#### **QUALITY ASSURANCE PLAN**

Doctoral School of Chemistry (KDI), University of Szeged
December 15, 2022

The Quality Assurance Plan of the Doctoral School of Chemistry at the University of Szeged is based on the "University of Szeged Regulations Governing the Doctoral Training Programs and the Awarding of the Doctoral Degree", "University of Szeged Quality Assurance Guidelines for Doctoral Training and the Awarding of the Doctoral Degree", Quality Assurance Guideline by the Hungarian Doctoral Council, and the "Rules of Operation of the Doctoral Council of Natural and Engineering Sciences (TMTDT) at the University of Szeged" along with the Rules of Operation of the KDI.

### 1. The management and the organization of the doctoral school

The Council of the Doctoral School (DIT) reviews its operating regulations, training regulations, and quality assurance plan every two years. The annual quality assurance report is presented by the Head of the School at the council meeting, with one PhD student delegate with the right of consultation, and the DIT reviews it. The Secretary's duty is to store the annual quality assurance report and to ensure its public access. The Quality Assurance Officer is the Deputy Head of the Doctoral School.

The documents in Hungarian and in English are downloadable from www.doktori.hu (https://doktori.hu/index.php?menuid=191&lang=EN&di\_ID=150) and from the webpage of the KDI (https://www2.sci.u-szeged.hu/chem/phd\_chem/indexe.html).

## 2. Instructors, announcers and supervisors of the doctoral school

#### • Instructors:

The teaching staff of the doctoral school consists of instructors and researchers with academic degrees only, who are approved by the DIT. The instructors of the doctoral school are registered in the database of the Hungarian Doctoral Council (ODT) and they declare on their ODT webpage the percentages of the work share in the doctoral schools if they also participate in other doctoral schools. The current training plan of the doctoral school, along with the courses and their instructors are accessible at the webpage of the doctoral school and at the webpage of www.doktori.hu. The list of offered courses with the instructors is approved by the Council of the Doctoral School each semester. The courses are recorded in the Neptun system by the Secretary of the doctoral school. The examiner of any course can only be the instructor registered for the course in the Neptun system.

The work of the instructors is rated online by the students anonymously in the Neptun system. The student evaluations become accessible to the students and staff with valid Neptun ID based upon the approval of the instructors.

### • Announcers of research topics and Supervisors:

Instructors and researchers with academic degrees, who are approved by the DIT, can announce research topics. The approved internal and external announcers should exhibit adequate research activity: their scientific indicators in the preceding five years of announcing the research topic have to exceed at least twice those of the publication requirements to awarding the doctoral degree, they should have at least one publication per year where they are first/corresponding authors, and they have

sufficient financial funds to support research. If the supervisorship is shared, the two supervisors together have to fulfill these requirements.

The announcer of a research topic becomes supervisor when his/her student is admitted and enrolls to the doctoral school.

The guarantees of quality of the instructors, announcers, and supervisors related to the doctoral school:

- academic degree (PhD, CSc, DSc)
- research activity reaching international standards
- successful funding applications
- experience in university education

The DIT reviews the composition of its core members, announcers, supervisors every two years along with considering the OMHV (student feedback to teacher work) evaluations and the PhD defenses. It also gives recommendations to recruit new members or terminate the position of old members. The new members, independent of their affiliations, can apply to become instructors or announcers by submitting the required documents (CV, course description, or research topics and existing research funds) either to the head of the programs or to the leaders of the doctoral school. The new applications are reviewed within two months. The DIT decides on the support of the applications and forwards it for approval to the TMTDT (Doctoral Council of Natural and Technical Sciences).

The personnel of the Doctoral School of Chemistry at the University of Szeged guarantees the high quality and diversity of the doctoral education.

### 3. Announcing doctoral research topics (scientific requirements)

The DIT evaluates every research topic each year, and approves only those which have the required scientific and financial background besides the necessary infrastructure and from which a high quality PhD dissertation fulfilling the publication requirements can be submitted within 4-5 years.

# 4. Quality assurance requirements during the doctoral admission procedure

The admission procedure is reviewed every year by the Admission Committee with suggestions of possible changes. The proposed modifications are approved by the DIT.

The scientific entrance exam is related to the selected program of the applicant where the topics are fixed beforehand and published at the website of the school. The entrance examination is oral, preferably in person. The evaluation of the exam is based on the Entrance Exam Regulation approved by the DIT. The scoring and the topics are reviewed every year, when the Admission Committee is approved by the DIT. The evaluation system with the exam topics is downloadable from the webpage of the Doctoral School:

https://www2.sci.u-szeged.hu/chem/phd\_chem/KDIfiles/KDI\_entrance\_exam\_points.pdf

The outcome of the admission procedure evaluation is included in the annual quality assurance report along with suggested modifications, if any.

# 5. Quality assurance requirements during the doctoral training

The doctoral training/research programs of the KDI are responsible for teaching 5-10 courses on average. New courses are accepted and approved by the DIT, which can also request the renewal of course contents. The course topics have to be reviewed at least every two years.

The credit system ensures equality and provides transparent and predictable requirements. The students participating in the 4-year training program have to collect 240 credits described in the Training Program of the KDI to obtain absolutorium.

The task of the supervisors is to ensure the physical and electronic access to the required research materials. The supervisors' responsibility is to encourage their students to publish their results in the highest quality scientific journals or other publication forms. The PhD students have to upload their publications into university repositories and record their bibliographic data in the MTMT (Hungarian Scientific Bibliography), which are checked by their supervisors before the submission of the doctoral dissertations.

The doctoral school requires that their students give oral presentations at departmental seminars or other scientific meetings (working committee meetings of the Hungarian Academy of Sciences, Hungarian conferences, etc.). The KDI recommends that the doctoral students present their results at international conferences, which are acknowledged by credits given in the Training Regulations of the school. The KDI also recommends that the students during their doctoral training try to visit universities/institutes where research related to their work is carried out.

The doctoral students are required to submit a written progress report to the Head of the KDI every semester. The reports, approved by the supervisors, contain the summary of the academic and scientific achievements (including publications, conference and seminar presentations related to the doctoral work). The DIT evaluates the students' performance and progress, which are summarized once a year by the Head of KDI, based on the written reports.

The procedure of the students' complaints and appeals based on the university doctoral regulations is the following: The students can submit a complaint in writing or in e-mail to any Head of Programs of the KDI or to the leaders of KDI. The complaints are investigated within a month by an independent committee assigned by the Council of KDI, the members of which are at least two core members of the school and one doctoral student. The committee informs the Council of the KDI in the nearest KDI meeting and gives suggestions for possible steps to be taken. The recommendation has to be approved by the Council of the KDI. The protocol for an appeal against the decision: first appeal to TMTDT, then EDT (Doctoral Council of the University), and at the highest level, to the Rector of the University.

The students admitted after year 2016/17 take a comprehensive (complex) exam two years after their admission according to the *Regulations Governing the Doctoral Training Programs and the Awarding of the Doctoral Degree*. The exam is precisely detailed and regulated in Chapter 5 of the *Regulations Governing the Doctoral Training Programs and the Awarding of the Doctoral Degree*. The students' eligibility for the examination is checked by the Secretary of the School using the Neptun system before the exam. The topics of the exam and the committee members of the complex examinations are recommended by the Head of the Program, based on a previous consultation with the supervisors, and approved by the DIT. The Head of the School forwards the recommendations to the TMTDT for approval. The work of the committees is helped by the supervisor statements sent to the Head of the KDI. The topics of the complex exam are reviewed yearly. The protocol of the complex exam is

based on the protocol approved by the TMTDT and the exam reports received from the TMTDT.

The KDI prepares a self-assessment every five years which is made public in the database of www.doktori.hu. The assessment contains the statistical data of the doctoral training (number of students, average time to obtain the PhD degree, the ratio of the number of students obtaining a PhD degree to that of entering the doctoral program, etc.).

# 6. Quality assurance requirements in awarding the doctoral degree

The publication and foreign language requirements that constitute a prerequisite for submitting the doctoral dissertation are checked by the Head of the KDI based on the requirements set by the Council of the KDI and reviewed every five years.

The publication list related to the doctoral dissertation must contain publications which are included in maximum of one other doctoral dissertation. The fulfillment of this condition is the responsibility of the supervisor, which is confirmed in writing by the supervisor upon submission of the dissertation.

Before submitting the dissertation, the doctoral students have to present their work to an expert audience (workplace, or Hungarian Academy of Sciences Committee, Working Committee, etc.). The audience has to approve the thesis points and has to give a written supportive opinion that the work is suitable for a doctoral dissertation. Another condition to submit the doctoral dissertation is the written supportive statement of the DIT, based on the opinion of the Head of the Program, after considering the result of the similarity screening provided by the University of Szeged.

The objective evaluation criteria for the procedure and requirements of the public defense are stated in the Rules of Operation of TMTDT and the written protocol of the public defense.