ANNEX

TO THE REGULATION OF THE DOCTORAL TRAINING AND THE DOCTORAL DEGREE AWARD PROCEDURE OF THE UNIVERSITY OF MISKOLC GOVERNING ANTAL KERPELY

DOCTORAL SCHOOL OF MATERIALS SCIENCE AND TECHNOLOGY

OPERATIONAL REGULATION OF ANTAL KERPELY DOCTORAL SCHOOL OF MATERIALS SCIENCE AND TECHNOLOGY OF THE UNIVERSITY OF MISKOLC





Miskolc, 2019

MISKOLCI EGYETEM	Annex to the Regulation of the doctoral training and the doctoral degree award procedure of the	
	University of Miskolc governing Antal Kerpely	Version: A4
	Doctoral School of Materials Science and	
	Technology	

	Annex to the Regulation of the doctoral training	
MISKOLCI EGYETEM	and the doctoral degree award procedure of the	
	University of Miskolc governing Antal Kerpely	Version: A4
	Doctoral School of Materials Science and	
	Technology	

Academic Regulations No. 1.1.29.





ANNEX TO THE REGULATION OF THE DOCTORAL TRAINING AND THE DOCTORAL DEGREE AWARD PROCEDURE OF THE UNIVERSITY OF MISKOLC GOVERNING ANTAL KERPELY DOCTORAL SCHOOL OF MATERIALS SCIENCE AND TECHNOLOGY

OPERATIONAL REGULATION OF ANTAL KERPELY DOCTORAL SCHOOL OF MATERIALS SCIENCE AND TECHNOLOGY OF THE UNIVERSITY OF MISKOLC

for students who established their student status from 1 September 2016

REGULATIONS ADOPTED BY SENATE RESOLUTION NO. 253/2019 OF THE UNIVERSITY OF MISKOLC

Copy No A4 to be used for incorporating modifications

MISKOLCI EGYETEM	Annex to the Regulation of the doctoral training and the doctoral degree award procedure of the	
	University of Miskolc governing Antal Kerpely	Version: A4
	Doctoral School of Materials Science and	
	Technology	

MISKOLCI EGYETEM	Annex to the Regulation of the doctoral training	
	and the doctoral degree award procedure of the	
	University of Miskolc governing Antal Kerpely	Version: A4
	Doctoral School of Materials Science and	
	Technology	

Contents

Chapter	Title	Page	Vers ion	Date of Introducti on
	Establishment of the Doctoral School	1		
I	Organization of the Doctoral School	1		
	Name and details of the Doctoral School	1		
	Head of the Doctoral School	1		
	Members of the Doctoral School	2		
	Disciplinary Doctoral Council	2		
Section 5	Administration and registration system of the Doctoral	3		
	School			
Section 6	Structure of the Doctoral School	3		
II	Work of the Doctoral School	4		
Section 7	Admissions Board	4		
Section 8	Procedure	4		
Section 9	Tasks following admissions			
Section 10	Curriculum	5 5		
Section 11	Research seminars	7		
Section 12	Doctoral students' teaching activities	7		
Section 13	Doctoral students' research activities	8		
Section 14	Doctoral students' publication activities	8		
Section 15	Dissertation	10		
Section 16	Training and research phase as well as research and	12		
	dissertation phase			
Section 17	Submission of the doctoral dissertation	12		
Section 18	Financial management of the Doctoral School	12		
Section 19	Quality Assurance of the Doctoral School	13		
Section 20	Contact with the PhD alumni of the university	14		
VI	Rules pertaining to foreign doctoral students and	14		
	doctoral candidates			
VII	Closing provisions	15		

Annex to the Regulation of the doctoral training and the doctoral degree award procedure of the University of Miskolc governing Antal Kerpely Doctoral School of Materials Science and Technology

g	Page:
e	
7	Version: A4

ESTABLISHMENT OF THE DOCTORAL SCHOOL

By Decision No. 2000/10/III/2.4/1 (XII.15.), the Hungarian Accreditation Committee (henceforth MAB) approved the accreditation of Antal Kerpely Doctoral School of Materials Science and Technology built on the Metallurgy Doctoral Programme of the Faculty of Materials Science and Engineering of the University of Miskolc accredited in 1994.

By Decision No. 2015/6/XI/12/2/885 of MAB, the Doctoral School registered as materials science and technology No 33 was assessed as adequate and its accreditation was extended until 31 July 2019.

The Doctoral School, like all Doctoral Schools, was established pursuant to Act LXXX of 1993 on Higher Education, Government Decree 51/2001 (IV.3) on Doctoral Training and the Doctoral (PhD) Degree Award Procedure taking into account the MAB resolutions.

The Doctoral School operates according to Act CCIV of 2011 on National Higher Education, Government Decree No. 387/2012. (XII. 19.) as well as the Regulation of the Doctoral Training and the Doctoral Degree Award Procedure of the University of Miskolc.

The Operational Regulation of Antal Kerpely Doctoral School of Materials Science and Technology records the special knowledge and aspects of the operation within the legal frameworks mentioned above.

CHAPTER 1 ORGANIZATION OF THE DOCTORAL SCHOOL

Section 1 Name and details of the Doctoral School

Antal Kerpely Doctoral School of Materials Science and Technology operates within the Faculty of Materials Science and Engineering of the University of Miskolc.

The contact information of the Doctoral School is included in Annex 1.

Section 2 Head of the Doctoral School

The general representative of the Doctoral School is the Head of the Doctoral School, who is a core member of the Doctoral School, elected by the University Doctoral Council on the recommendation of the majority of the core members and appointed for a period of up to five years and released by the Rector. The appointment may be extended several times. A letter of appointment is issued. The Head of the Doctoral School is an internationally renowned core member university professor in possession of the title of Doctor of the Hungarian Academy of Sciences (henceforth HAS) who is responsible for the academic quality and the educational work of the doctoral school.

MISKOLCI EGYETEM	Annex to the Regulation of the doctoral training	Page:
MISKOLCI EGILILMI	and the doctoral degree award procedure of the	
		Version: A4
	Doctoral School of Materials Science and	
	Technology	

Section 3 Members of the Doctoral School

- (1) Faculty members of the Doctoral School are academic staff and researchers having academic degrees and professors emeriti who are considered suitable by the Disciplinary Doctoral Council to perform teaching, research and supervisor duties in the Doctoral School by the recommendation of the head of the Doctoral School. New core members of the Doctoral School are recommended to the Doctoral Council of the University by the core members' meeting. The professional and employment criteria related to the core members are laid down in the relevant decision of the Hungarian Accreditation Committee. The list of current core members is included in Annex 2. In addition to those listed above, there are numerous contributors to the structured activities as lecturers and research (co-)supervisors based on demands changing from year to year.
- (2) The professional criteria for doctoral topics, topic announcers and supervisors are laid down in Annex 3 of the University Doctoral Regulation.
- (3) When appointing or authorizing a supervisor, the Disciplinary Doctoral Council shall review whether, in addition to the requirements of the HAC, his or her publications include any that would be accepted as a condition of defence in the doctoral degree award procedure. If they do not, the Council will not support supervision.
- (4) The Disciplinary Doctoral Council insists that at least the supervisor of a full-time doctoral student be an instructor, researcher of the University of Miskolc or officially belong to a department/institute.

Section 4 Disciplinary Doctoral Council

- (1) The chairperson, vice-chairperson and members of the Disciplinary Doctoral Council are proposed by the core members of the Doctoral School. The Faculty Council voices an opinion on the person of the chairperson and the vice-chairperson. The chairperson, vice-chairperson and members of the Disciplinary Doctoral Council shall be appointed and dismissed by the chairperson of the Doctoral Council of the University, after the University's Doctoral Council has delivered an opinion vote.
- (2) The Disciplinary Doctoral Council shall have at least 7 members. With the exception of the doctoral student member, all members of the council shall have a PhD or an equivalent degree. With the exception of the doctoral student representative, members with the right to vote shall meet the conditions of core membership. The majority of members are university professors of the faculty. In case of programmes organised jointly with other universities, professional representation of the partner universities shall be ensured.
- (3) One member of the Disciplinary Doctoral Council shall be a representative elected by the doctoral students of the given discipline. The student representative shall participate in the meetings of the doctoral council with a voting right. The term of office of this representative is one academic year.

MISKOLCI EGYETEM	Annex to the Regulation of the doctoral training	Page:
MISKOLCIEGIETEM	and the doctoral degree award procedure of the	
	University of Miskolc governing Antal Kerpely	Version: A4
	Doctoral School of Materials Science and	
	Technology	

- (4) At least one third of the members of the Disciplinary Doctoral Council shall have a PhD or an equivalent degree and shall not have an employment relationship with the University. A professor emeritus/emerita of the University is considered to have an employment relationship with the University.
- (5) The Head of the Disciplinary Doctoral Council is a university professor, preferably the Head of the Doctoral School.
- (6) The term of office of the chairperson and members of the Disciplinary Doctoral Council with the exception of the provision of paragraph (3) shall be three years. The chairperson and the members may be re-elected.
- (7) The work of the Disciplinary Doctoral Council is assisted by the Secretary of the Doctoral School and a Doctoral Academic Committee entrusted by the Council. The doctoral student delegated to the doctoral council, the administrator of the Doctoral School responsible for the doctoral affairs and with consultation rights the Secretary of the Doctoral School shall take part in the committee. The committee shall be chaired by an instructor in possession of a PhD or equivalent degree elected by the Disciplinary Doctoral Council proposed by the head of the doctoral school. Duties of the Doctoral Academic Committee: assessing doctoral students' performance, managing registration, applications, cases and assisting in the preparations of meetings of the Disciplinary Doctoral Council.
- (8) Other provisions related to the Disciplinary Doctoral Council (duties, quorum) are included in Section 5(8)-(9) of the University Doctoral Regulation.

Section 5 Administration and registration system of the Doctoral School

- (1) The Dean's Office of the Faculty is in charge of administration of the Doctoral School. Personal files and applications are registered by doctoral students in such a way that they can be managed, reviewed and administered easily by computer in a personal database.
- (2) Certified copies of the minutes taken at the meetings of the Doctoral School are kept in the Dean's Office as part of the records.

Section 6 Structure of the Doctoral School

- (1) Antal Kerpely Doctoral School of Materials Science and Technology covers the following disciplines:
 - a) Chemical metallurgy
 - b) Foundry automotive casting
 - c) Interfacial and nanotechnologies
 - d) Metal forming
 - e) Physical metallurgy, heat treatment
 - f) Materials informatics
 - g) Space materials and technology
 - h) High temperature equipment and thermal energy management
 - i) Ceramic and silicate technology
 - j) Polymer technology

MISKOLCI EGYETEM Annex to the Regulation of the doctoral training and the doctoral degree award procedure of the University of Miskolc governing Antal Kerpely Doctoral School of Materials Science and Technology

- k) Chemical processings and technologies
- (2) Most of the members of the Disciplinary Doctoral Council are the head of a discipline at the same time, which automatically ensures the representation of the discipline in the Doctoral Council. (The heads of disciplines above are the instructors of the Faculty listed in Annex 4.)
- (3) Educational programmes in the doctoral school based on the decision of the Disciplinary Doctoral Council are led by the heads of disciplines. The work of the doctoral students participating in the programme are directly led by the supervisor.

CHAPTER 2 WORK OF THE DOCTORAL SCHOOL

Section 7 Admissions Board

The Admissions Board is elected by the Disciplinary Doctoral Council every year. The Admission Board consists of at least three members, excluding any supervisors who have a supervisee in the given admission procedure.

Section 8 Procedure

The general requirements of the admission procedure are summarised in Section 1 of Annex 16 of the University Doctoral Regulation. Further details of the admission procedure related to Antal Kerpely Doctoral School are as follows:

- a) On announcing the application call for the doctoral (PhD) training, the admission point system of the admission procedure together with the related guide shall be published on the notice board of the Faculty of Materials Science and Engineering and on the website of the Doctoral School.
- b) The points awarded to the PhD students applying for the call for applications shall be preassessed by the Doctoral Academic Committee on the basis of the documents submitted and shall be made public prior to the oral examination.
- c) During the oral admission exam, the Admission Board aims to be informed about the applicant's research conceptions, scientific preparedness, language proficiency, aptitude and presenting skills and to assess the expected efficiency of the training and degree award using as objective criteria as possible.
- d) Doctoral admissions can take place on a day after the final examination, the applicants shall be informed of the dates and place in writing in advance.
- e) During the admission procedure, the administrator of the Dean's Office in charge of doctoral affairs shall receive the application forms from the Secreteriat of Vice-Rector for Scientific and International Relations, prepare the evaluation forms and organise the admission examination(s). The Admission Board shall process the admission results and make recommendations to the Disciplinary Doctoral Council about the ranking of the applicants.

Annex to the Regulation of the doctoral training and the doctoral degree award procedure of the University of Miskolc governing Antal Kerpely Doctoral School of Materials Science and Technology

g	Page:
e	
7	Version: A4

Section 9 Tasks following admissions

- (1) After admission, doctoral students shall perform their enrolment and registration requirements pursuant to Section 37 of Volume III of the Organisational and Operational Regulation of the University of Miskolc, entitled Requirements for Students.
- (2) In the registration process, the Doctoral Academic Committee shall receive, check and according to the regulations, correct the starting, admission, registration and work plan documents of the data files, which the doctoral students shall continuously submit after the first registration at the end of each completed semester. To make these semester documents valid, they shall be signed by the supervisor who by doing so shall declare that his or her supervisee has fulfilled the tasks set out in the work and research plan on time. The corrected data files shall then be sent by the Academic Committee to the student to print and sign. The signed documents and the corrected files shall be stored by the Dean's Office.
- (3)The Disciplinary Doctoral Council shall provide continuous access for the doctoral students of Antal Kerpely Doctoral School to the regulation of the doctoral training and the doctoral degree award procedure of the University of Miskolc, as well as the operational regulations of Antal Kerpely Doctoral School of Materials Science and Technology including the amendments in force on its official website.
- (4)At Antal Kerpely Doctoral School students can take part in either a scholarship or a feepaying programme, the completion of which is attested by the earning of the pre-degree certificate.

Section 10 Curriculum

- (1) In every type of training programmes the number of credits to be obtained is the same, which is included in the training plan of the Doctoral School. According to this in the first four semesters of the programme the candidate shall complete four examinations and two compulsory, two-credit subjects (Research studies, Scientific database management).
- (2) The Disciplinary Doctoral Council shall approve the work and research plan at the beginning of the first semester. Any subsequent changes of the work plan shall require the consent of the Disciplinary Doctoral Council.
- (3) The list of subjects that can be taken at the faculty is included in the list of subjects annexed to the training plan, and the syllabus of each subject is continuously available on the website of the Doctoral School. Certain subjects may be taken only in one semester of the school year (spring/autumn), according to the terms and conditions agreed with the lecturer.
- (4) In addition to the four compulsory subjects to supplement and broaden the doctoral training, the Candidate may take optional, so-called 'facultative' subjects which are in some way related to the objectives set in the research plan. These may be proposed by the Candidate in

MISKOLCI EGYETEM	Ar an
------------------	----------

Annex to the Regulation of the doctoral training and the doctoral degree award procedure of the University of Miskolc governing Antal Kerpely Doctoral School of Materials Science and Technology

g	Page:
e	
y	Version: A4

agreement with the supervisor with the approval of the Disciplinary Doctoral Council. In this case the subject is worth two credits.

- (5) Completed academic requirements shall be recorded by way of credit points in the student's electronic registration course book, as well as on his or her central data sheet registered in the Dean's Office.
 - a) By passing the examination of a compulsory subject, students receive 10 credits, regardless of the grade; therefore 40 credits can be obtained by completing the four compulsory subjects.
 - b) In the first semester all students shall take "Research studies" and in the second semester "Scientific database management" as a compulsory subject for two credits each, but these subjects are not complex examination subjects.
 - c) Two credits can be obtained for passing the examination of each "facultative" subject.
 - d) The rules of the complex examination are included in the annex to the training plan called "Procedure of the complex examination"
 - e) Foreign language requirements of the Doctoral School:

 English, German, French, Russian and Spanish are accepted as first foreign language, which can be certified with a state accredited complex B2 foreign language certificate or a certification equivalent to this. The level of the second foreign language required to pursue the discipline can be certified by passing a language exam organised by the Language Teaching Centre of the University of Miskolc, at least at intermediate level. Second foreign language can only be English, provided it is not the first foreign language.
- 6) Pursuant to Section 5(8)(v) of Chapter 1 of the University Doctoral Regulation, the Disciplinary Doctoral Council shall permit doctoral students to pursue parallel doctoral programs in the specialty areas, if specifically recommended by the supervisor. If the student does not progress adequately in his or her PhD training or in scientific work (in terms of completing the requirements for the graduate school and regular conduct of his or her own experiments required for the dissertation as well as the full acceptance of the research seminars), permission shall be withdrawn. It is the responsibility of the student applying for a PhD programme to declare whether he or she is participating in any other training. If he or she fails to do so and it is revealed during the PhD training, he or she shall be instructed to suspend the concurrent training.
- 7) Doctoral student can apply for partial studies abroad. They may pursue partial studies abroad on the basis of a work programme recommended by their supervisor and approved by the Disciplinary Doctoral Council which ensures the validity of the relevant study period in the PhD programme.
- 8) During the partial studies abroad, doctoral students shall be granted a scholarship for a maximum period of six months, and during a period of six to twelve months the Disciplinary Doctoral Council shall decide whether they may continue to receive support. Partial studies of more than 12 months abroad cannot be financed by the home university.

Section 11 Research seminars

(1) The Candidate shall prove progress in his or her research topic in a research seminar. A minimum of seven public research seminars shall be completed during the training: three

MISKOLCI EGYETEM Annex to the Regulation of the doctoral training and the doctoral degree award procedure of the University of Miskolc governing Antal Kerpely Doctoral School of Materials Science and Technology

during the training and research phase, with a maximum of 15 credits / research seminar and four more in the research and dissertation phase, max. 20 credits / research seminar.

- (2) The formal requirements for research seminar papers submitted by PhD students of the Doctoral School are as follows:
 - a) Papers shall be submitted in one bound copy to the Dean's Office and in one electronic copy (pdf) to the e-mail address specified in the call. Papers can only be accepted or submitted for review if they are signed by the supervisor(s).
 - b) The title page of the paper shall include the name of the Doctoral School, the number of the research seminar, the name of the doctoral student, the supervisor and the name of doctoral student's department.
 - c) Papers shall be written in A/4 size with a maximum font size of 13 and 1.5 line spacing, in a minimum of 20 and a maximum of 30 pages.
 - d) Tables and figures shall be sequentially numbered and titled. The paper can include a bibliography, annexes. The format of the bibliography as follows:
 [Serial Number[AUTHOR(S): Title, Place and date of publication, Page Number
- (3) The head of the Doctoral School shall forward the written material of the research seminar to a lecturer or researcher who is familiar with the subject. The student shall receive the assessment before the presentation. In order to follow the progress of the research topic, the student's research seminar papers shall regularly be reviewed by the same lecturer, if possible.
- (4) Successful completion shall be registered by the minutes of a joint seminar which shall be held in the month following the end of each semester.
- (5) Research seminars are to help prepare for writing the dissertation and constitute a proper thematic framework. Members of the Disciplinary Doctoral Council shall be invited to the research seminars.
- (6) Research seminars are organized by the Dean's Office.

Section 12 Doctoral students' teaching activities

(1) Teaching activity is worth a maximum of five credits per semester.

Section 13 Doctoral students' teaching activities

(1) The basic task and aim of doctoral training is to provide scientific training based on a university degree, in the framework of which doctoral students become capable of independent research. Efforts shall be made to successfully complete the research task required for the dissertation within the training period. The supervisor and the relevant head of the department are required to provide doctoral students with the necessary conditions to concentrate on the assigned task.

MISKOLCI EGYETEM Annex to the Regulation of the doctoral training and the doctoral degree award procedure of the University of Miskolc governing Antal Kerpely Doctoral School of Materials Science and Technology Annex to the Regulation of the doctoral training Page: Version: A4

(2) In order to facilitate their preparation, doctoral students may be involved in tasks related to research at research locations. Presenting the processed results of the experimental and research work in the form of reports are worth 2 credits in the training and research phase and 5 credits in the research and dissertation phase.

Section 14 Doctoral students' publication activities

- (1) During the course of the training, doctoral students must also acquire skills of scientific publication of appropriate format and quality. They shall publish their research findings as a first author, with the co-authorship of the supervisor and other contributors, in prestigious Hungarian and international journals until the successful completion of the procedure. It is the duty of the supervisor to review the PhD student's manuscripts in detail and make any necessary adjustments.
- (2) The candidate confirms his or her independent scientific work with publications or forthcoming publications in prestigious, reviewed scientific journals or volumes, as well as papers in major Hungarian and foreign conferences. The semester report template shall be used for evaluation.
- (3) In the case of co-authored publications, a statement by the co-author(s) stating that the results published in the publications and the results presented in the thesis booklet are recognised as those of the candidate shall be attached.
- (4) By the beginning of the defence procedure a doctoral student shall have at least one prestigious publication published and one accepted for publication in which the doctoral student is the first author. As a proof, a declaration of co-authorship available in Chapter IV(13)(4) of the University Doctoral Regulations shall be submitted. At least one of them shall appear in a prestigious international journal, while the other may appear in a prestigious Hungarian-language journal. The latter may be an article of at least four pages in the proceedings of an international conference, or a specific invention application, book, or aid related to the subject of the dissertation, in which the Candidate has written at least one subsection. There is no need to wait until the physical (or electronic) publication of the article with this decision; it is sufficient to prove acceptance of the article by an editorial letter containing the DOI number.
- (5) "Articles in a prestigious international journal" shall be understood to mean only journal articles which:
 - a) have a Q2 rating at the time of submission (http://www.scimagojr.com/),
 - b) have been published in the category of publications in which the original scientific results are customarily published; these are typically "paper", "regular paper", "original paper", "article", "short paper", etc. categories, excluding categories for other purposes, such as "review", "discussion", "correspondence", "editorial", "book review", etc.

MISKOLCI EGYETEM Annex to the Regulation of the doctoral training and the doctoral degree award procedure of the University of Miskolc governing Antal Kerpely Doctoral School of Materials Science and Technology

- (6) The following credit points may be awarded for publication activities, based on photocopied or separately printed articles and conference booklets submitted to the Doctoral Academic Committee:
 - an international peer-reviewed journal article
 - articles published in Q1 journals 40 credits
 - articles published in Q2 Journals 30 credits
 - articles published in Q3 journals 20 credits
 - articles published in Q4 Journals 10 credits

Categories Q1-Q4 are accepted by the Academic Committee from Scimago (the best of the categories available for the journal in the year of publication or, if better, the year of submission, the latter date is the date of submission in the published article).

- articles published in a non-Q international peer-reviewed journal (6 credits)
- articles in a foreign language published in a Hungarian journal (6 credits),
- articles in a Hungarian journal (4 credits),
- articles in a foreign language (5 credits) and presentations (4 credits) at an international conference,
- foreign language articles (3 credits) and presentations (2 credits) at a Hungarian conference,
- articles in Hungarian at a Hungarian conference (2 credits) and lectures (2 credits).

Only peer-reviewed articles can be taken into consideration that are printed or electronically accessible to the public.

- (7) A publication can only be considered an article if it consists of at least of 4 printed pages and it follows a standard outline (introduction, experiments, results, conclusions, reference). This condition does not apply to Q1 and Q2 scientific journals.
 - (8) The Doctoral School
 - does not distinguish between oral presentations and poster presentations, both are credited as presentations,
 - 10 credits for a registered patent,
 - 4 credits for a patent filed,
 - a conference is recognized by the Council as an international conference where the
 majority of the participants are foreigners, the language of the presentation is English,
 German or Russian, but not Hungarian. Thus, MicroCad and the Spring Wind
 Conference will only be recognized as international conferences if the above condition
 is met and is certified by the organizers.
- (9) At Antal Kerpely Doctoral School doctoral students are expected to obtain at least 90 credits until the complex examination, including publications worth at least 10 credits presenting their research results and preparedness for research. Only first authors in each category are entitled to credit for publications. An electronic journal publication is worth the same credit. A minimum total of 55 credits shall be earned from publications during the entire four-year training period.
- (10) During the selection of the core members and supervisors in the degree award procedure and in the evaluation of scientific publishing activity, the data appearing in the Database of Hungarian Scientific Works (henceforth MTMT) shall be taken into account, and the publishing activity shall be proved by the data in the MTMT. Scientific work not included in

MISKOLCI EGYETEM Annex to the Regulation of the doctoral training and the doctoral degree award procedure of the University of Miskolc governing Antal Kerpely Doctoral School of Materials Science and Technology Page: Version: A4

the MTMT database shall not be taken into account when evaluating the scientific publishing activities of lecturers, researchers or students.

Section 15 Doctoral dissertation

- (1) The dissertation is a piece of work in Hungarian or in a language approved by the Disciplinary Doctoral Council summarizing the candidate's objectives, new academic results the so-called "theses" (description of the work, related literature, research methods).
- (2) In the dissertation, the name of the author, supervisor, doctoral school and its head, as well as the place and date of writing and the DOI number shall be indicated. The dissertation shall have the supervisor's recommendation (maximum three pages), a table of contents (in Hungarian and English), a summary of maximum two pages and a bibliography. The latter shall include the list of the Candidate's academic publications. A summary in Hungarian and in a foreign language shall also be attached, maximum two pages per language. The dissertation may have appendices (e.g. a set of photos, documents, etc.).
- (3) The dissertation shall be submitted in five bound copies, and in electronic copy as well. The related provisions are included in Section 16 of the University Doctoral Regulation.
- (4) Candidates shall attach the thesis booklet to the dissertation electronically and in 50 printed copies.

A thesis booklet shall include

- a) Chapter 1: a short summary of the research objectives set,
- b) Chapter 2: a short description of the analyses and experiments conducted, the methodology of data collection and the exploration and application of resources,
- c) Chapter 3: a short summary of the scientific results, their utilisation and opportunities for utilisation. The utilisation of the achieved results may involve direct and indirect practical application, promotion of the internal development of the branch of science or enhancement of other branches of science with new knowledge,
- d) Chapter 4: a list of publications related to the topic of the research field,
- e) In the case of a dissertation or a printed work containing the results of collective research work, the candidate shall describe in detail and accurately his or her share in the work of the team. Theses shall be signed in advance by each member of the research group involved declaring that the results presented in the thesis booklet are recognised as those of the candidate.
- (5) Before the departmental discussion the dissertation shall be assigned to two pre-reviewers, an internal one (having employment relationship with the University of Miskolc) and an external one (having no employment relationship with the University of Miskolc) as follows:
 - a) the pre- reviewers are invited by the chairperson of the Disciplinary Doctoral Council after consulting with the supervisor,
 - b) the pre-reviewer presents his or her opinion during the departmental discussion,
 - c) the Disciplinary Doctoral Council appoints the assessment committee after the departmental discussion and in awareness of the results.

Annex to the Regulation of the doctoral training	
and the doctoral degree award procedure of the	
University of Miskolc governing Antal Kerpely	Version: A4
Doctoral School of Materials Science and	
Technology	

- d) internal pre-reviewers and internal reviewers may be the same.
- (6) As far as publications, lectures and works are concerned, the Candidate shall (may) publish in agreement with the supervisor; however, the dissertation, together with its theses, shall be presented for a departmental discussion, at least one month before submission, to the professionally relevant educational organization unit. If the Candidate's doctoral research was not wholly or partly carried out at the given educational organization unit, the professional-scientific community of the actual research location shall be invited to the departmental discussion or may even be organized there by inviting faculty members.
- (7) Rules of the departmental discussion are laid down in Section 15 of the University Doctoral Regulation.
- (8) The Candidate shall defend theses and not a dissertation. The dissertation shall be written in such a way that the acceptability of the theses formulated at the end of the dissertation is substantiated by the main body of the dissertation, which has the following three criteria:
 - a) The thesis shall belong to one of the topic areas covered by the Doctoral School (see Annex 4). If this is not the case, the dissertation shall be rejected, and the candidate shall be advised to submit it to another doctoral school.
 - b) The theses shall contain new scientific results which are supported by the processed literature.
 - c) The results of the theses shall be credible, proven in the dissertation by the detailed description of the measurements or calculations and the comparison of the results with literature data.
- (9) For each thesis, the three criteria of paragraph 8 shall be examined. If any of the criteria fails to meet a given thesis, that thesis must be rejected by the reviewers and the assessment committee. The defence is successful if the Candidate defends at least one thesis.
- (10) A thesis can be accepted or rejected in whole or in part by the assessment committee and the reviewers. The assessment committee and the reviewers cannot formulate a thesis.

Section 16 Training and research phase as well as research and dissertation phase

- (1) The calculation of credit points shall be carried out continuously on personal data sheets by the Doctoral Academic Committee on the basis of regular reports by doctoral students. If at least 90 credit points have been accumulated by the end of the training and research phase and the requirements of the training have been fully met, the doctoral student may apply for the complex examination pursuant to Section 9 of the University Regulation and the rules of procedure "Complex examination" in the annex to the training plan.
- (2) During the second four semesters, the research and dissertation phase, the doctoral student shall basically conduct research, publish research findings and prepare his or her dissertation suitable for departmental discussion. The rules for calculations are the same as for the training and research phase.

MISKOLCI EGYETEM Annex to the Regulation of the doctoral training and the doctoral degree award procedure of the University of Miskolc governing Antal Kerpely Doctoral School of Materials Science and Technology Page: Version: A4

Section 17 Submission of the doctoral dissertation

- (1) The conditions for the submission of the dissertation and the commencement of the degree awarding procedure are set out in Section 17 of the University Doctoral Regulation.
- (2) The dissertation shall be sent to the reviewers by the head of the Doctoral School. At the request of the Disciplinary Doctoral Council, the two official reviewers shall make a written review within two months.
- (3) Upon receipt of the reviews, the Disciplinary Doctoral Council shall examine whether the Candidate has two positive reviews. However,
 - a) in the case of a positive and a negative review, the head of the Doctoral School shall send the dissertation to a pre-designated third (reserve) reviewer;
 - b) in the case of two negative reviews, a new procedure may only be initiated after a maximum of two years and no more than once in the same topic.
- (4) The defence shall be organized by the Dean's Office with the assistance of the supervisor. The head of the Disciplinary Doctoral Council shall notify the Candidate of the decision. The Disciplinary Doctoral Council shall discuss the result of the defence and recommend / not recommend awarding the PhD degree.

CHAPTER 3 FINANCIAL MANAGEMENT OF THE DOCTORAL SCHOOL

Section 18

- (1) The normative subsidy for state scholarship holders is a significant source of income for doctoral schools.
- (2) The obligation to pay procedural fees related to doctoral degree awarding procedure, as specified in Annex 16 to the Doctoral Regulation, shall apply to all doctoral students.
- (3) The above listed financial resources to be used by the faculty shall be allocated under the direction of the Disciplinary Doctoral Council and on the basis of the following principles by the Dean's Office:
 - a) The personal budget and 5% of the material budget of the normative support shall remain in the Dean's Office in order to manage the expenses of the entire Doctoral School through a centralized framework.
 - b) 35% of the resources shall be distributed among the departments in proportion to the calculated number of academic and research staff in possession of an academic degree.
 - c) 60% of the resources shall be allocated taking into account the proportion of doctoral candidates receiving public or foundation grants.
- (4) Only those departments shall be eligible for the material budget for doctoral students according to the calculation method detailed above which have an active full-time PhD student during the semester in question.

MISKOLCI EGYETEM Annex to the Regulation of the doctoral training and the doctoral degree award procedure of the University of Miskolc governing Antal Kerpely Doctoral School of Materials Science and Technology Page: Version: A4

(5) The sources of income listed above are significant for the life of a Doctoral School, but expenses may be significantly higher. Research centres, foundations and other support can fill the gap.

CHAPTER 4 QUALITY ASSURANCE OF THE DOCTORAL SCHOOL

Section 19

- (1) The quality assurance of doctoral studies is multifaceted, which is specified in Section 12 of Chapter III of the University Doctoral Regulation. The implementation of these principles is regularly monitored by the Disciplinary Doctoral Council on the basis of the report of the Doctoral Academic Committee. The quality of the obtained PhD degree is ensured as follows:
 - a) During the admission procedure, after a fair evaluation of the Candidate's performance to date, the most suitable Candidates are admitted,
 - b) The lecturers of PhD subjects are highly qualified, scientists and researchers in possession of an academic degree,
 - c) The subjects announced and their syllabi are reviewed by the Academic Committee at the beginning of each academic year,
 - d) The supervisors are the best academic staff of the Faculty who are constantly present in the scientific community, publish in prestigious journals, give presentations at international conferences,
 - e) The scientific topics announced are related to the international trend of the discipline,
 - f) Publication of results in prestigious journals is a prerequisite for defending the dissertation,
 - g) The student shall prove the progress of his or her scientific activity by holding a research seminar every semester,
 - h) The reviewers of the dissertation and the members of the Assessment Committee are outstanding scientists in the field.
- (2) Electronic data sheets and comprehensive spreadsheets are of major importance for monitoring work. The registration of the achieved results is thus ensured, as well as the applications (year-offs, examination postponement, subject enrolment, subject modifications, pre-degree certificate, publication acceptance, complex examination, language examination, departmental discussion, appointment of assessment committee, etc.) are registered. It provides an opportunity to handle training and doctoral degree awarding procedures in an objective and up-to-date manner.
- (3) In addition, the supervisor is of course expected to be aware of the doctoral student's applications and achievements, therefore student applications and submissions are only discussed by the Disciplinary Doctoral Council if they are countersigned by the supervisor.

CHAPTER 5
CONTACT WITH THE PHD ALUMNI OF THE UNIVERSITY OF MISKOLC

Annex to the Regulation of the doctoral training and the doctoral degree award procedure of the University of Miskolc governing Antal Kerpely Doctoral School of Materials Science and Technology

g	Page:
•	
	Version: A4

Section 20

Antal Kerpely Doctoral School is based on the graduate training of the Faculty of Materials Science and Engineering of the University of Miskolc; the faculty also maintains close contact with its engineer alumni through established practice in meetings, and even more with PhD alumni. Former doctoral supervisors and members of the Doctoral School who had some contact with doctoral students during their training have a particular role to play. The purpose of this relationship is twofold: those who have already obtained a PhD must be won, beyond their postdoctoral activity, to support our doctoral education; those who in possession of the pre-degree certificate are working on their dissertation must be won to continue their activities.

Chapter 6 SPECIAL RULES PERTAINING TO FOREIGN DOCTORAL STUDENTS AND DOCTORAL CANDIDATES

- Section 22 50% of the amount of the tuition fee is allocated to the faculty budget and 50% to the Institute to which the foreign doctoral student belongs for foreign doctoral students who have been admitted to the Doctoral School with a Hungarian or foreign scholarship.
- Section 23 Foreign doctoral candidates are admitted as part of the normal admission procedure. General conditions of admission to PhD programmes are as follows:
 - a) a university degree or MSc degree on at least "cum laude" or equivalent level, certifying the completion of university studies ending with a final examination or state examination,
 - b) a certified copy of an at least B2 level complex language certificate in English,
 - c) appropriate level professional expertise in the selected topic to be checked by the Admission Board at the admission interview,
 - d) preference is given to initial certified scholarly/professional achievement (e.g. publication, studies in another higher education institution abroad, or other similar activities).
- Section 24 Application for admission can be made on the date advertised by downloading the application form from the website of the Doctoral School. Additional admission dates different from the date advertised may be provided by the University Doctoral Council on an individual basis. The following attachments are necessary for application:
 - a) applying for recognition of a foreign qualification,
 - b) a certified copy and translation of the higher education diploma and of the documents attesting to the duration and successful completion of the studies,
 - c) professional CV including a photograph,
 - d) copy of the certificate of language proficiency,
 - e) copies of publications,
 - f) description of ideas concerning PhD thesis topic,
 - g) certificate of participation in a scholarship programme,
 - h) a statement by the supervisor of the Doctoral School about accepting the supervision of the foreign doctoral student,
 - i) other.

MISKOLCI EGYETEM Annex to the Regulation of the doctoral training and the doctoral degree award procedure of the University of Miskolc governing Antal Kerpely Doctoral School of Materials Science and Technology

- Section 25 The administrator of the Doctoral School in charge of foreign doctoral student affairs collects and submits the applications to the head of the Disciplinary Doctoral Council.
- Section 26 The chairperson of the Disciplinary Doctoral Council appoints and invites the Chairperson of the admissions board who is a university professor or professor emeritus of the given topic. The other member of the admissions board is always the administrator of the Doctoral School in charge of foreign doctoral student affairs.
- Section 27 The oral examination is conducted through an internet video link, the time of which is communicated to the applicants by the administrator of the Doctoral School in charge of foreign doctoral student affairs.

During the oral interview, the board assesses the candidate's professional knowledge, ideas regarding his or her doctoral work, previous scientific activities and language proficiency.

Section 28 The board scores the applicant's performance with a maximum of 100 points, of which 50 points can be awarded on the basis of the documents submitted and 50 on the basis of the oral interview.

The board scores the applicants' performance, ranks them and either recommends or does not recommend their admission to the Doctoral Council.

- Section 29 In order to get admitted, applicants shall get minimum 60 points. A score of 60 points is only a necessary condition for admission but does not mean automatic admission.
- Section 30 Foreign doctoral students shall fulfil the requirements during their doctoral studies set out in the training plan of the Doctoral School

CHAPTER 8 CLOSING PROVISIONS

The present Regulation incorporate the provisions effective as of 18 October 2019 in a uniform structure amended by Senate Resolution No. 253/2019 and adopted by Senate Resolution No. 297/2016. Modifications affecting the performance evaluation that are favourable or indifferent to the doctoral student (e.g. Section 15(9)) may also be applied to training started under the previous provisions.

Miskolc, 18 October 2019

Professor Dr. Zoltán Gácsi university professor Head of the Doctoral School Council Prof. Dr. András Torma Rector Chairperson of the Senate

Annex to the Regulation of the doctoral training and the doctoral degree award procedure of the University of Miskolc governing Antal Kerpely Doctoral School of Materials Science and Technology

,	Page: 1
	Appendix:

Annex 1

Contact information of the Antal Kerpely Doctoral School of Materials Science and Technology

Postal address: 3515 Miskolc-Egyetemváros

Dean's Office of the Faculty of Materials Science and Engineering

Telephone number: +36 46 565 090 (Dean's Office)

Fax number: +36 46 565 408 (Dean's Office)

e-mail: makdekani@uni-miskolc.hu

website: http://www.kerpely.uni-miskolc.hu

Chair of DIT: Professor Dr. Zoltán Gácsi university professor

Institute of Physical Metallurgy, Metal Forming and Nanotechnology

+36 46 565 111/15-41

zoltan.gacsi@uni-miskolc.hu

Vice-chair of DIT: Prof. Dr. Valéria Mertinger university professor, ,-head of institute

Institute of Physical Metallurgy, Metal Forming and Nanotechnology

+36 46 565 111/15-45 femvali@uni-miskolc.hu

Secretary of DIT: Mária Kissné Dr. Svéda senior reserch fellow

MTA-ME Materials Science Research Group

+36 46 565 111/15-06 femmaria@uni-miskolc.hu

Administrator in the Dean's Office in charge of candidate affairs

Judit Roneczné Ambrus-Tóth administrative expert

Dean's Office of the Faculty of Materials Science and Engineering

+36 46 565 090

roneczne.judit.@uni-miskolc.hu

Administrator in the Dean's Office in charge of doctoral student affairs

Gabriella Balázsdi-Szabó administrative expert

Dean's Office of the Faculty of Materials Science and Engineering

+36 46 565 111/20-72 rekkdhpg.@uni-miskolc.hu

Administrator in the Dean's Office in charge of foreign doctoral student affairs

Ágnes Solczi administrative officer

Institute of Ceramic and Polymer Engineering Faculty of Materials Science and Engineering

+36 46 565 102

femagika.@uni-miskolc.hu

MISKOLCI EGYETEM Annex to the Regulation of the doctoral training and the doctoral degree award procedure of the University of Miskolc governing Antal Kerpely Doctoral School of Materials Science and Technology Appendix:

2. Annex

Core members of Antal Kerpely Doctoral School of Materials Science and Technology

1) Prof. András Roósz (1945)

Member of HAS (2004, Engineering Sciences) professor emeritus (ME)

2) Prof. Zoltán Gácsi (1951)

Doctor of HAS (2004, Engineering Sciences) university professor (ME)

3) Prof. György Kaptay (1960)

Correspondence member of HAS (2016), university professor (ME)

4) Prof. Tamás Kékesi (1960)

Doctor of HAS (2006, Engineering Sciences) university professor (ME)

5) Prof. Tamás Török (1951)

Doctor of HAS (2007, Engineering Sciences) university professor (ME)

6) Prof. Valéria Mertinger (1966)

Doctor of HAS (2018, Materials Science), university professor (ME)

7) Prof. Árpád Bence Palotás (1966)

Doctor of HAS (2018, Material Sciences), university professor (ME)

8) Prof. Kálmán Marossy (1949)

PhD (1998, Chemical Sciences), habil. (2004) university professor (ME)

9) Prof. György Czél (1962)

PhD (1998, Material Sciences), habil. (2017) university professor (ME)

10) Prof. Béla Viskolcz (1967)

CSc (1998, Chemical Sciences), habil. (2015) university professor (ME)

Core member emeriti of Antal Kerpely Doctoral School of Materials Science and Technology

11) Prof. Sándor Bárány (1937)

Doctor of Chemical Sciences (1982, Chemical Sciences, 1993, nostrificated in Hungary) professor emeritus (ME)

12) Prof. Pál Bárczy (1941)

CSc (1976, Engineering Sciences) professor emeritus (ME)

13) Prof. István Szűcs (1946)

CSc (1997, Engineering Sciences) professor emeritus (ME)

Annex to the Regulation of the doctoral training and the doctoral degree award procedure of the University of Miskolc governing Antal Kerpely Doctoral School of Materials Science and Technology

,	Page: 3
	Appendix:

Members of the Materials Science and Technology Disciplinary Doctoral Council (from 1 July 2019)

Chairperson: 1. Prof. Zoltán Gácsi university professor (DSc) Vice-chairperson: 2. Prof. Valéria Mertinger university professor, (DSc)

University members with voting rights:

- 3. Prof. András Roósz professor emeritus (DSc, member of HAS)
- 4. Prof. Béla Viskolcz university professor (DSc)
- 5. Prof. Árpád Bence Palotás university professor (DSc)
- 6. Prof. György Kaptay university professor (DSc, Correspondence member of HAS)

External members with voting rights:

- 7. Prof. Péter János Szabó university professor (Doctor of HAS)
- 8. Prof. Károly Belina university professor (PhD)
- 9. Prof. Dezső Beke professor emeritus (DSc)

University members with consulting rights:

- 1. Prof. György Krállics university professor (PhD)
- 2. Prof. Pál Bárczy professor emeritus (CSc)
- 3. Prof. Tamás Kékesi university professor (DSc)
- 4. Prof. László Gönze A. university professor (CSc)
- 5. Prof. Kálmán Marossy university professor (PhD)
- 6. Prof. László Varga associate professor (PhD)

Prof. Tamás Török university professor (DSc)External members with consulting rights:

- 1. Prof. Jenő Dúl honorary university professor, research professor (CSc)
- 2. Prof. Gábor Buza honorary university professor (CSc)

Secretary (non-member):

Mária Kissné Dr. Svéda senior reserch fellow (PhD)

Person recommended to be an internal member of the UDC

Prof. Valéria Mertinger (DSc) university professor,

Person recommended to be an alternate member of the UDC

Prof. Árpád Bence Palotás (DSc) university professor, dean

Person recommended to be an external member of the UDC

Dezső Beke (DSc) professor emeritus, University of Debrecen

1 doctoral student with voting rights elected for the given academic year

1 doctoral student with consultation rights elected for the given academic year

Secretary (non-member):

Mária Kissné Dr. Svéda (PhD) senior reserch fellow

Institute of Physical Metallurgy, Metal Forming and Nanotechnology

MTA-ME Materials Science Research Group

Academic Committee

Chairperson: Prof. Valéria Mertinger university professor,

Members: Dr. Péter Baumli university associate professor,

in charge of foreign doctoral students

Judit Roneczné Ambrus-Tóth administrative expert for doctoral affairs

Mária Kissné Dr. Svéda senior reserch fellow

two doctoral students elected for the given academic year

Annex to the Regulation of the doctoral training and the doctoral degree award procedure of the University of Miskolc governing Antal Kerpely Doctoral School of Materials Science and Technology

Page: 4	
Appendix:	

Annex 4

Heads of scientific areas of Antal Kerpely Doctoral School of Materials Science and Technology

-	Chemical metallurgy	Prof. Tamás Kékesi university professor (DSc)
_	Foundry automotive casting	Prof. László Varga associate professor (PhD)
_	Interfacial and nanotechnologies	Prof. György Kaptay university professor (DSc)
_	Metal forming	György Krállics (PhD) associate professor
_	Physical metallurgy, heat treatment	Prof. Valéria Mertinger university professor (DSc)
_	Materials informatics	Prof. Zoltán Gácsi university professor (DSc)
_	Space materials and technology	Prof. Pál Bárczy professor emeritus (CSc)
_	High temperature equipment and thermal energy management	Prof. Árpád Bence Palotás university professor (DSc)
_	Ceramic and silicate technology	Prof. László Gönze A. university professor (CSc)
_	Polymer technology	Prof. Kálmán Marossy university professor (PhD)
_	Chemical processings and technologies	Prof. Béla Viskolcz university professor (CSc)