institute of Technology (KIT). Such a renewal can be made for the first time on the occasion of the 25th anniversary of the day the doctoral degree was awarded. The respective decision shall be made by the KIT Department Council.

Section 4: Entry into Force, Transition Regulation

Article 26 Entry into Force, Transition Regulation

- (1) The present Regulations for the Award of the Doctoral Degree shall enter into force on the day after publication in the official announcements of Karlsruhe Institute of Technology (KIT).

- (2)** At the same time, the Regulations for the Award of the Doctoral Degree in Engineering (Dr.-Ing.) of Universität Karlsruhe (TH) for the Department of Mechanical Engineering of July 16, 2007 (Official Announcement of Universität Karlsruhe (TH) No. 53 of August 15, 2007), as amended by the First Amendment of the Regulations of Karlsruhe Institute of Technology (KIT) for the Award of the Doctoral Degree in Engineering (Dr.-Ing.) at the KIT Department of Mechanical Engineering (Official Announcement of Karlsruhe Institute of Technology (KIT) No. 4 of March 15, 2012), shall cease to be in force.
- (3)** In case a doctoral agreement was concluded according to Art. 10 or acceptance as a doctoral candidate was expressed according to Art. 11 prior to the entry into force of the present Regulations for the Award of the Doctoral Degree, these doctoral procedures shall continue to be subject to the Regulations for the Award of the Doctoral Degree in Engineering (Dr.-Ing.) of Universität Karlsruhe (TH) for the Department of Mechanical Engineering of July 16, 2007 (Official Announcement of Universität Karlsruhe (TH) No. 53 of August 15, 2007), as amended by the First Amendment of the Regulations of Karlsruhe Institute of Technology (KIT) for the Award of the Doctoral Degree in Engineering (Dr.-Ing.) at the KIT Department of Mechanical Engineering (Official Announcement of Karlsruhe Institute of Technology (KIT) No. 4 of March 15, 2012). Upon request by the doctoral candidate, the provisions of the present Regulations for the Award of the Doctoral Degree may apply. The request shall be addressed in writing to the Chairperson of the Doctoral Admissions Committee.

Karlsruhe, June 26, 2017

Professor Dr.-Ing. Holger Hanselka
(President)

Annex 1a (German)

(Titel der Dissertation)

Zur Erlangung des akademischen Grades eines/einer
DOKTORS / DOKTORIN DER INGENIEURWISSENSCHAFTEN (Dr.-Ing.)

bei der KIT Fakultät für Maschinenbau des
Karlsruher Instituts für Technologie (KIT)
eingereichte

DISSERTATION

von

(akademischer Grad, Vorname, Name)

Please note that the preceding German text shall be used exclusively. This English translation is a service provided for your information only.

Annex 1a (English)

(Title of the Doctoral Thesis)

DOCTORAL THESIS

submitted by ...

(academic degree, first name, last name)

for conferral of the academic degree of a
Doctor of Engineering Sciences (Dr.-Ing.)

at the KIT Department of Mechanical Engineering
of Karlsruhe Institute of Technology (KIT).

Annex 1b (German)

(Titel der Dissertation)

Zur Erlangung des akademischen Grades eines/einer
DOKTORS/DOKTORIN DER INGENIEURWISSENSCHAFTEN (Dr.-Ing.)

von der KIT Fakultät für Maschinenbau des
Karlsruher Instituts für Technologie (KIT)
angenommene
DISSERTATION

von

(akademischer Grad, Vorname, Name)

Tag der mündlichen Prüfung:

Hauptreferent/Hauptreferentin

Korreferenten/Korreferentinnen:

Please note that the preceding German text shall be used exclusively. This English translation is a service provided for your information only.

Annex 1b (English)

(Title of doctoral thesis)

DOCTORAL THESIS

submitted by

(academic degree, first name, last name)

for conferral of the academic degree of a
Doctor of Engineering Sciences (Dr.-Ing.)
accepted by the KIT Department of Mechanical Engineering
of Karlsruhe Institute of Technology (KIT).

Date of oral examination:

Main reviewer:

Other reviewers:

Annex 2

Das Karlsruher Institut für Technologie (KIT)

verleiht
awards,

durch die KIT-Fakultät für Maschinenbau
in the KIT Department of Mechanical Engineering

(Name)

geboren am XX. Monat XXXX in Geburtsort
born on Month XX, XXX in place of birth

Titel und Würde eines/einer
the degree and honors of

**Doktors/Doktorin der Ingenieurwissenschaften
(Dr.-Ing.)**

nachdem er/sie in ordnungsgemäßem Promotionsverfahren durch seine/ihre Dissertation
after having proved his/her scientific competence and abilities by successful completion of the regular doctoral procedure and by his/her thesis

(Titel der Dissertation)

sowie durch die mündliche Prüfung seine/ihre wissenschaftliche Befähigung erwiesen hat.
followed by a successful oral examination and defense.

Karlsruhe, XX. Monat XXXX
Karlsruhe, Month XX, XXXX

Präsident/-in des
Karlsruher Instituts für Technologie (KIT)

Dekan/-in der KIT-Fakultät für Maschinenbau

Annex 3 (German)

Die eidesstattliche Versicherung ist schriftlich abzugeben. Die Möglichkeit einer Aufnahme der eidesstattlichen Versicherung zur Niederschrift bleibt unberührt. Die schriftliche Erklärung hat folgenden Wortlaut:

Eidesstattliche Versicherung gemäß § 13 Absatz 2 Satz 2 Ziffer 3 der Promotionsordnung des Karlsruher Instituts für Technologie (KIT) für die KIT-Fakultät für Maschinenbau:

1. Bei der eingereichten Dissertation zu dem Thema

.....

handelt es sich um meine eigenständig erbrachte Leistung.

2. Ich habe nur die angegebenen Quellen und Hilfsmittel benutzt und mich keiner unzulässigen Hilfe Dritter bedient. Insbesondere habe ich wörtlich oder sinngemäß aus anderen Werken übernommene Inhalte als solche kenntlich gemacht.

3. Die Arbeit oder Teile davon habe ich wie folgt/bislang nicht* an einer Hochschule des In- oder Auslands als Bestandteil einer Prüfungs- oder Qualifikationsleistung vorgelegt.

Titel der Arbeit:

Hochschule und Jahr:

Art der Prüfungs- oder Qualifikationsleistung:

4. Die Richtigkeit der vorstehenden Erklärungen bestätige ich.

5. Die Bedeutung der eidesstattlichen Versicherung und die strafrechtlichen Folgen einer unrichtigen oder unvollständigen eidesstattlichen Versicherung sind mir bekannt.

Ich versichere an Eides statt, dass ich nach bestem Wissen die reine Wahrheit erklärt und nichts verschwiegen habe.

Ort und Datum

Unterschrift

* Nicht Zutreffendes streichen. Bei Bejahung sind anzugeben: der Titel der andernorts vorgelegten Arbeit, die Hochschule, das Jahr der Vorlage und die Art der Prüfungs- oder Qualifikationsleistung.

Please note that the preceding German text shall be used exclusively. This English translation is a service provided for your information only.

Annex 3 (English)

The present affirmation in lieu of an oath shall be given in writing. The possibility of an oral affirmation in lieu of an oath for recording shall remain unaffected. The declaration in writing shall have the following wording:

Affirmation in lieu of oath according to Art. 13, par. 2, cl. 2, No. 3, of the Regulations of Karlsruhe Institute of Technology (KIT) for the Award of the Doctoral Degree at the KIT Department of Mechanical Engineering:

1. The doctoral thesis covering the subject _____ represents my own independent work.

2. I only used the sources and aids indicated without any impermissible assistance by third persons. In particular, I have indicated any and all contents taken over from other works either literally or in substance.

3. The doctoral thesis or parts thereof have been submitted to a university in Germany or abroad as part of the examination or qualification work as follows/have not yet been submitted to a university in Germany or abroad as part of the examination or qualification work.*

Title of the work:

University and year:

Type of examination or qualification work:

4. I herewith confirm correctness of the above declarations.

5. I am aware of the significance of the affirmation in lieu of oath and the penal consequences of an incorrect or incomplete affirmation in lieu of oath.

I affirm in lieu of oath that, to the best of my knowledge, these statements are true and I have not concealed anything.

Place and date

Signature

* Delete as appropriate. In the former case, please indicate the title of the thesis submitted elsewhere, the university, the year of submission, and the type of examination or qualification work.

Annex 4 (German)

Eidesstattliche Versicherung Belehrung

Die Universitäten in Baden-Württemberg verlangen eine Eidesstattliche Versicherung über die Eigenständigkeit der erbrachten wissenschaftlichen Leistungen, um sich glaubhaft zu versichern, dass der/die Promovend/-in die wissenschaftlichen Leistungen eigenständig erbracht hat.

Weil der Gesetzgeber der Eidesstattlichen Versicherung eine besondere Bedeutung beimisst und sie erhebliche Folgen haben kann, hat der Gesetzgeber die Abgabe einer falschen eidesstattlichen Versicherung unter Strafe gestellt. Bei vorsätzlicher Abgabe einer falschen Erklärung droht eine Freiheitsstrafe bis zu drei Jahren oder eine Geldstrafe.

Eine fahrlässige Abgabe (also Abgabe, obwohl Sie hätten erkennen müssen, dass die Erklärung nicht den Tatsachen entspricht) kann eine Freiheitsstrafe bis zu einem Jahr oder eine Geldstrafe nach sich ziehen.

Die entsprechenden Strafvorschriften sind § 156 StGB (falsche Versicherung an Eides Statt) und § 161 StGB (fahrlässiger Falscheid, fahrlässige falsche Versicherung an Eides Statt).

§ 156 StGB: Falsche Versicherung an Eides Statt

Wer vor einer zur Abnahme einer Versicherung an Eides Statt zuständigen Behörde eine solche Versicherung falsch abgibt oder unter Berufung auf eine solche Versicherung falsch aussagt, wird mit Freiheitsstrafe bis zu drei Jahren oder mit Geldstrafe bestraft.

§ 161 StGB: Fahrlässiger Falscheid, fahrlässige falsche Versicherung an Eides Statt

Absatz 1: Wenn eine der in den § 154 bis 156 bezeichneten Handlungen aus Fahrlässigkeit begangen worden ist, so tritt Freiheitsstrafe bis zu einem Jahr oder Geldstrafe ein.

Absatz 2: Strafflosigkeit tritt ein, wenn der Täter die falsche Angabe rechtzeitig berichtigt. Die Vorschriften des § 158 Abs. 2 und 3 gelten entsprechend.

Ort und Datum

Unterschrift

Please note that the preceding German text shall be used exclusively. This English translation is a service provided for your information only.

Annex 4 (English)

Affirmation in Lieu of Oath Instructions

The universities in Baden-Württemberg demand an affirmation in lieu of oath stating that the scientific achievements made represent own work in order to be sure that the doctoral candidate has performed the scientific work on his/her own.

As the legislator attaches particular significance to the affirmation in lieu of oath and the latter may have major consequences, the legislator has made an incorrect affirmation in lieu of oath punishable. An intentional wrong affirmation may be punished by imprisonment of up to three years or a fine.

A negligent affirmation (i.e. an affirmation made although you should have recognized that the declaration is not true) may be punished by imprisonment of up to one year or a fine.

The corresponding penal provisions are Art. 156 StGB (Penal Code) (wrong affirmation in lieu of oath) and Art. 161 StGB (Penal Code) (perjury, negligently wrong affirmation in lieu of oath).

Article 156 StGB: Wrong affirmation in lieu of oath

Persons making a wrong affirmation in lieu of oath to a competent authority or making incorrect statements in reliance on such an affirmation shall be punished with imprisonment for up to three years or with a fine.

Article 161 StGB: Perjury, negligently wrong affirmation in lieu of oath

Par. 1: If one of the actions specified in Arts. 154 to 156 was made negligently, this may be punished by imprisonment of up to one year or a fine.

Par. 2: Impunity shall apply, if the offender corrects the wrong statement in due time. The provisions of Art. 158, paragraphs 2 and 3 shall apply accordingly.

Place and date

Signature

Annex 5a (German)

Versicherung gemäß § 11 Absatz 2 Ziffer 4 der Promotionsordnung des Karlsruher Instituts für Technologie (KIT) für die KIT-Fakultät für Maschinenbau

1. Einen erheblichen Verstoß gegen die Grundsätze guter wissenschaftlicher Praxis habe ich bislang nicht begangen.

2. Es gab bisher keine Promotionseignungsprüfung oder gleichwertige Prüfung an einer Universität oder dieser gleichgestellten Hochschule, an der ich erfolglos teilgenommen habe.¹

3. Diesem Promotionsverfahren gingen keine anderen Promotionsverfahren voran und ich bin in keinen weiteren Promotionsverfahren Kandidat/-in
oder

Diesem Promotionsverfahren gingen die folgenden Promotionsverfahren voran bzw. in den folgenden Promotionsverfahren bin ich Kandidat/-in:

Universität:

Fakultät:

Titel der Dissertation:

Stand des Promotionsverfahrens:

4. Durch

.....

wurde mir bereits der Grad des Doktors/der Doktorin der

.....

verliehen.

a) Dieser Doktorgrad wurde nicht aus gesetzlichen Gründen entzogen.

b) Es liegen keine Gründe vor, die nach den gesetzlichen Bestimmungen die Entziehung des Doktorgrades rechtfertigen.

5. Ein entgeltliches Vertragsverhältnis, das eine gewerbliche Promotionsberatung zum Gegenstand hat und zur Unselbstständigkeit zumindest einer Promotionsleistung führen kann, besteht bzw. bestand nicht.

6. Die Richtigkeit der vorstehenden Erklärungen bestätige ich.

Ort und Datum

Unterschrift

¹ Gilt nur für Hochschulabsolventen/-innen gemäß § 4 Absatz 5 Promotionsordnung / Zu streichen, sofern nicht zutreffend.

Please note that the preceding German text shall be used exclusively. This English translation is a service provided for your information only.

Annex 5a (English)

**Affirmation According to Art. 11, par. 2, No. 4 of the Regulations of
Karlsruhe Institute of Technology (KIT) for the Award of the Doctoral Degree at the
KIT Department of Mechanical Engineering**

1. I have not yet seriously violated the principles of good research practice.
2. I have not yet participated without success in any doctoral aptitude test procedure or equivalent test at a university or equivalent college.¹
3. This doctoral procedure was not preceded by any other doctoral procedures and I am no candidate in any other doctoral procedure.

or

This doctoral procedure was preceded by the following doctoral procedures/I am candidate in the following doctoral procedures:

University:

Department:

Title of Doctoral Thesis:

Status of Doctoral Procedure:

4. I was awarded the degree of Doctor of _____ by .
 - a) This doctoral degree was not revoked for legal reasons.
 - b) There are no reasons justifying revocation of the doctoral degree according to the legal provisions.
5. A contractual relationship against payment covering commercial advising relating to the doctorate and potentially resulting in at least one component of the doctorate not being developed on my own does not exist or did not exist.
6. I herewith confirm the correctness of the above statements.

Place and date

Signature

¹ Only applies to university graduates according to Art. 4, par. 5 of these Regulations / delete as appropriate.

Annex 5b (German)

Versicherung gemäß § 13 Absatz 2 Satz 2 Ziffer 5 der Promotionsordnung des Karlsruher Instituts für Technologie (KIT) für die KIT-Fakultät für Maschinenbau

1. Einen erheblichen Verstoß gegen die Grundsätze guter wissenschaftlicher Praxis habe ich bislang nicht begangen.

2. Es gab bisher keine Promotionseignungsprüfung oder gleichwertige Prüfung an einer Universität oder dieser gleichgestellten Hochschule, an der ich erfolglos teilgenommen habe.¹

3. Diesem Promotionsverfahren gingen keine anderen Promotionsverfahren voran und ich bin in keinen weiteren Promotionsverfahren Kandidat/-in.

oder

Diesem Promotionsverfahren gingen die folgenden Promotionsverfahren voran bzw. in den folgenden Promotionsverfahren bin ich Kandidat/-in:

Universität:

Fakultät:

Titel der Dissertation:

Stand des Promotionsverfahrens:

4. Durch

.....

wurde mir bereits der Grad des Doktors/der Doktorin der

.....

verliehen.²

a) Dieser Doktorgrad wurde nicht aus gesetzlichen Gründen entzogen.

b) Es liegen keine Gründe vor, die nach den gesetzlichen Bestimmungen die Entziehung des Doktorgrades rechtfertigen.

5. Ein entgeltliches Vertragsverhältnis, das eine gewerbliche Promotionsberatung zum Gegenstand hat und zur Unselbstständigkeit zumindest einer Promotionsleistung führen kann, besteht bzw. bestand nicht.

6. Die „Regeln zur Sicherung guter wissenschaftlicher Praxis am Karlsruher Institut für Technologie (KIT)“ habe ich beachtet.

¹ Gilt nur für Hochschulabsolventen/-innen gemäß § 4 Absatz 5 Promotionsordnung / Zu streichen, sofern nicht zutreffend.

² Zu streichen, sofern nicht zutreffend.

7. In die Dissertation wurden Vorveröffentlichungen einbezogen, bei denen ich im Rahmen einer Mitautorenschaft jeweils einen signifikanten Teil selbstständig erbracht habe. Eine Aufstellung mit den Angaben:²

Autoren/Autorinnen:

Titel der Vorveröffentlichung:

Veröffentlicht in:

Selbstständig erbrachter Teil:

ist dieser Erklärung beigefügt. Die Aufstellung ist Bestandteil dieser Erklärung.

8. Die Dissertation oder Teile davon wurden nicht bei einer anderen Fakultät als Dissertation eingereicht.

oder

Die Dissertation oder die nachfolgenden angegebenen Teile davon wurden

..... (Teile der Dissertation)

an der

Universität:

Fakultät:

als

eingereicht.²

9. Die Richtigkeit der vorstehenden Erklärungen bestätige ich.

Ort und Datum

Unterschrift

² Zu streichen, sofern nicht zutreffend

Please note that the preceding German text shall be used exclusively. This English translation is a service provided for your information only.

Annex 5b (English)

**Affirmation According to Art. 13, par. 2, cl. 2, No. 5 of the Regulations of
Karlsruhe Institute of Technology (KIT) for the Award of the Doctoral Degree at the
KIT Department of Mechanical Engineering**

1. I have not yet seriously violated the principles of good research practice.
 2. There has not yet been any doctoral aptitude test procedure or equivalent test at a university or an equivalent university, in which I participated without success.¹
 3. This doctoral procedure was not preceded by any other doctoral procedures and I am no candidate in any other doctoral procedure.
- Or
- This doctoral procedure was preceded by the following doctoral procedures/I am candidate in the following doctoral procedures:
- University:*
- Department:*
- Title of Doctoral Thesis:*
- Status of Doctoral Procedure:*
4. I was awarded the degree of Doctor of by²
 - a) This doctoral degree was not revoked for legal reasons.
 - b) There are no reasons justifying revocation of the doctoral degree according to the legal provisions.
 5. A contractual relationship against payment covering commercial advising relating to the doctorate and potentially resulting in at least one component of the doctorate not being developed on my own does not exist or did not exist.

¹ Applies to university graduates according to Art. 4, par. 5 of the Regulations for the Award of the Doctoral Degree only/delete as appropriate.

² Delete as appropriate.

6. I have observed the “Regeln zur Sicherung guter wissenschaftlicher Praxis am Karlsruher Institut für Technologie” (Rules for Safeguarding Good Research Practice at Karlsruhe Institute of Technology (KIT)).

7. The doctoral thesis incorporates previous publications, of which I independently developed major parts as co-author. A list with the following information is attached to this declaration²:

Authors:

Title of Publication:

Published in:

Part developed independently:

The list is an integral constituent of this declaration.

8. The doctoral thesis or parts thereof were not submitted as a doctoral thesis to any other Department.

Or

The doctoral thesis or the following parts thereof (parts of the doctoral thesis) were submitted to

university:

department:

as ...²

9. I herewith confirm the correctness of the above statements.

Place and date

Signature

²Delete as appropriate.