

University of Pannonia



**Doctoral School of Chemistry and Environmental  
Sciences**

**Rules and Regulations of the Doctoral Programme**

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## **Preamble**

The Doctoral School of Chemistry and Environmental Sciences (DSCES) was established at the University of Pannonia on October 9, 2009 by merging two doctoral schools, i.e. the Doctoral School of Chemical Sciences and the Doctoral School of Environmental Sciences.

The Doctoral School of Chemistry and Environmental Sciences was accredited by the Hungarian Accreditation Committee (hereinafter HAC) in compliance with the Decree **2015/9/XI/53/2/939** until December 31, 2019.

The Rules and Regulations of the Doctoral School of Chemistry and Environmental Sciences incorporate the following legal Acts and Government Decrees:

- Act CCIV of 2011 on National Higher Education (hereinafter NHEA)
- Government Decree 387/2012 (XII.19.) (modified on April 26, 2013) on Doctoral Schools, doctoral procedures, and habilitation
- resolutions of the HAC
- Doctoral Rules and Regulations of the University of Pannonia.

## I. GENERAL PROVISIONS

### a. Introduction

- (1) The Doctoral School (hereinafter DS), including various organizational units of the university, is an educational institution, operating with the approval of the University and the HAC, in which preparatory training for obtaining an academic degree is provided. Other higher education institutions or research institutes outside the DS may also associate with the doctoral school.
- (2) Official name of the DS: Doctoral School of Chemistry and Environmental Sciences (hereinafter DSCES), operating at the Faculty of Engineering, University of Pannonia.
- (3) The minimum personnel conditions set forth in the establishment of the school and by the accreditation must be met at all times.
- (4) Based on the resolution of the UDHC, the DS shall develop its internal operating rules in such a way that they successfully contribute to the high quality of training and obtaining a doctoral degree. It shall also be ensured that all doctoral students have access to the full intellectual properties and facilities of the school to be able to carry out research.
- (5) When devising the Doctoral Rules and Regulations of the DSCES, the Doctoral Rules and Regulations of the University of Pannonia should be taken into account along with other decisions.

## II. ORGANISATIONAL FRAMEWORK OF THE DOCTORAL SCHOOL

### b. Members of the Doctoral School

#### (1) *Head of the Doctoral School*

- a. The head of the doctoral school is appointed or dismissed by the Rector with regard to the proposal of the UDHC and approval of HAC.
- b. The head of the DS is responsible for maintaining the quality of academic and scientific work of the school.
- c. The head of the DS is elected by the core members of the doctoral school for the period of three years.
- d. The work of the head of the school is assisted by the DPHC.

#### (2) *Secretary of the Doctoral School*

- a. The secretary of the Doctoral School is appointed or dismissed by the DPHC with regard to the proposal of the head and the panel of the DS.
- b. The Secretary of the DS is responsible for the day-to-day running of the school's administrative and organizational tasks. The Secretary is to assist the head of the DS, to facilitate the meetings of the DPHC, and to prepare and forward the reminders about them to DPHC members.

#### (3) *Core members*

- a. Based upon the proposal of the head of the DS, core members are appointed by the DPHC. The assignment may be revoked on the proposal of the head of the DS, or the individual may revoke it officially in writing upon individual decision. The Hungarian higher education permits individuals to be employed as a core member exclusively in one doctoral school at a time.

- b. The list of core members of the DSCES is available in the database of the National Doctoral Council /www.doktori.hu/. The list of core members is also included in Appendix 1 of these regulations.
- c. Academics, who pursue high standard scientific activities in the academic discipline and research field matching the objectives of the doctoral school, may also join as core members of the DS upon the recommendation of the head of the DS and approval of the DPHC.
- d. Core members of the DSCES are to undertake teaching and supervisory work in the DS.

(4) *Supervisors of doctoral topics*

- a. A supervisor of the DS shall responsibly manage and assists the studies and research work of the doctoral students during their preparation of obtaining the doctoral degree.
- b. A supervisor of the DS shall be any lecturer or a researcher with a scientific/academic degree, whose announced research topic corresponds to that of the main research areas of DSCES, and whose research topics had been approved by the DPHC.
- c. Research topics to be announced at the DSCES shall first be sent for approval of the DPHC by January 15 or June 15 of each year. The announced doctoral topics and appointments of supervisors of doctoral topics are to be decided by the DPHC.

(5) *Teaching staff of the DS*

- a. Teaching staff of the DS shall consist of lecturers and researchers holding academic/scientific degrees that has been found suitable by the DPHC to lead lecturing, research and supervisory activities in the DS. The list of lecturers of the DS can be found in Appendix 2.
- b. Lecturers of the DS are to offer subjects as specified in the curriculum of the doctoral training/research programme. Offering new subjects or changing the content of an old subject of the curriculum is only accepted with the permission of DPHC.
- c. The doctoral programs are revised and announced by the DPHC annually and are published in the usual way. The lecturers shall notify the head of the DS in writing of the subjects to be offered in the given semester no later than September 1 and February 1, respectively.

(6) *PhD Students/Doctoral Students*

Doctoral students participating in the doctoral programme have the rights, duties and obligations that are stipulated in the Acts governing higher education.

**c. The Doctoral Programme and Habilitation Council (DPHC)**

- (1) Council of the Doctoral School: a panel that meets regularly to assist the head of the doctoral school and is elected by the core members of the DS. Its members are appointed and dismissed by the Doctoral and Habilitation Council of the University.
- (2) Members of the DPHC are elected for 3 years.
- (3) Core tasks of the DPHC:
  - a. based on the requirements set by the UDHC, develops, revises and improves the doctoral training and research programmes; determines those scientific activities that can be point-based evaluated, and evaluates the academic performance of the students,
  - b. each academic year decides and selects courses to be offered based on the recommendation of the heads of departments and research institutes,
  - c. makes recommendation to the UDHC on appointing academic staff, supervisors of doctoral topics and members of the Admission Committee of the doctoral

school (personal data sheet for new employees (academics/researchers) can be found at the appendix),

- d. organises admission procedures to the doctoral training programme,
  - e. fulfils admission related administration tasks
  - f. reviews applications for obtaining a PhD degree through individual preparation, makes recommendation to UDHC,
  - g. appoints supervisors of doctoral topics of newly admitted students,
  - h. approves study plans of doctoral students,
  - i. reviews the scientific achievements of doctoral students, evaluates their research work and recognises credit points, can initiate the suspension of studies when necessary,
  - j. evaluates applications for exemption of exams
  - k. reviews and decides on deferral request and applications for part-time scholarships abroad based on the recommendation of supervisors,
  - l. defines the subjects of the comprehensive/complex exams,
  - m. appoints exam board members of comprehensive/complex exams, members of dissertation committees,
  - n. makes recommendations on awarding a doctoral degree
  - o. supervises the distribution and allocation of finances of the DS, controls the administration of the finance of the DS,
  - p. keeps records of the first employment of the alumni,
  - q. makes a proposal to the UDHC on awarding doctoral degrees and titles of honorary doctor (Doctor Honoris Causa); shall express opinion on cases the UDHC's judgement is sought after.
- (4) The DPHC is chaired by the Head/Director of the DSCES.
  - (5) The updated list of members of the DPHC is included in the Appendix.
  - (6) The secretary of the DPHC is appointed by the Head/Director of the DSCES and is responsible for organising the meetings of the DPHC.
  - (7) Except for the student representative, members of the DPHC must possess a doctoral degree.
  - (8) The quorum and decision-making criterions of the DPHC are the same as those of the UDHC.

**d. Forum of the Doctoral School of Chemistry and Environmental Sciences**

- (1) The Head/Director of the DSCES organises a forum to provide information about the affairs of the DS.
- (2) The forum is convened by the Secretary of the DS on behalf of the Head of the DS.
- (3) The purpose of the forum is to inform the members of the DS and to seek their opinion on important issues.
- (4) The forum can be organised online as well.

**e. Research facilities and research disciplines of the DSCES**

The following research disciplines are available in the DSCES:

**1. Analytical Chemistry, separation science**

instructors: Péter Hajós PhD, Krisztián Horváth PhD

**2. Bioorganic chemistry, bio-coordination chemistry**

instructors: József Kaizer DSc, Gábor Speier DSc

**3. Modeling and simulation of complex molecular systems**

instructors: Dezső Boda DSc, Tamás Kristóf PhD, Mónika Valiskó PhD, Szabolcs Varga PhD, Peter Gurin PhD

4. **Environmental mineralogy**  
instructor: Mihály Pósfaí DSc
5. **Environmental and inorganic photochemistry**  
instructor: Ottó Horváth DSc, Erzsébet Szabóné Bárdos PhD, Zsolt Valicsek PhD
6. **Atmospheric Chemistry**  
instructors: András Gelencsér DSc, Gyula Kiss DSc, András Hoffer PhD, Ágnes Molnár PhD, Kornélia Imre PhD
7. **Limnology**  
instructors: Judit Padisák DSc, Csilla Stenger-Kovács PhD
8. **Radiochemistry and radioecology**  
instructors: Tibor Kovács PhD, Edit Tóth-Bodrogi PhD
9. **Organochemical synthesis and catalysis**  
instructors: József Bakos DSc, Rita Skodáné Földes DSc
10. **Ecotoxicology**  
instructor: Nóra Kovács PhD
11. **Behavioral ecology**  
instructors: András Liker DSc, Gábor Seress PhD

- (1) The main research facilities of the DSCES can be found in the following:

Center for Natural Sciences  
 Institute of Mechatronics Engineering and Science  
 Research Center for Engineering Sciences  
 Research Center for Biochemical, Environmental and Chemical Engineering  
 Research Institute of Biomolecular and Chemical Engineering

The scientific capacity of the doctoral school is further strengthened by two research groups of the University of Pannonia:

*Atmospheric Chemistry (head: András Gelencsér DSc)*  
*Evolutionary Ecology (head: András Liker DSc)*

- (2) The University's general rules apply for any research carried out on departmental or institutional levels. Formal requirements for announcing research topics can be found in Appendix 5.

### III. DOCTORAL PROGRAMME PROCEDURES OF THE DOCTORAL SCHOOL OF CHEMISTRY AND ENVIRONMENTAL SCIENCES

#### f. Admission and eligibility

- (1) The Admission Committee of the DSCES shall have at least 4 members: the chair of the Admission Committee shall be the head/director of the DS or any core member appointed by the head/director of the DS, further members of the Admission Committee should be two core members of the DS and a representative of the PhD students.
- (2) Applicants, who meet the criteria set in the admission requirement of the DS, shall be notified about eligibility one week prior to the entrance exam by the Office of the Doctoral Schools (ODS).
- (3) The Admission Committee is responsible for conducting the admission procedure and assessing the candidate's academic knowledge and intellect. The AC shall evaluate the applicant's performance and based on the entrance/admission test make a recommendation to the DPHC about accepting or refusing the application.

- (4) Applicants found eligible for admission will be ranked by the Admissions Committee based on total scores obtained at the entrance exam. The order of the ranking is determined separately for recipients of the Hungarian state scholarship and for the fee-paying training. The admission score is determined on the basis of the points awarded (qualification of the diploma, language skills, professional activity) and the performance at the entrance exam (professional language skills, relevant professional experience). Applicants, obtaining scores less than 50% on the entrance exam, may not be admitted.
- (5) The final decision on admission to the doctoral programme is made by the UDHC based on the recommendation of the DPHC.
- (6) Upon successful admission, the head of the DPHC will appoint the supervisors of doctoral topics.
- (7) Doctoral training is also available to those who wish to prepare individually for the PhD degree, provided that they have met the requirements for admission and the doctoral training. An application form shall be submitted in the case of individual preparation as well. Applications can be submitted continuously and will be evaluated during the term period. In this case, the official “doctoral student status” is acquired by applying for the complex exam and its acceptance.
- (8) Criteria of obtaining a PhD degree through individual preparation:
  - a. at least 5 years of research activity
  - b. sufficient level of publications of the last 10 years which is determined by the UDHC based on the specific field science,
  - c. master’s or equivalent degree,
  - d. knowledge of two foreign languages
- (9) Application for obtaining a PhD degree through individual preparation:
  - a. Application to be submitted to the Directorate of Academic Affairs, then it is forwarded to the DS,
  - b. Formally appropriate applications are revised by the DPHC, then recommends UDHC to initiate the acceptance or refusal of application and the assignation of the subjects of the complex exam.
  - c. Applicants are to be notified about the decision in writing, refusals should be justified.
  - d. The complex exam shall be conducted following the decision of the UDHC. The research and dissertation phase of the training shall proceed along the complex exam.

**g. The doctoral training programme**

- (1) The study and examination regulations regarding doctoral students participating in the organised training is set out in the Training Programme” of the DS. The training period shall take six semesters for those who commenced their studies before September 1, 2016 and 8 semesters for those who started after September 1, 2016. Doctoral students may participate in studies abroad for a maximum of one semester. Part-time study abroad is only accepted if the doctoral student conducts research and / or studies related to the research topic. DPHC decides on the acceptance of part-time training received abroad based on the proposal of the supervisor.
- (2) Doctoral candidates, who commenced their studies before September 1, 2016, shall take a comprehensive examination after successfully fulfilled the requirements prescribed in the regulations of the doctoral programme. The comprehensive exam is a form of assessment to evaluate the doctoral candidate’s knowledge acquired in the branch of science. Subjects of the comprehensive examination are included in Appendix 6.

- (3) The comprehensive exam consists of two subjects related to the topic of the dissertation: a major and a minor subject. The doctoral candidate's examination subjects are approved by the DPHC based on the supervisor's recommendation. The doctoral student or doctoral candidate shall be notified in writing of the subjects and the date of the comprehensive examination. The comprehensive examination precedes the dissertation defence in public.
- (4) The comprehensive examination shall be conducted before the Comprehensive Exam Committee. The examination committee consists of a Chair and a maximum of four additional members; one third of the committee, but at least one member shall be an external professional, not employed by the University. All members of the exam committee shall hold a doctoral degree. The comprehensive exam shall only be conducted if the chairman and two members (at least one of them external) are present. The candidate's supervisor, consultant, or the co-publisher of the candidate's doctoral topic cannot serve as members of the exam committee. The comprehensive exam is public.
- (5) The committee decides on the grades of the main and the minor subjects separately by secret ballot (on a 0-4 level marking system). The exam is successful if the sum of the number of points obtained reaches 60% of the available score for both subjects separately. The unsuccessful exam may be retaken only once after six months, but not later than within 12 months. The final grade is decided according to the following: the average of the points determined separately for the two subjects, expressed as a percentage of the points that can be obtained. At averaging the marks, the core subject shall weight double.
- (6) Minutes are taken at the comprehensive exam. Results shall be announced immediately after the exam.
- (7) No comprehensive exam is necessary to take for those who commenced their studies after September 1, 2016, or are in individual preparation as the complex exam ensures the probe the doctoral students' theoretical preparation. The two subjects of the complex exam - similar to those of the comprehensive exam – are assigned from the compulsory elective subjects of the DS and shall be related to the research area/topic of the doctoral student. The evaluation of the theoretical part of the complex exam is the same as that of the comprehensive exam (and in the case of the dissertation part it is also necessary to reach 60%).

#### **h. Procedures of obtaining a doctoral degree**

- (1) To obtain a doctoral degree, doctoral students need to fulfil the degree requirements as set in the Rules and Regulations of the DS, write, and defend their thesis.
- (2) Doctoral students are required to submit the "*Request for Approval of Awarding Doctorate Degree*" form.
- (3) Requirements for obtaining a doctoral degree:
  - a. master's degree
  - b. successful comprehensive/complex exam
  - c. proof of independent scientific work in forms of published or accepted for publication articles in professionally approved scientific journals, peer-reviewed journals, and books (according to the requirements set in the disciplinary regulations of the DS).
  - d. evidence of appropriate command of two languages other than Hungarian/ foreign languages (list of languages accepted and the required level is included in the Appendix.)

- e. preparation and submission of a dissertation based on independent research (hereinafter dissertation) by using methods of scientific work, as well as its defence in a public debate before a committee
  - f. no criminal records.
- (4) Minimum requirements to obtain a doctoral degree in the DSCES are the following:
    - a. articles published or accepted for publication in three refereed international journals, each of which has an impact factor of more than 1, regardless of the order of the authors; or
    - b. at least two articles published or accepted for publication in a peer-reviewed English language journal with an impact factor recognized in the discipline, with the Candidate being first author in at least one of these; AND presentation and / or poster at minimum one international scientific conference.
  - (5) The criteria for obtaining a doctoral degree is the submission of a doctoral dissertation written by the doctoral student or doctoral candidate (hereinafter: author).
  - (6) The most important results of the doctoral dissertation should be summarized in a theses booklet.
  - (7) At the request of the author, with the consent of UDHC, the dissertation can be submitted in a foreign language.
  - (8) The formal requirements regarding the format of the dissertation and theses booklet are contained in Appendix 7.
  - (9) To support the author, the dissertation should be discussed in the forum of the DSCES (possibly in other scientific forum upon request) before its completion. Objections raised during the disputation are considered at the discretion of the author. Minutes shall be kept of the presentation of the dissertation, of the disputation, of the conclusion of the referees and the scientific forum.
  - (10) The thesis shall be submitted in two bound copies, including the sample pages of the Appendix 7.
  - (11) DPHC invites two referees with doctoral degrees to evaluate the dissertation. At least one of the referees shall be an external expert. Due to conflicts of interest or professional reasons, referees may reject the assignment within 14 days. The referee has 2 months, excluding the months of July and August, to complete the evaluation of the dissertation.
  - (12) Doctoral candidates shall be notified about the appointed members of the Dissertation Committee. Except for conflict of interest or partiality, the doctoral candidate shall not object to the appointed members. In case of objection on part of the doctoral candidate, the DPHC shall decide upon changing the members of the Dissertation Committee.
  - (13) The evaluation shall detail the referees' opinion on the content, the format and the mistakes of the dissertation, with special focus on the acceptance of the theses. The evaluation can also contain questions to the author of the dissertation.
  - (14) The DSCES requests three copies of the referees' evaluation. The third page of the dissertation shall be filled in with the necessary data (name of the referees, their evaluation, and the dates). One copy of the referees' written report/evaluation shall be handed back to the author, who shall respond to the questions asked by the referees. The response of the author shall be submitted in 3 copies to the Doctoral Programme Administrator. The date and place of the doctoral defense shall be announced within 2 months of the receipt of the evaluation reports and other supporting documents.
  - (15) If both referees object to defend the thesis, the procedure to obtain a doctoral degree shall be terminated. In case only one of the referees objects to defend the thesis, then the DPHC is responsible to call upon another referee. The assessment/evaluation of the third referee shall finalise the decision.

- (16) The evaluations are to be handed to the author who shall prepare a written response before the defence. The response is sent to the referees by the Doctoral Programme Administrator.
- (17) The doctoral thesis shall be defended before a Dissertation Committee appointed by the DPHC in a public disputation. The Dissertation Committee shall consist of at least 5 members: the Chair, being a professionally qualified university professor or professor emeritus, the referees, and two additional members. It shall be ensured that two members of the Dissertation Committee are external experts who are not employed by the University. All members of the Dissertation Committee shall hold an academic degree. The supervisor, the consultant, and the co-author of any publications of the doctoral candidate shall not be members of the Dissertation Committee.
- (18) The public disputation shall be conducted after successfully passing the comprehensive/complex exam.
- (19) The doctoral candidate, members of the DPHC, along with all the relevant faculty, departments or institutes involved in the programme, shall be notified about the time and date of the public disputation. The notification shall contain that anyone wishing to comment may do so during the disputation, alternatively, can also reflect in writing beforehand.
- (20) The doctoral dissertation shall be made accessible to anyone.
- (21) Members of the Dissertation Committee shall be provided the opportunity to review the assessment of the dissertation and the responses given to the evaluation of the referees.
- (22) In case the dissertation was prepared in a foreign language, the defence can be held either in Hungarian or in a foreign language.
- (23) At the defence, the doctoral candidate shall summarise the main points of the dissertation/present the abstract of the thesis. The doctoral candidate shall respond to the questions and comments by the members of the Dissertation Committee and the audience. At the end of the defence, the referees and the audience declare whether they accept the candidate's responses.
- (24) After closing the disputation, the Dissertation Committee shall decide in a closed session, by secret voting (on a 0-4 level points grading) whether the defence was successful or not. The referees are also included in the voting. The doctoral thesis is considered successful/accepted if the candidate receives at least 60% of the maximum points.
- (25) Minutes shall be taken about the disputation and of the closed session that shall be signed by the members of the Dissertation Committee. The third page of the dissertation shall be signed at the same time (sample of the third page is included in Appendix 8.)
- (26) Following the closed session, the Chair shall publicly announce the outcome of the defence.
- (27) A failed defence cannot be repeated. The author may submit a new dissertation in a similar topic only after two years and in one occasion.
- (28) A certificate shall be issued about the evaluation of the defence.
- (29) Based on the minutes taken at the defence, DPHC prepares a proposal to the UDHC
- (30) A copy of the successfully defended doctoral dissertation along with the evaluations and the responses is to be kept in the Central Library of the University, the additional copy and further documents are to be saved at the administration unit for preservation.

*This document was accepted by the Council of the Doctoral School of Chemistry and Environmental Sciences on January 20, 2021, it is in effect until revoked.*

### Core Members of the Doctoral School of Chemistry and Environmental Sciences

<b>Dezső Boda</b>	DSc, dr. habil.	professor
<b>András Gelencsér</b>	DSc, dr. habil. Member of the Hungarian Scientific Academy	professor
<b>Ottó Horváth</b>	DSc, dr. habil.	professor
<b>József Kaizer</b>	DSc, dr. habil.	professor
<b>Gyula Kiss</b>	DSc	scientific advisor
<b>Tamás Kristóf</b>	PhD	associate professor
<b>András Liker</b>	DSc, dr. habil.	professor
<b>Judit Padisák</b>	DSc, dr. habil. Member of the Hungarian Scientific Academy	professor
<b>Mihály Pósfai</b>	DSc, dr. habil. Member of the Hungarian Scientific Academy	professor
<b>Rita Skodáné Földes</b>	DSc, dr. habil.	professor

### Emeritus Members of the Doctoral School of Chemistry and Environmental Sciences

<b>József Bakos</b>	DSc	professor emeritus
<b>András Dallos</b>	CSc	associate professor
<b>Péter Hajós</b>	PhD	associate professor
<b>Attila Horváth</b>	DSc	professor emeritus
<b>Ernő Mészáros</b>	Member of the Hungarian Scientific Academy	professor emeritus
<b>János Somlai</b>	PhD habil.	associate professor
<b>Gábor Speier</b>	DSc	professor emeritus

### Lecturers of the Doctoral School of Chemistry and Environmental Sciences

Dr József Bakos	DSc
Dr Szabolcs Balogh	PhD
Dr Gábor Bernát	PhD
Dr László Biczók	CSc
Dr Pál Boda	PhD
Dr Dezső Boda	DSc
Dr Veronika Bókony	PhD
Dr Gábor Borics	PhD
Dr László Bozó	academician
Dr Krisztina Buczkó	PhD
Dr András Dallos	CSc
Margit Eniszné Dr Bódogh	PhD
Dr Gergely Farkas	PhD
Dr Lajos Fodor	PhD
Dr László G. Tóth	DSc
Dr Ildikó Galambos	PhD
Dr András Gelencsér	academician
Dr András Gergely	PhD
Dr Péter Gurin	PhD
Dr János Győri	PhD
Dr Péter Hajós	PhD
Dr Zsuzsanna Hartyáni	CSc
Dr László Haszpra	DSc
Dr András Hoffer	PhD
Dr Krisztián Horváth	PhD
Dr Eszter Horváth	PhD
Dr Attila Horváth	DSc
Dr Ottó Horváth	DSc
Dr. Katalin Hubai	PhD
Dr Kornélia Imre	PhD
Dr József Kaizer	DSc
Dr Tamás Kégl	PhD
Dr György Keglevich	DSc
Dr Ferenc Kiss László	PhD
Dr Gyula Kiss	DSc
Dr Tamás Korim	DSc
Dr János Korponai	PhD

Dr Nóra Kováts	PhD
Dr Tamás Kristóf	PhD
Dr Éva Makó Kristófné	PhD
Dr Károly Lázár	DSc
Dr György Lendvay	DSc
Dr András Liker	DSc
Dr Gábor Maász	PhD
Dr Gergely Balázs Madas	PhD
Dr Aurél Marton	PhD
Dr Ernő Mészáros	academician
Dr János Mink	DSc
Dr Ágnes Molnár	PhD
Dr Szabolcs Nagy	PhD
Éva Nagyné Dr Hajnal	PhD
Dr Csaba Németh	PhD
Dr Zoltán Németh	PhD
Dr Péter Németh	PhD
Dr Judit Padiák	academician
Dr Tamás Pap	CSc
Dr József Sándor Pap	PhD
Dr Gábor Paulovits	PhD
Dr Zsolt Pirger	PhD
Dr Mihály Pósfai	academician
Dr Béla Raucsik	PhD
Dr Dénes Schmera	PhD
Dr Géza Balázs Selmeczy	PhD
Dr Gábor Seress	PhD
Rita Skodáné Dr Földes	DSc
Dr János Somlai	PhD
Dr Gábor Speier	DSc
Dr Csilla Stenger-Kovács	PhD
Erzsébet Szabóné Dr Bárdos	PhD
Dr István Szalai	DSc
Dr Gábor Szalontai	DSc
Dr Tamás Székely	CSc
Dr Erzsébet Takács	DSc
Dr Szilárd Törös	CSc

Dr András Kovács	CSc
Dr Tibor Kovács	PhD
Dr Edit Tóth-Bodrogi	PhD
Dr Róbert Tuba	PhD
Dr Zsolt Valicsek	PhD
Dr Mónika Valiskó	PhD
Dr Gábor Várbíró	PhD
Dr Szaboles Varga	PhD
Dr Zsolt Végvári	PhD
Dr Ferenc Vonderviszt	DSc
Dr László Wojnárovits	DSc

Dr Ádám Tóth	PhD

**Members of the Doctoral Programme and Habilitation Council of the Doctoral School of  
Chemistry and Environmental Sciences**

**Chair:**

Dr Ottó Horváth DSc, professor

**Members:**

Dr András Gelencsér DSc, professor, member of the Hungarian Academy of Sciences

Dr József Kaizer DSc, professor

Dr András Liker DSc, professor

Dr Judit Padisák DSc, professor, member of the Hungarian Academy of Sciences

Dr Mihály Pósfai DSc, professor, member of the Hungarian Academy of Sciences

Dr Skodáné Dr Földes DSc, professor

**External Members:**

Dr László Biczók DSc, scientific advisor

Dr László Bozó, DSc, professor, member of the Hungarian Academy of Sciences

Dr László G. Tóth DSc, professor

György Keglevich DSc, professor

PhD student representative

**Secretary:**

Dr Ágnes Rostási PhD

**Personal Data Sheet****(For lecturers/researchers of the DSCES)****Name:** \_\_\_\_\_**Date of birth:** \_\_\_\_\_**Academic degree and date of obtaining the academic degree:**  
\_\_\_\_\_**Discipline of the obtained degree:** \_\_\_\_\_**Type of employment with the University:**

- full time
- part-time
- contract based
- retired
- professor emeritus
- other: \_\_\_\_\_

**Position at the University:**

- professor
- associate professor
- scientific/research work
- other: \_\_\_\_\_

**Habilitant's denomination from the university:** \_\_\_\_\_**Date of habilitation:** \_\_\_\_\_**Active supervisor:** yes/no**Currently supervising the following student(s):**

Name	Semester

**Participating in the doctoral programme in form of (please choose one):**

Chair

core member

supervisor

lecturer

**Information regarding scientific work:**

(List the 10 most important publications of the last 5 years including bibliographic data)

**Specific data on scientific work (patents, inventions of the last 5 years).**

**Please include your Curriculum Vitae (max. 2 pages).**

## Research Topics of the DSCES

Research topic: <div style="text-align: center;">[Title]</div>		Supervisor: [Name] [position] [Scientific degree]
Discipline:	Main research area:	Research site:
Details of the research topic:		
Precedents of the research topic:		
Additional information:		
Signature of the supervisor:	Head of the research facility:	
Decision of the DPHC of the DSCES on the research topic: <div style="text-align: center;">[accepted / not accepted].</div>		Signature of the Director of the Doctoral School:

**List of subjects of the comprehensive/complex exam  
of the DSCES**

Subject name	Lecturer	Credit
Nuclear energetics	Edit Tóth-Bodrogi	4
Bioanalytical methods	Péter Hajós	4
Biochemistry II.	Rita Skodáné Dr. Földes	8
Chemistry of biocoordination	József Kaizer	8
Theoretical organic chemistry	Gábor Speier	8
Separation methods in analytical chemistry	Péter Hajós	8
Metalloorganic chemistry	József Kaizer	8
Physical chemistry I.	Dezső Boda	8
Physical chemistry II.	Dezső Boda	8
Statistical thermodynamics of fluids	István Szalai	8
Computer simulation of liquids	Tamás Kristóf	8
Hydrobiology	Judit Padisák	8
Hydrogeology	Ádám Tóth	4
Interpretive spectroscopy I.	Rita Skodáné Dr. Földes	8
Interpretive spectroscopy II.	Rita Skodáné Dr. Földes	8
Experimental photochemistry steady state methods	Ottó Horváth	8
Time resolved methods	Lajos Fodor	8
Coordination chemistry	Lajos Fodor	4
Environmental mineralogy	Mihály Pósfai	8
Environmental photochemistry	Ottó Horváth	8
Environmental chemistry	Ottó Horváth	8
Research report (1.year) I.		20
Research report (2.year) II.		20
Research report (3.year) III.		20
Quantum chemistry I.	György Lendvay	4
Quantum chemistry II.	György Lendvay	4
Atmospheric science	Ágnes Molnár	8
Atmospheric chemistry	András Gelencsér	8
Limnology	Judit Padisák	8
Nuclear and particle physics	Péter Gurin	8
Nuclear metrology	Tibor Kovács	4
Ecology	Judit Padisák	8
Polimer chemistry	József Kaizer	8
Radioisotope applications	Tibor Kovács	4
Radioecology	Edit Tóth-Bodrogi	6
Vibrational and electronic spectroscopy	Zsolt Valicssek	8
Stereochemistry of Organic Compounds	Gergely Farkas	8
Inorganic photochemistry	Lajos Fodor	8
Natural and artificial radiations	Edit Tóth-Bodrogi	4

Toxicology	Nóra Kováts	8
Transmission electron microscopy	Mihály Pósfai	6
Transition metals and their compounds	Zsolt Valicsek	8
Biogeochemical cycles	Ottó Horváth	8
Theoretical inorganic chemistry	Margit Kovács	8
Behavioral ecology	András Liker	6
Final report I.		20

## Formal requirements for doctoral theses and abstract booklets

The **doctoral thesis** shall be submitted in 2 identical, bound copies and in electric form as well. One of the bound copies is the property of the University Central Library, one copy is the property of the educational unit or the supervisor. If the candidate requires an own bound copy, she/he must provide it with an additional bound copy.

The front cover shall contain the following: DOCTORAL (PhD) DISSERTATION, name of the author, place and year of submission. On the inside of the back cover, it is recommended to place a suitable paper case to place the reviews of the referees and the answers in it.

The first page of thesis is blank, followed by the second page, which is the title page. This page shall display (apart from the previously mentioned data) the title of thesis, the supervisor's name, and the name of the Doctoral School of the University of Pannonia.

The template of the 3<sup>rd</sup> page of the dissertation is included in Annex 8 of the rules and regulations. The content of the 3<sup>rd</sup> page is not allowed to change. The known information shall be filled in by the author; the rest shall be left blank.

### Components of the thesis:

- table of contents,
- abstract with the translation of the title (in Hungarian, English and another world language), a summary of the literature of the research field, with a critical remarks,
- research part (detailed description of the materials used and methods applied), the research results and their evaluation, (with special attention to the knowledge gained through the research to express the development and improvement in the given scientific field),
- detailed summary (longer and more detailed than the extract),
- bibliography/reference list including all sources cited in the work (shall be displayed in a way that the cited documents can be identified with complete certainty),
- numbered results of the hypothesis of the thesis in Hungarian and English.

The maximum length of the thesis is 250,000 characters, including tables and diagrams as well. The details of extensive series of measurements are not necessary to be included, unless the author insists, they can be added to the appendix. It falls into the jurisdiction of the UDHC to grant an exemption from length constraint.

The **abstract booklet** shall provide a brief summary of the preliminary research work, the aims, the applied research / experimental methods and the findings of an independent scientific work (thesis conclusions) in a numbered format. The booklet shall contain a list of the author's publications with bibliographic data regarding the topic of the dissertation.

The abstract booklet shall be submitted in Hungarian and in English, bound together or separately - in a number of copies depending on the number of people to be invited - and in an electronically version as well (in a separate files). Usually, 30 copies of the printed form are sufficient.

### **Aspects of the abstract at the end of the thesis in Hungarian language:**

- in terms of structure, it shall stand as an "independent work" with a clear line of thought and following a simple style,
- the paragraphs shall be logically connected, but topically separated from each other,
- the use of terminology shall be uniformed/standardized and clear,
- the use of first person singular shall be avoided, instead "the author ...", "the dissertation ..." is advised to be used,
- its length shall not exceed 2,500 characters,
- it shall contain a clearly and briefly prepared summary of the aims and objects of the research, experimentation and work that contributed to the writing of the dissertation. It should also entail the description of the applied method(s), procedure(s) - if the method/procedure is new or modified, then only the nature and the quality of the novelty shall be outlined - including the achieved specific results and the realised or possible applications.

Based on the content of the thesis, the author shall contemplate the weight, the inclusion or exclusion of the above mentioned aspects in the abstract.

### **The abstract shall exclude:**

- an introduction, a detailed explanation of the choice of topic, known statements...etc.
- a thematic presentation of each chapter of the thesis,
- figures or chemical formulas.

### **Aspects of the English or other foreign language abstracts:**

- its content shall not exceed 8-10 lines,
- the aspects of the content are the same as above, but it is advised to focus on the method applied, the obtained result and their application.

In compiling these abstracts, special attention shall be paid to the correct use of language and grammar, in particular to the terminology in English and German.

[PhD THESIS TITLE]

Thesis for obtaining a PhD degree in the Doktoral School of [NAME OF SCHOOL] of the  
University of Pannonia

in the branch of [NAME] Sciences

Written by [NAME OF PhD-CANDIDATE]

Supervisor(s): [NAME(S)]

propose acceptance (yes / no)

.....  
[SIGNATURE(S) OF SUPERVISOR(S)]  
(supervisor/s)

The PhD-candidate has achieved ..... % in the comprehensive exam,  
Veszprém, [DATE]

.....  
[SIGNATURE OF THE CHAIRMAN OF THE EXAMINATION COMMITTEE]  
(Chairman of the Examination Committee)

As reviewer, I propose acceptance of the thesis:

Name of Reviewer: ..... yes / no

.....  
[REVIWER'S SIGNATURE]  
(reviewer)

Name of Reviewer: ..... yes / no

.....  
[REVIWER'S SIGNATURE]  
(reviewer)

The PhD-candidate has achieved .....% at the public discussion.

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[SIGNATURE OF THE CHAIRMAN OF THE COMMITTEE]  
(Chairman of the Committee)

The grade of the PhD Diploma ..... (..... %)

Veszprém, [DATE]

.....  
[SIGNATURE OF THE CHAIRMAN OF UDHC]  
(Chairman of UDHC)

[PhD THESIS TITLE]

Thesis for obtaining a PhD degree in the Doctoral School of [NAME OF SCHOOL] of the  
University of Pannonia

in the branch of [NAME] Sciences

Written by [NAME OF PhD-CANDIDATE]

Supervisor(s): [NAME(S)]

propose acceptance (yes / no)

.....  
[SIGNATURE(S) OF SUPERVISOR(S)]  
(supervisor/s)

As reviewer, I propose acceptance of the thesis:

Name of Reviewer: ..... yes / no

.....  
[REVIWER'S SIGNATURE]  
(reviewer)

Name of Reviewer: ..... yes / no

.....  
[REVIWER'S SIGNATURE]  
(reviewer)

The PhD-candidate has achieved .....% at the public discussion.

Veszprém, [DATE]

.....  
[SIGNATURE OF THE CHAIRMAN OF THE COMMITTEE]  
(Chairman of the Committee)

The grade of the PhD Diploma ..... (%)

Veszprém, [DATE]

.....  
[SIGNATURE OF THE CHAIRMAN OF UDHC]  
(Chairman of UDHC)

	UNIVERSITY OF PANNONIA Doctoral School of Chemistry and Environmental Sciences	<b>NAME</b>		
<b>Study plan</b>				
<b>Subject name</b>	<b>Teacher</b>	<b>Credit</b>	<b>Schedule (semester)</b>	
<b><u>Obligatory subjects</u></b>				
<b><u>Specialization subjects</u></b>				
Name of the specialization:				
<b><u>Optional subjects</u></b>				
<b>Total: .... Credits</b>				



These rules and regulations have been approved by the Council of the Doctoral School of Chemistry and Environmental Sciences on January 01, 2021.