

BUDAPEST UNIVERSITY OF TECHNOLOGY AND ECONOMICS

George A. Oláh Doctoral School Rules of Operation

General provisions

Section 1

These Rules are based on the provisions on the establishment and rules of operation of doctoral schools and the criteria for obtaining a doctoral degree, stipulated in Act CCIV of 2011 on National Higher Education (NFTV), Government Decree 387/2012. (XII. 19.) on doctoral schools, doctoral degree procedure and habilitation, as well as BME's Code of Doctoral Studies and Habilitation (BME DHSZ, 28 June 2021) and BME's Code of Studies and Examinations (TVSZ).

Foundation, members and organisation of the Doctoral School

Section 2

The **Doctoral School of BME's Faculty of Chemical Technology and Biotechnology** has been running its doctoral programme since 1993. In accordance with national level provisions, the Hungarian Accreditation Committee (MAB) made a decision on the final accreditation of the Doctoral School (later named George A. Oláh Doctoral School) on 22 February 2002. The George A. Oláh Doctoral School (chemical sciences, as well as chemical technology, biotechnology and environmental engineering) (hereinafter: Doctoral School) operates at the Faculty of Chemical Technology and Biotechnology (hereinafter: Faculty) of BME.

The language and international embeddedness of the doctoral school: The language of this profession is English. Accordingly, events organised by the doctoral school (subjects, presentations, defences) will be in English or Hungarian as required by the participants. Dissertations, research topic proposals, thesis defences, examination minutes may be both in English or Hungarian. Depending on the funds available and also using online/hybrid defence options, the George A. Oláh Doctoral School aims to engage members of the international science community in seminars and doctoral degree award procedures.

Section 3

(1) The core members' body plays a crucial role in the operation of the doctoral school. Its role is to supervise the operation of the school and submit proposals to the Habilitation Committee and Doctoral Council of the University (EHBDT) for the appointment of core members and head of the Doctoral School Council (DIT), and members and head of the Habilitation Committee and Doctoral Council of Chemical Sciences, Biotechnology, Environmental and Chemical Engineering at the end of a cycle or in other cases (see also Section 6).

Preparations for the above activities of the core members are made by the nominating committee. Members of the nominating committee are elected at the beginning of each cycle.

The HBDT can award the title of Honorary Member of the George A. Oláh Doctoral School in accordance with Appendix no.1.

(2) New core members may be co-opted by the head of the doctoral school, with a simple majority of votes by the existing core members and with the approval of the EHBDT.

(3) The appointment of core members is confirmed by the periodic review of the MAB.

Section 4

The head of the Doctoral School is appointed by the Rector of the university with the approval of the EHBDT, at the recommendation of the school's core members from the core member professors who are under the age of 70 and hold, at a minimum, the title of Doctor of the Hungarian Academy of Sciences. The duration of the mandate is limited to a maximum of five years, but may be repeated unlimitedly.

Section 5

According to the BME Code of Doctoral Studies and Habilitation (DHSZ), the EHBDT is established at BME and its role is to supervise the programmes at BME's doctoral schools in accordance with Section 7 of the DHSZ (see Appendix no.2). The operational body supervising the doctoral programmes within the George Oláh Doctoral School is the DIT, in accordance with Section 12 of BME's DHSZ (see Appendix no.3). The body in charge of the doctoral graduation process within the doctoral schools is the HBDT, acting in its authority, as delegated by the EHBDT, and working alongside the Doctoral School. Its operation is regulated by Section 6 of BME's DHSZ (see Appendix no.4). Unless the powers are expressly provided for in a higher form of legislation, competencies related to the programme may be transferred by the HBDT to the DIT. The Doctoral Study Committee (DTB) is responsible for the academic and administrative matters of doctoral students, as defined by the BME TVSZ. The current composition of the bodies of the George Oláh Doctoral School – core members, DIT and HBDT – and a summary of their professional work can be found at www.doktori.hu and the website of the Doctoral School.

Section 6

The mandates under Sections 4-5 shall cease:

- a) at the expiry of the mandate,
- b) with a removal, regulated by the same procedure as the appointment, proposed in writing by at least 33% of the core members,
- c) with the resignation of the appointed person,
- d) with the permanent incapacitation or death of the appointed person.

The operation of the George A. Oláh Doctoral School

Section 7

The operation of the Doctoral School is governed by the head of the Doctoral School, with the administrative support of the Dean's Office of the Faculty. The head of the doctoral school offers the position of the deputy to one of the DIT members. The appointment of such a deputy shall be confirmed by a vote of the core members.

Section 8

(1) The Doctoral School shall call for topic proposals and announce a list of PhD topics. It is the DIT which decides on the acceptance of the topics and the supervisors. The topics are published on the website of the Doctoral School and the Hungarian Doctoral Council (www.doktori.hu).

(2) Supervisors shall have at least 2 years of professional experience from the date of their doctoral graduation (PhD). One supervisor can oversee the work of maximum 4 doctoral students at the same time. The DIT can only give an exemption from these conditions with the consent of the EHBBDT.

(3) Each PhD student has only one supervisor assigned (with the exceptions specified in BME's DHSZ), who is exclusively and fully responsible for managing and promoting the studies and the research activity of the doctoral student, and their preparation for the doctoral graduation. Supervisors can be full-time BME employees or professors emeritus, or full-time employees of other institutions which have signed a cooperation agreement for doctoral programmes with BME. Based on the decision of the DIT, and when approved by the EHBBDT, retired employees of BME's Faculty of Chemical Technology and Biotechnology may become temporary supervisors. When an external supervisor is engaged, the DIT designates a BME thesis advisor to provide administrative support for the supervisor and monitor the student's progress.

(4) The DIT may change the subject of the doctoral thesis or the person of the supervisor/thesis advisor, either at their request, at the request of the student concerned or at the DIT's own discretion. Before the decision, the DIT shall seek the opinion of the supervisor's superior.

Section 9

For the subjects, announced according to Section 8, the entrance examination is organised by the Dean's Office of the Faculty. The Admissions Committee (FB) is designated by the DIT, acting in its authority as delegated by the HBBDT. The Admissions Committee shall evaluate the candidates' comprehensive professional knowledge during the admission interview (which can be held online also), their academic achievements, language skills and their professional activity so far, for which it shall award a score of between 0-100 points, according to the "Rules and regulations of the assessment of doctoral candidate applications", published on the website of the Doctoral School. In the case of applicants who have graduated from a foreign university, candidates are assessed by the Admissions Committee on a 0-100 point scale based on their academic results, an online test or a DIT-approved alternative, and an interview to assess their preparedness and previous professional experience. A minimum of 60 points is required for admission in all cases. On the basis of a report issued by the Admissions Committee, the Doctoral School Council shall make a recommendation to the Faculty's Dean on admission and on the awarding of state scholarships. Decisions on admissions shall be made by the Faculty's Dean without changing the order of the admissions as approved by the DIT.

Section 10

- (1) In the case of candidates choosing to prepare for their degree individually, the doctoral degree procedure begins with the application for the complex examination and its approval (Government Decree 387/2012. (XII.19., Section 12, Government Decree 266/2016. (VIII. 31. amendment).
- (2) Approval of the application in case of individual preparation is subject to disciplinary compliance and the formal completion of the publication and language requirements of the doctoral degree (as thesis statements are not required at the application, the content is not evaluated, only quantitative indicators need to be met).
- (3) By admission, the Doctoral School recognises the minimum credits set as a condition for taking the complex examination, with the possibility of recognising additional credits on the basis of prior knowledge and competences acquired, when requested.
- (4) The doctoral school appoints a thesis advisor for students opting for individual preparation.
- (5) The complex examination following admission is part of the first semester of the research and dissertation phase.

Section 11

- (1) Before each semester, the DIT shall accept the list of subjects along with the lecturers proposed in the doctoral programme, acting in its authority as delegated by the HBDT. It shall announce the accepted subjects on the website of the Doctoral School. 'Guided education' is part of the doctoral programme with a maximum of 24 credit points.
- (2) The academic staff of the Doctoral School includes lecturers and researchers with minimum doctoral degrees who, at the recommendation of the head of the Doctoral School, are considered by the DIT, acting in its authority as delegated by the HBDT, as being competent to perform educational, research-oriented and supervisory tasks within the framework of the Doctoral School for a given period. An instructor of the Doctoral School may also be a full-time employee of a Hungarian or foreign research centre, university, company or other institution which has concluded a written agreement of co-operation with BME with a view to fulfilling the objectives of the doctoral programme (external instructor).

Section 12

Management of the Doctoral School's registration system, its administration and fulfilment of obligations for information provision shall be carried out by the Dean's Office of the Faculty, taking into account Sections 11 of BME Code of Doctoral Studies (see Appendix no.5).

Obtaining a doctoral degree

Section 13

- (1) The body which makes a proposal on the conferral of the doctoral degree is the HBDT. Based on its proposal, the doctoral degree is awarded by the EBDT. The head of the HBDT offers the position of deputy to one of the members. The appointment of such a deputy shall be confirmed by a vote of the core members.

(2) In accordance with Section 7 (7)g) of BME's DHSZ, the requirement system for obtaining a doctoral degree is elaborated by the HBDT and approved by the EHBDT (see Appendix 6).

(3) The requirements for the doctoral degree are successful completion of the complex exam and the acquisition of the absolutorium. A detailed description of the complex examination is given in the training plan of the George A. Oláh Doctoral School.

(4) The HBDT shall review the requirements of obtaining a doctoral degree at least every 3 years and, if necessary, modify them with the approval of the EHBDT.

(5) In the case of procedures already in progress, it depends on the choice of the doctoral candidates as to whether the requirements valid at the time of their admission or the modified ones should be applied.

(6) The requirements of obtaining a doctoral degree are published by the Doctoral School on its website.

Closing provision

Section 14

This Code was reviewed and approved by the EHBDT on 24 February 2022. The Code shall enter into force immediately. For doctoral degree procedures to be started after 24 February 2022, the requirements of the HBDT in force before 24 February 2022 or contained in this document shall be applied until 24 February 2025, according to the choice of the doctoral students/doctoral candidates.

András Szarka

Dean

László Nyulászi

Chair of the HBDT

László Poppe

Head of the George A.
Oláh Doctoral School

Appendix no. 1.

Honorary Member of the George A. Oláh Doctoral School

The distinguished title of the “Honorary Member of the George A. Oláh Doctoral School” may be awarded to a Hungarian or foreign person, who is

- (a) involved in internationally acknowledged high-level research activities in any of the fields within the competency of the doctoral school (chemical sciences, as well as chemical technology, biotechnology and environmental engineering)
- (b) Actively and significantly contributes to the doctoral programme in the form of joint research activities, supervision, lectures, teaching at courses for doctoral students, participating in doctoral graduation procedures, etc.
- (c) Proposals for awarding the title of Honorary Member of the George A. Oláh Doctoral School may be submitted by the core members and members of the HBDT. These proposals shall be reviewed by the nominating committee and submitted to the Doctoral School Council, which shall then formulate a position on the proposals. Decisions on awarding the distinguished title shall be made by the HBDT by a simple majority vote.

Appendix no. 2

Operational rules of the EHBDT in accordance with Section 7 of BME's DHSZ

Chapter 4

Habilitation Committee and Doctoral Council of the University (EHBDT)

Section 7

- (1) The Habilitation Committee and Doctoral Council of the University (EHBDT) shall supervise the educational activities of the doctoral schools at the university and shall deliver an opinion on questions of principle pertaining to doctoral procedures. The EHBDT seeks to assure a uniform level of perception throughout the faculties (majors, specialties) of the University.
- (2) The EHBDT may *ex officio* have as its delegated members, the chairs of the HBDTs, who may be substituted according to the provisions of Section 6 (3).

The EHBDT shall have the majority of its members *ex officio*. The chair and deputy chair of the EHBDT shall be of full time, public servant status, a highly recognised university professor who holds the “Doctor of the Hungarian Academy of Sciences (MTA)” title or has been awarded the Kossuth Prize, the Széchenyi Prize or who is a university professor with an art academy (MMA, SZIMA) membership. The Chair shall be nominated by the Rector at the recommendation of the EHBDT from among its members, while the position of the deputy chair shall be offered by the Chair at the recommendation of EHBDT, also from among the members of the EHBDT. The duration of their mandate is 3-5 years (renewable multiple times), and at least one of them shall represent the engineering faculty.
- (3) The total number of members that can be delegated to the EHBDT *ex officio* by the individual faculties is n . The composition of members that can be delegated to the EHBDT by the faculties depends on the value of n as follows:
 - (a) For $n=0$, no members can be delegated to the EHBDT by the given faculty.
 - (b) For $0 < n < 3$, all the members delegated *ex officio* are voting members of the EHBDT. Additionally, the Rector shall entrust further $(3-n)$ external voting members from a list drafted by the faculty (which includes persons who do not have public servant status with the University, possess the Doctor of the Hungarian Academy of Sciences title, have been awarded the Kossuth or Széchenyi Prize and which excludes any Professor Emeritus or retired university processor of BME).
 - (c) For $n \geq 3$, 3 of the *ex officio* members have voting rights, while the remaining members delegated *ex officio* participate in the work of the EHBDT in a consultative capacity. Members of the EHBDT delegated from the same faculty shall decide on the voting right in annual cycles. In this case, the given faculty may not propose external members.
 - (d) If the number of external members calculated in this way is less than one-third of the EBHDT members, the chair of EHBDT shall invite additional external members from the faculty lists representing the highest scientific potential.
 - (e) In the above calculation, the chair of the EHBDT shall be excluded from the members of the given faculty.
 - (f) **The faculty lists are compiled by the expert HBDT chairs of the respective faculty on the basis of the votes of the HBDTs.**

- (4) The head of the doctoral school shall participate in the work of the EHBDT in a consultative capacity, unless they are members who have been delegated ex officio.
- (5) A representative of the Doctoral Student Union participates in the work of the EHBDT whenever doctoral matters are discussed.
- (6) Members delegated to the EHBDT ex officio shall appoint their deputies from among those who already substitute them in other scientific functions (like the chair of the HBDT or the DIT). A deputies shall hold the title of Doctor of the Hungarian Academy of Sciences or have a Kossuth or Széchenyi Prize, or in the case of a doctoral school of arts, an art academy membership (MMA, SZIMA). External members may not be substituted.
- (7) The EHBDT
 - a) shall express an opinion on the proposals to establish a new doctoral school;
 - b) shall provide the Senate with a regular assessment of the doctoral programme and the process of obtaining a doctoral degree at the university; in particular with regard to Section 84/A (4) of the Higher Education Act;
 - c) shall express an opinion on a Rector's recommendation for the dissolution of the doctoral school and initiate the dissolution of the doctoral school if justified;
 - d) shall decide on the award, nostrification or withdrawal of doctoral degrees;
 - e) shall elect the executives of the doctoral school of the higher education institution, and appoint or dismiss members of the doctoral school council;
 - f) shall establish the "Disciplinary Habilitation Committees and Doctoral Councils", organised by faculties or by branches of science or the arts to conduct the procedure of obtaining a doctoral degree (see Section 6);
 - g) shall approve the systems of requirements for earning a doctoral degree and habilitation, drawn up by the HBDTs;
 - h) shall decide under their authority delegated by the Senate on distributing among the faculties the state doctoral scholarships available for the University;
 - i) shall monitor the utilisation of the annual budgets of state doctoral scholarships and coordinate the potential reallocations between faculties;
 - j) shall decide on the conferral of the Habilitation;
 - k) shall deliver an opinion to the Senate regarding university professor applications;
 - l) shall deliver an opinion to the Senate about faculty recommendations for the Honorary Doctor, Honorary Master, Industry Professor and "John von Neumann" Professor titles, as stipulated by the Human Resources Policy;
 - m) shall approve Professor Emeritus members from among the core members of the doctoral school;
 - n) shall propose a recommendation for the Senate for the Code of Doctoral Studies and Habilitation as well as for its amendment.
- (8) The EHBDT considers the academic record of a candidate to be satisfactory in the procedure for the evaluation of university professorship applications, if the candidate has obtained the title of Doctor of the Hungarian Academy of Sciences in the discipline of the application within 5 years of the submission of the application. The EHBDT will reject the application for a university professorship if the candidate does not fulfil one of the award criteria or the habilitation requirements expected at the time of application.

- (9) If the procedure for the evaluation of the university professorship application is not conducted in an engineering or natural science discipline, the chair of the HBDT of the discipline may initiate the involvement of external experts. At the request of the HBDT chair, the EHBDT chair, taking into account the proposal of the HBDT chair, shall invite at least two external experts to the EHBDT meeting to review the university professorship applications. The invited experts may be members of the habilitation committees of partner universities with a major doctoral school in the given area of science. The invited experts shall prepare a written opinion for the EHBDT meeting.
- (10) Sessions of the EHBDT are closed. The EHBDT session shall form a quorum if more than half of its members are participating in the decision-making. The decisions of the committee shall be made (by open or secret ballot) by a simple majority vote of its members, except for cases explicitly named in the Code, where decisions are taken by secret ballots using a point system. Voting shall be made by secret ballot in personal matters, except for decisions on organisational matters, required to prepare further decisions (e.g. election of the committee). A vote by ballot shall be ordered in any matter at the request of any voting member of the EHBDT. Minutes of sessions shall be recorded and then verified by the Chair. The reasoning behind the decisions of the EHBDT must be made public.
- (11) When discussing personal issues, persons with a conflict of interest (as specified in Section 2 (4)) shall be excluded from participating in the decision-making process. Potential conflicts of interest must be reported before the discussion by the person concerned.
- (12) Appeals may be lodged against the decisions of the EHBDT pursuant to Section 2.
- (13) Secretarial tasks and committee-related administrative work of the EHBDT shall be performed by the Rector's Office.

Appendix no. 3

Operational rules of the Doctoral School Council in accordance with Section 12 of BME's DHSZ

Chapter 7

Doctoral School Council (DIT)

Section 12

- (1) DITs are organised by doctoral schools to assist the work of the head of the doctoral school. They are elected by the core members of the given doctoral school. Members of the DITs shall be appointed and recalled by the EHBDT. The chair of the DIT is the head of the doctoral school, assisted by the secretary.
- (2) Voting members of the DIT may be selected exclusively from
 - those who meet the criteria pertaining to core members, or are university professors, or
 - habilitated associate professors, habilitated private professors or
 - those holding a "Doctor of Science" title or "Doctor of the Hungarian Academy of Sciences" title or
 - those awarded the Kossuth or Széchenyi Prize.

At least 7 of the DIT members must have voting rights. A representative of the Doctoral Student Union shall participate in the work of the DIT in a consultative capacity.

- (3) Composition of the DIT shall adequately represent the professional competences of the particular discipline.
- (4) The members of the DIT shall be appointed for 3 years, which can be renewed multiple times.
- (5) The mandate of the DIT includes the following regular (annual or more frequent) **tasks, as specified in Government Decree no. 387/2012 (XII. 19.)** :
 - a) approval of the list of lecturers of the doctoral school; selection of subjects to be announced in the programme;
 - b) approval of the announcers of topics and the announced topics;
 - c) making suggestions to the Dean on the admittance of students into the doctoral programme, acting on the proposal from the Admission Committee, approval of the topic selections of doctoral students;
 - d) assessment of the performance of students participating in a doctoral programme;
 - e) review of the doctoral school's training plan;
 - f) review of the international relations of the doctoral school;
 - g) review of the quality assurance plan of the doctoral school;
 - h) review of the rules of operation of the doctoral school.

- (6) The DIT shall form a quorum if more than half of its members are participating in the decision-making. The committee shall decide (by open or secret ballot) with the majority vote of the members. Committee sessions are not public. Voting shall be made by secret ballot in personal matters, except for decisions on organisational matters, required to prepare further decisions (e.g. election of the admission committee). Voting by ballot shall be ordered in any matter at the request of any committee member. Minutes of sessions shall be recorded and then verified by the Chair.
- (7) When discussing personal issues, persons with a conflict of interest (as specified in

Section 2 (4) shall be excluded from participating in the decision-making process. Potential conflicts of interest must be reported by the person concerned.

- (8) Appeals may be lodged against the decisions of the DIT pursuant to Section 2.
- (9) The administrative tasks of the DIT shall be carried out by the Dean's Office.

Appendix no. 4

Operational rules of the Habilitation Committee and Doctoral Council in accordance with Section 6 of BME's DHSZ

Chapter 4

Disciplinary Habilitation Committee and Doctoral Council (HBDT)

Section 6

- (1) "Habilitation committees and doctoral councils" (HBDTs) are bodies set up in the scientific/artistic disciplines pursued at the faculties (Appendix 1) in order to confer doctoral degrees and carry out habilitation procedures within the powers delegated by the EHBDT. The EHBDT delegates to the HBDT the delegable powers of the doctoral and habilitation procedures, some of which may be revoked in particularly justified cases, either periodically or for a specific procedure. The Chair of the EHBDT shall inform the Rector of the revocation of the power(s), stating the reasons for the revocation, by a decision of the EHBDT.
- (2) The members and the Chair of the HBDT – after a decision made by the EHBDT at the recommendation of the core members of the doctoral school – shall be appointed by the Chair of the EHBDT. The chair of the HBDT shall be in a full time, public servant status, a highly recognised university professor who holds the "Doctor of the Hungarian Academy of Sciences" title or has been awarded the Kossuth Prize, the Széchenyi Prize or who is a university professor with an art academy membership, ***including membership in the Hungarian Academy of Arts (hereinafter: MMA) and Széchenyi Academy of Literature and Arts (hereinafter: SZIMA).*** The chair of HBDT is assisted by the chair-appointed Deputy and the Secretary.
- (3) The members of the HBDT shall be selected to fulfil the following requirements:
 - a) lecturers and academic researchers employed full time, in an employee or public servant status at a relevant higher education institution shall be appointed university professors or hold habilitation,
 - b) at least two-thirds shall be university professors, and
 - c) at least one-third or at least two members shall have no employment relationship with the University. Furthermore, the members shall be expected to fulfil the conditions of core membership. The committee must have at least 9 members.
- (4) A representative of the Doctoral Student Union participates in the work of the HBDT whenever doctoral matters are discussed.
- (5) Composition of the HBDT shall adequately represent the professional competences of the particular discipline. The chair and the members shall be elected for 3 years, and they may be re-elected multiple times.
- (6) The mandate of the HBDT in doctoral matters includes:
 - a) decision on the recognition of credits
 - b) ***selecting the members of the admission committee and the complex examination board,*** and the subjects of the complex examination;
 - c) conducting the doctoral procedure;

- d) appointing the thesis committee, making a decision on the application for a closed thesis defence based on the opinion of the thesis committee;
 - e) making recommendations to the EHBDT to close a procedure that has been interrupted due to exceeding a deadline or for any other reason;
 - f) making recommendations to the EHBDT on awarding the doctoral degree or for the refusal of the application;
 - g) establishing a detailed set of requirements for the complex exam, the submission of the thesis to the reviewers and the award of the degree, in accordance with these regulations and taking into account the specificities of the field;
 - h) revision of the detailed doctoral requirements as necessary, and submission thereof to the EHBDT for approval;
 - i) making recommendations to the EHBDT on the doctoral degree nostrification.
 - j) **The HBDT may delegate to the DIT its powers specified in points a) – b) in relation to the programme.**
- (7) The mandate of the HBDT in habilitation matters include:
- a) launching a habilitation procedure at request, conducting the habilitation review;
 - b) inviting members of professional committees, Thesis Committees and further experts as needed;
 - c) making a recommendation to the EHBDT to conduct the habilitation review and continue or close the procedure, then to confer the habilitation, based on the committee reports and on the discussion thereof;
 - d) making a recommendation to the EHBDT on any procedure stopped due to the withdrawal of the application, or on closing a procedure interrupted for other reasons;
 - e) establishing a detailed set of requirements in harmony with this regulation that takes into consideration the specifics of the scientific discipline besides the requirements set hereby, and submitting them to the EHBDT for approval.
- (8) Sessions of the HBDT are closed. The HBDT shall form a quorum if more than half of its members are participating in the decision-making. The decisions of the committee shall be made (by open or secret ballot) by a simple majority vote of its members, except for cases explicitly named in the Code, where decisions are taken by secret ballots using a point system. Voting shall be made by secret ballot in personal matters, except for decisions on organisational matters, required to prepare further decisions (e.g. election of the members of the Thesis Committee). A vote by ballot shall be ordered in any matter at the request of any voting member of the HBDT. Minutes of sessions shall be recorded and then verified by the Chair. The reasoning of the decisions of the HBDT is public.
- (9) When discussing personal issues, persons with a conflict of interest (as specified in Section 2 (4)) shall be excluded from participating in the decision-making process. Potential conflicts of interest must be reported by the person concerned.
- (10) Appeals may be lodged against the decisions of the HBDT pursuant to Section 2.

- (11) The administrative tasks of the HBDT shall be carried out by the Dean's Office of the responsible (gestor) faculty. The Dean shall determine responsibilities and assign resources by also taking into consideration the opinion of the chair of the HBDT.

Appendix no. 5

Data collection and information provision by the Doctoral School in accordance with Section 11 of BME's DHSZ

Chapter 6

Section 11

- (1) The doctoral school shall provide regular, detailed, and public information about its operation on its www.doktori.hu website, including:
 - the classification as per academic discipline and branch of science,
 - the names and professional CVs of the core members and supervisors,
 - the quality assurance plan,
 - the training plan,
 - the operational rules.

- (2) The doctoral school shall provide regular, detailed, and public information about its performance on the www.doktori.hu website, providing access to:
 - the doctoral topics announced and approved by the DIT,
 - the doctoral theses and thesis booklets or DLA creative works in electronic formats,
 - the list of individuals who have earned a doctoral degree.

- (3) The doctoral school shall provide regular, detailed and public information on its website regarding the education offered, including:
 - admission requirements,
 - subjects taught,
 - degree award requirements.

BME Faculty of Chemical Technology

and Biotechnology George A. Oláh

Doctoral School

**Chemical Sciences, Biotechnology, Environmental and Chemical
Engineering Habilitation Committee and Doctoral Council (HBDT)**

Minimum requirements for publication during PhD procedures

The following minimum requirements have been set for **candidates, proponents and reviewers** with the aim of:

- providing a self-check option for applicants, based on which they can check whether their publications formally meet the minimum requirements set by BME's Chemical Sciences, Biotechnology, Environmental and Chemical Engineering Habilitation Committee and Doctoral Council (HBDT).
- providing guidance for proponents in checking whether the minimum requirements have been met.
- providing viewpoints for reviewers to be used during assessment.

Meeting the minimum requirements shall not automatically mean that the degree is also awarded.

Obviously, scientific activities and MTMT-registered publications cannot be evaluated by a single number, especially not with a number that only designates the quantity of scientific publications. Consequently, the minimum requirements described herein must be fulfilled, but are *not necessarily enough* to obtain a PhD degree. When assessing the Candidate's publications, quality aspects (standard of journals, possibly the number of citations, etc.) shall also be taken into consideration, and when awarding PhD degrees it is crucial to establish the extent of the candidate's (decisive) contribution in the case of joint publications.

The Candidate must fill in a table entitled "*Publications*", which gives details of the publications linked to the thesis statements and other publications to be included in the thesis. This table must be attached at the time of submission. In the case of publications/patents to be used for the thesis statements, it is essential to prepare "*Co-author declarations*". In these declarations Hungarian co-authors without PhD degrees, participating/planning to participate in a doctoral programme in Hungary, agree on the extent of their contribution to a given scientific work. The declaration is signed and verified by the supervisor, thus assuming responsibility for the extent of the contribution they verify, even if they are not the author/corresponding author of the publication. The declaration needs to be prepared once, when the given publication/patent is used in a qualification procedure (or admission process to a doctoral school) for the first time, and every co-author is advised to keep a copy for any future qualification procedures. The Dean's Office maintains a database of these declarations.

When a PhD thesis is submitted, the HBDT will start to examine whether the thesis is ready for a debate if the following minimum requirements are met:

- (1) the criteria specified in Section 17 (5) of the BME DHSZ: prescribing that "the minimum requirement is at least 3 peer-reviewed publications already published (or accepted for publication). Minimum 2 of these must be in a foreign language, minimum 2 published in a journal, minimum 2 must be high-quality publications of the candidate's own work with their predominant contribution, and minimum 2 publications must be registered in the Web of Science or Scopus database."

- (2) The candidate must have minimum three publications listed in the “*Publications*” table submitted with the thesis, related to the thesis statements. One of the publications may be substituted with a patent **approved** as per Point 3c). The patent and the publication containing the same results are not considered as separate publications. *If the minimum requirements are met, any additional number of publications may be used in the thesis, which shall be subject to no criteria beyond the general requirements of scientific merit.*

The candidate’s “*significant contribution*” to the publications is defined as follows: (2a)

In the “*Co-author declaration*” for the publications submitted with the thesis, the candidate's contribution among the ***co-authors without a PhD degree who are enrolled in a Hungarian programme*** exceeds 50%.

If the candidate is not the first author, they must state in the co-author declaration what their contribution to the communication was (if not stated in the publication itself).

- (2b) In the case of patents, ***when determining the candidate’s contribution as per 2a)*** in the “*Co-author declaration*”, the ratio of co-authors without a PhD degree, enrolled in a doctoral programme in Hungary, ***must not differ from the ratio of their contribution to the patent as co-inventors.*** The candidate ***must state their contribution to the patent in the “Co-author declaration”*** also in the case of patents.

- (3) Out of the minimum three publications published on the thesis topic (or documented as accepted for publication and related to the thesis statements)

- (3a) all journal articles on original research findings, published in **an English-language journal in a Web of Science and/or Scopus (Elsevier) database with an impact factor**, in which the candidate's contribution is significant.

In addition, out of the publications to be used, the ***top three*** publications **must have an impact factor (IF) greater than 4** ($IF_{article1} + IF_{article2} + IF_{article3} > 4$)

or

must have a quartile (Q) sum of less than/equal to 7 (where the Q classification is either Clarivate or Scimago and for $Q_{n_{article1}}, Q_{m_{article2}}, Q_{o_{article3}}$ $n+m+o \leq 7$). When calculating ***Q*** the quartile score of D1 publications is 0.

IF and ***Q*** shall be determined using the data for the year of publication. If this is not yet known, the latest available value should be used.

- (3b) If the candidate has a significant contribution in two articles with original findings, published in ***journals listed in the Web of Science and/or Scopus (Elsevier) database, and their impact factor sum is 8 or higher***, and according to Clarivate or Scimago **one of them has at least a D1 and the other at least a Q2 ranking**, the third publication, in print or digital format, is subject to no other criteria than the general requirements of scientific merit.

- (3c) Where the *candidate's decisive share according to 2b*) has resulted in a granted patent protection, it is accepted as one of the publications in 3a) or 3b). A patent granted in Hungary is recognised under 3a) or 3b) as a Q1 publication, and a patent granted by the EU, WIPO or US is recognised under 3b) as a D1 publication.
- (4) The candidate must pass the complex exam.
- (5) The candidate shall have a documented verification of having held at least one scientific oral presentation, which is signed by the supervisor.
- (6) The minutes of the in-house defence conducted at any BME faculty must be presented, displaying the result of the vote in favour of the submission of the thesis. There is also an attached appendix with all the modifications made on the basis of the review suggestions mentioned during the in-house defence.
- (7) The candidate fulfils the language requirements set out in the BME DHSZ as follows:
Any one of the French, German, Italian, Russian, Portuguese or Spanish languages or another language accepted by the ad hoc majority decision of the HBDT is accepted. Fulfilment of the language requirements shall be verified with a basic level A2 language examination or equivalent certificate, or a secondary school diploma, university degree or academic title in the given language. Proof of language proficiency may be provided by passing an examination or giving a professional presentation in the language concerned, or by a documented minimum 1-year study trip abroad in the language area concerned. These are verified by a document issued by the workplace manager.

It is advised that the position of the chair of the HBDT be requested when any issues arise during the evaluation of publications.

These criteria were reviewed and approved by the EHBDT on 24 February 2022. The Code shall enter into force immediately. For doctoral degree procedures to be started after 24 February 2022, the requirements of the HBDT in force before 24 February 2022 or contained in this document shall be applied until 24 February 2025, according to the choice of the doctoral students/doctoral candidates.