Óbuda University Doctoral School on Materials Science and Technology Performance Evaluation Annual Report September 1, 2024 – August 31, 2025

Contents

1. Review and evaluation of the achievement of the previous year's quality objectives, based on the results of which new quality objectives are set

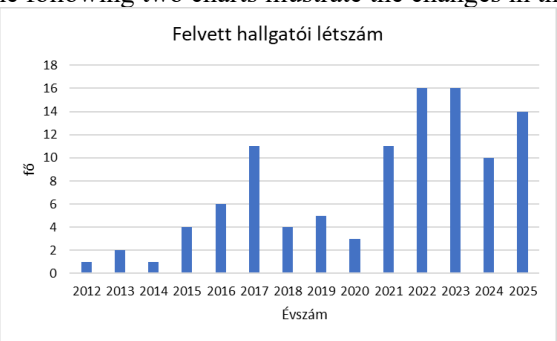
The evaluation of the quality targets set for the 2023–24 academic year can be found in the attached document[1].

2. Analysis of the number of doctoral students

From the launch of the DI until the end of the 2024–25 academic year, the aggregate student data are as follows:

Total applicants		112
Admitted students		104
Enrolled		103
of which	full-time	47
	correspondence	15
	SH	27
	individual	14
of which	Graduated	30
	Graduated	10
	Currently enrolled	21
	In the dissertation phase	29
	Transferred to another DI	1
	Dismissed	12
Number of comprehensive exams		67

The following two charts illustrate the changes in the number of DI students.



Since the DI's inception—following slight fluctuations—the number of applicants appears to have stabilized at around 10–16 students per year.
To date, we have dismissed 12 students for academic reasons without awarding a degree, and one student has transferred to another doctoral school. The dismissal rate for academic reasons is 11.6%.
Over the past 13 years, a total of 67 comprehensive exams have been administered, with an average of 1.9 years elapsing between admission and the comprehensive exam. For seven students, the time between admission and the comprehensive exam exceeded two years due to the use of a passive semester.
During the reporting period, the following 14 new students (8 full-time, 2 part-time, 2 correspondence, 2 individual) were admitted. With the exception of part-time student Shahid Nazir, all of the admitted students

[1] 1 ATDI Quality Objectives_Indicators 2023_24 academic year.pdf

enrolled for the first semester of the 2025/26 academic year. Péter Gerse was also admitted during the June 2025 admission period and will begin his doctoral studies concurrently with his MSc program.

Liza Lutter	Full-time
György Káli	Individual
Péter Gerse	Daytime
Emese Kozák	Day
Kristóf Havasréti	Daytime
Dániel Medgyesi	Daytime
György Pócsik	Daytime
Fruzsina Tichov	Daytime
Boglárka Almássy	Part-time
Lajos Berzy	Full-time
Teodóra Heim	Part-time
Ildikó Szenthe	Individual
Azalia Fajri Yasin	Full-time, SH
Shahid Nazir	Full-time, SH

3. Doctoral students taking the comprehensive exam, applying for an absolutorium, in the process of obtaining a degree, or who have obtained a degree in the current year, results (factual), dropouts

During this period, 15 of our students took the comprehensive exam, all of whom passed:

Zsuzsa Olesnyovicsné Szabadi	Correspondence
László József Mónus	Full-time
Zsombor Szomor	Full-time
Viktor Vass	Day
János Márk Bozorádi	Daytime
Béla Bődi	Daytime
Ferenc Hareancz	Correspondence
Ádám Inger	Full-time
Gergely Juhász	Part-time
János Kuti	Full-time
Attila Széll	Full-time
Minhalina Binti Ahmad Buhairi	Daytime, SH
Sara Ines Moussaoui	Day, SH
Wasan Abdullah Alkaron	Day, SH
György Káli	Individual

Students requesting an absolutorium

Ismaeel Noor Taha	Full-time, SH
Tamás Zeffer	Full-time
Mariam Shbanah	Day, SH
Taha Zoubeida	Day, SH
Zereay Nugusse Berhane	Day student, SH
Lilia Bató	Day

Ferenc Oláh	Day
Fruzsina Fülöp	Day

The following five students are in the process of earning their degrees:

Ramiro Sebastian Vargas Cruz	Full-time, SH
Fruzsina Fülöp	Full-time
Taha Zoubeida	Day student, SH
Lilia Bató	Day
Ferenc Oláh	Day

The following students earned degrees during the reporting period:

Anikó Bezsenyi	Correspondence	Summa cum laude
Anita Bányai	Full-time	Summa cum laude
Abdul Whab Mgherony	Full-time, SH	Summa cum laude
József Nádas	Individual	Summa cum laude
Attila Zsolt Kenéz	Correspondence	Cum laude
Levente Széles	Full-time	Summa cum laude
Ismaeel Noor Taha	Full-time, SH	Summa cum laude

The dissertations and thesis booklets of students who have earned their degrees, as well as the members of the review committee, can be found at https://atdi.uni-obuda.hu/doktori-vedesek/.

We dismissed 3 students without a degree for academic reasons:

Gábor Ladányi	individual	due to expiration of the degree completion deadline
Tibor Czene	individual	due to expiration of the deadline for degree conferral
Szabolcs Czene	Full-time	Dismissed without a certificate of completion due to lack of publication credits

4. Change of advisor/involvement of co-advisor, changes to the topic

During the reporting period, the DIT accepted the following individuals as new supervisors based on their professional and publication activities:

- Éva Széles, Senior Research Fellow, HUN REN EK
- Márton Király, Research Associate, HUN REN EK
- Mátyás Dabóczi, Senior Research Fellow, HUN REN EK
- Zsolt Ferenc Kovács, Associate Professor, János Neumann University
- Zsófia Enikő MÁRKUSNÉ BEBESI, Senior Research Fellow, HUN-REN Wigner Physics Research Center
- Attila KASZÁS, Senior Research Fellow, Head of the Multimodal Neurotechnology Research Group at the Institute of Cognitive Neuroscience and Psychology, HUN-REN Research Center for Natural Sciences
- Ferenc Gillemot, Scientific Advisor, HUN-REN EK

- János Kónya, Managing Director of Dent-Art-Technik Kft., Regional Director and Co-Chair of the Hungarian Medical Manufacturers and Service Providers Cluster (MediKlaszter), and President of the Hungarian Additive Technology Association (MATESZ)

All of the new thesis advisors meet the relevant regulations and requirements. There were two instances of a change in thesis advisor or research topic for the following students:

Zsuzsa Olesnyovicsné Szabadi	Original supervisor: Judit Pázmán, Associate Professor (DUE)
	New supervisors: Mihály Réger, Professor (ÓE), and Richárd Horváth, Associate Professor (ÓE)
Reason:	It became necessary to assign a new research topic due to the failure to deliver the experimental materials promised in connection with the Paks II project
The new topic:	Possibilities for the simultaneous heat treatment of maraging steels

Seif Eddine HABBACHI	Original supervisor: Zoltán Hózer, Scientific Advisor HUN REN EK
	New supervisor: Márton Király, Research Associate, HUN REN EK
Justification	Zoltán Hózer's work commitments

5. Habilitation procedures and their effectiveness

Ferenc Safranyik successfully completed his habilitation procedure at the doctoral school. The habilitation thesis and the list of committee members can be found at https://atdi.uni-obuda.hu/habilitacio/.

6. Results of doctoral student needs and satisfaction surveys, e.g., questionnaire surveys, workshops, roundtable discussions, individual interviews, and feedback

Opinions of students enrolled in the program (see Appendix 1)

We conducted a questionnaire-based needs and satisfaction survey in February 2025, midway through the reporting period. The questionnaire was distributed to 45 students; the number of responses was 24, with a response rate of 53%. The questionnaire included a total of 24 numerical and 4 open-ended response options.

The topics covered were:

1. the general functioning of the doctoral school
2. teaching, teachers
3. research, supervision
4. other comments

The results of the questionnaire survey can be summarized as follows.

On a scale of 1 to 5, students' numerical responses averaged between 4.4 and 5 for all questions.

For question 1.a.4, "adequacy of the academic administration," one student (number 19) gave a rating of 1. This student is a full-time student and is about to take a comprehensive exam. The same student writes the following regarding question 1.b:
"The only downside is the administrative tasks. It is shameful that the Neptun system is unusable in a doctoral program. Course registration is also problematic, as the course registration form is ambiguous (to the administrator)." The average score of the student's numerical responses is 4.25.

Regarding question 1.a.10, "Overall usefulness of the time spent in doctoral training," one student (No. 7) rated it as satisfactory; this student is facing a complex SH exam. They did not elaborate on their opinion in the text responses; the average of their numerical responses is 3.7.

Although no one mentioned it in the oral evaluation, five students rated question 1.a.2 "organization and evaluation of the comprehensive exam" as average.

Four students gave a "moderate" rating to question 3.a.5, "feasibility of my research goals within the doctoral program."

Questions 1.a.1 "Overall quality of the doctoral training" and
1.a.3 "library infrastructure and online services," three students each rated them as average.

For the other numerical questions, there are at most two average ratings; the rest are good or excellent.

With the exception of two students (students 7 and 19), the average score for individual students falls between 4 and 5.

7. Analysis of HR data (core faculty, thesis advisors, thesis supervisors, course coordinators, instructors), changes (hires and departures), new core faculty/instructors, succession planning

During the reporting period, 11 core faculty members oversaw the doctoral program; of these, 2 are external members of the Hungarian Academy of Sciences (MTA), 5 hold a DSc, and 4 hold a PhD. Among the core faculty, 9 are appointed university professors and 2 are academic advisors. The average age of the core faculty members who are not professors emeritus (10 individuals) is 60; the youngest is 52, and the oldest is 67. The eligibility of the core faculty members has been verified in accordance with the relevant regulations. During the reporting period, one core faculty member will continue their work only on the Doctoral School Council due to age requirements, and their status as a core faculty member will be terminated.

According to the EDHSZ, a supervisor may not have more than six doctoral students at any one time. There are currently 60 students in the DI who have completed their coursework or are in the coursework or dissertation phase. A total of 42 faculty members supervise these 60 students, distributed as follows. Of the five students supervised by a particular faculty member, one student has already graduated.

Faculty member, number	Students under supervision, number
1	5
3	3
4	2.5
5	2
6	1.5
11	1
12	0.5

More than half of the 120 colleagues involved in doctoral training—52 individuals—have had or currently have a doctoral student under their supervision at ATDI. Active supervisors at DI have supervised a total of nearly 200 doctoral students nationwide to date, of whom 107 have already successfully earned their degrees. It follows that, on average, supervisors have already guided at least two doctoral students through the process of obtaining their doctoral degrees, meaning that DI supervisors undoubtedly possess significant experience in this field.

During the reporting period, 8 new supervisors joined the DI's work (see point 4).

In total, 54 of our staff members also teach courses at the DI. There are currently 107 courses available. We consider the relatively large number of available courses to be important due to the diverse nature of the research topics.

8. Statistical analysis and evaluation of faculty MTMT results

The verification, aggregation, and evaluation of faculty MTMT data are conducted annually at the university level.

9. Student Publication Records Based on MTMT

At the end of each semester, students summarize their publication results recorded in MTMT as part of their student report or comprehensive exam. A panel of judges composed of DIT members verifies the authenticity and compliance or non-compliance of this data.

10. Verification of ODT interface updates for DI core members/instructors/advisors

Verification of DI core members is performed regularly; the current status is presented in the table below.

			Thesis topic,	Graduates	Publication	Publication	In ATDI	In ATDI
		agreement	leadership	PhD student	past 5 years	entire career	at least 70%	accredited
1	Csaba Balázsi	ELKH EK	reasons	ok	ok	ok	ok	ok
2	Enikő Bitay		ok	ok	ok	ok	ok	ok
3	János Dusza	Prof. Emeritus	ok	ok	ok	OK	ok	ok
4	Imre Felde		ok	ok	ok	ok	ok	ok
5	Zoltán Hózer	ELKH EK	ok	ok	ok	ok	ok	ok
6	Péter Kádár		ok	ok	ok	ok	ok	ok
7	Mária Marosné Berkes		ok	ok	ok	ok	ok	ok
8	Ákos Nemcsics		ok	ok	ok	ok	ok	ok
9	Ervin Rácz		ok	ok	ok	ok	ok	ok
10	Mihály Réger		ok	ok	ok	ok	ok	ok
11	Endre Ruszinkó		ok	ok	ok	ok	ok	ok

The ODT interface for faculty and advisors is reviewed annually. At the end of the reporting period (August 2025), this review could not be conducted on the updated ODT interface; therefore, the review will take place after the website has been updated.

11. If available, results of needs and satisfaction assessments, e.g., questionnaire surveys, workshops, roundtable discussions, individual interviews, and feedback

The employee opinion and satisfaction survey was conducted between February 2 and February 30, 2025 (see Appendix 2)
The questionnaire was distributed to 37 internal instructors and supervisors; the number of responses was 20, with a response rate of 54%
The questionnaire included a total of 16 six-point numerical rating scales and 3 open-ended response options.

Findings

The average staff evaluation for questions 1–9 and 13–16—that is, for more than 75% of the questions—falls between 5 and 6. For three questions, the average response is below 5.

The lowest average score (4.32) was recorded for question 11, which pertains to research infrastructure. On a 6-point scale, the question regarding the reliability of the OHV system (Question 10) received a rating of 4.5; one of our “instructor, researcher; thesis writer, thesis advisor” staff members (No. 4) rated this as unsatisfactory. The average score for question 12, “How do you assess the research ambition of DI students?”, is also below 5.

The minimum score for responses to individual questions is generally 4 or higher, with the exception of the aforementioned questions 10 and 11, as well as question 5 (How do you generally assess the range and professional usefulness of the courses offered by the doctoral school?)

The average of the respondents’ ratings for all questions falls between 4.5 and 6. Eight of our staff members gave an average rating below 5 (1, 2, 4, 5, 9, 14, 15, 20), which corresponds to 40%. The lowest average score was 4.7 (respondent 5).

Among the positive feedback provided in the text responses, the comments regarding the mid-term student reports are particularly noteworthy; our staff members praise this form of assessment and evaluation.

Colleagues identified the DI's research infrastructure, the information content of the website, conference support for students, and the flow of information as areas for improvement.

12. Partnerships (domestic, international): with whom and in what areas did the DI collaborate, are there any new partnerships, etc.

Over the past year, the cooperation agreements signed with HUN REN research institutes were renewed; these can also be viewed on the doktori.hu website: https://doktori.hu/doktori-kepzes/doktori-iskolak/194-anyagtudomanyok-es-technologiak-doktori-iskola
We currently collaborate with the following partners in the areas of education, training, and research, as well as in the qualification procedures related to obtaining a PhD degree. Our relationship with the institutions marked in bold is also formalized by a cooperation agreement.

	Partner	Nature	Subject
1	**ELKH Energy Research Center**	research organization, contractual partner	in all areas
2	**ELKH Wigner Research Center for Physics**	research organization, contractual partner	in all fields
3	**ELKH Research Center for Natural Sciences**	research organization, contractual partner	in all fields
4	**János Neumann University**	partner institution, contractual partner	teaching, examination committee, research
5	**University of Dunaújváros**	partner institution, contractual partner	teaching, examination committee, research
6	Széchenyi University	partner institution	teaching, examination board, research
7	Lorraine University, Metz, France	partner institution	teaching, examination board, research
8	University of Miskolc	partner institution	teaching, examination board, research
9	MVM Paks Nuclear Power Plant Ltd.	industrial organization	examination board
10	University of Szeged	partner institution	examination committee
11	Eötvös Loránd University	partner institution	educational, examination committee,
12	Budapest University of Technology and Economics	partner institution	teaching, examination committee, research
13	Femtonics Ltd.	partner institution	examination committee
14	Dentarttechnik	industrial organization	research
15	Slovak Academy of Sciences	research organization	educational, examination board, research, expert, advisory, project
16	**Bay Zoltán Applied Research Public Benefit Nonprofit Ltd.**	research organization	examination board, education, research
17	National Center for Public Health	partner institution	examination committee
18	University of Debrecen, Faculty of Medicine	partner institution	examination committee
19	INNOVATEXT Textile Industry Technical Development and Testing Institute Ltd.	industrial partner	educational, examination board
20	Hungarian University of Agriculture and Life Sciences	partner institution	examination board
21	University of Sopron	partner institution	educational, examination committee
22	Inno-Water Ltd.	industrial partner	educational, examination board, research

23	77 Elektronika Kft.	industrial partner	educational, research, expert,
24	MTA Scientific Committee on Materials Science and Technology	MTA organization	examination committee, advisory

During the reporting period, we prepared a cooperation agreement with a new partner, Eszterházy Károly Catholic University, under which the EKKE may accept doctoral students participating in its program for the entire duration of the Doctoral School's program or for a partial period, following prior consultation. EKKE will provide these doctoral students with a research space and access to its infrastructure. The cooperation agreement has been finalized, and university approval and signature are expected in October 2025.

13. Results of needs and satisfaction surveys regarding partnerships (domestic, international), e.g., questionnaire surveys, workshops, roundtable discussions, individual interviews, and feedback

One of ATDI's most important collaborative partners is the HUN-REN EK Institute of Technical Physics and Materials Science. The institute's Scientific Council discussed the focal points of the institute's activities at a public meeting on February 10, 2025. The head of the doctoral school also participated in the meeting and, at the request of the MFA Scientific Council, evaluated the activities of the Thin Film Physics Laboratory. The meeting was attended by the heads of the MFA's seven institutes, as well as the president and strategic director of HUN-REN. During the meeting, we discussed current issues regarding the collaboration between HUN REN and the doctoral school, which included not only the European Commission but also the expansion of existing collaborations with the Wigner Research Institute and the Research Institute for Natural Sciences. Following the meeting, consultations took place with the heads of the Nanosensors Laboratory, the Thin Film Physics Laboratory, the Photonics Laboratory, and the Microsystems Laboratory. During the workshop, several participants emphasized the importance of the relationship established with the doctoral school, as well as the mutual benefits inherent in it.

A survey to gauge the opinions and satisfaction of external partners was conducted between February 2 and February 30, 2025; the results are included in Appendix 3.

The questionnaire was sent to 47 external partners, external instructors, and thesis advisors; the number of responses was 15, with a response rate of 37%.
The questionnaire included a total of 17 six-point numerical rating scales and 2 open-ended response options.

Question A in the introduction concerned the type of the respondent's workplace, while Question B concerned the role undertaken in the doctoral school (currently and in the recent past).

Findings

The number of responses to the external partner evaluation and the response rate are relatively low, which also suggests that while external partners participate in the DI's work, they are reluctant to perform additional administrative tasks. In our view, the questionnaire survey should therefore be used only rarely—also to maintain good relations.

The average scores for the numerical questions range between 4 and 6; no strikingly low values can be identified. The lowest average score was recorded for the question "How satisfied are you with the theoretical preparedness of the DI student(s)?", but even this score is above 4.

The highest average (5.53) was achieved by question 16: "How do you assess the role, efficiency, and effectiveness of the doctoral school administration in the organization and implementation of doctoral training?"

Respondent 12, who has the status of "educational institution, instructor; committee member, opponent (workplace discussion, public defense, comprehensive exam)," rated questions 2 and 3 as unsatisfactory. This colleague views the work of the ÓE DI quite negatively, as evidenced by the following two text responses:

> *For those who realize while working that they want a PhD, it's convenient because the minimum requirements set by the ÓE are easy to meet. They are, by the way, intelligent students; it's a shame that their PhD will be from the ÓE.*
> *I am no longer willing to accept invitations to serve as an opponent or as a committee member, because the goal is always for the student to earn their degree, even if they have fundamental shortcomings. The committee is made up of good friends who turn a blind eye to the nonsense. Unfortunately, this is the case for many SH students, which sounds good in the short term, but in the long run, it can lead to failure. The ÓE DI already has a "reputation" at my workplace.*

The same colleague's responses to criteria 13 and 14 (13. How do you assess the DI's publication requirements (a minimum of five publications, two of which must be IF articles)? 14. How do you evaluate the quality of the comprehensive exams, internal and public defenses?) also expresses a fundamentally negative opinion, giving a rating of 2 for both questions. Colleague 12's overall rating is 3.2 across all questions. Colleagues No. 3 (large company, committee member, opponent [workplace discussion, public defense, comprehensive exam]) and No. 13 (research institute, thesis advisor) also gave an overall rating of 3.9, although they did not provide a written evaluation.

Based on the above, it can be concluded that approximately one-fifth of external partners view the DI's operations very critically; these opinions cannot be ignored. At the same time, in the case of respondent 12, some form of bias or a bad experience may also have played a role. All of this means that the DI's professional standards, the complex exams, and the scientific value of the dissertations are the most important aspects of the external partners' assessment.

14. Review of infrastructure, e.g., the condition of the research and office technology infrastructure provided to doctoral students, developments and expansions achieved, "borrowed resources"

No significant changes have occurred in this regard at the DI.

15. Events and activities organized by the DI, such as doctoral student conferences, workshops, etc.

Two doctoral student conferences were organized during the reporting period. The program for the 22nd In-House Doctoral Student Conference, held on January 23, 2025, is available at the link https://atdi.uni-

obuda.hu/xxii-konferencia-2025/. The XXIII. in-house conference took place on June 19, 2025; its program is available here: https://atdi.uni-obuda.hu/xxiii-konferencia-2025/.

The purpose of the in-house conference, held at the end of each semester, is for students to present the results of their research to an informed audience. In each section, the review committee is composed of members of the doctoral school council. The review committee reviews the report submitted in writing in advance and evaluates the presentation based on it. Another main objective of the doctoral student conference is for students at the beginning of their studies to see and hear the work of more experienced doctoral students, thereby learning a great deal about organizing research and presenting research results. Both DI's external and internal partners are invited to the doctoral student conference. The usefulness of the student conference, held every semester, is confirmed by the results of questionnaire surveys.

16. Results of ALUMNI activities

Tracking the career paths of graduates

As part of our ALUMNI activities, we track graduates' career paths, current employers, activities, and contact information. We then sent out an electronic survey to graduates, allowing them to share their experiences and assess the value of their time at DI. We conduct a questionnaire survey among graduates every five years; soliciting feedback more frequently than this is counterproductive in terms of the results. During the most recent survey in 2023, the following students received the questionnaire.

Name of PhD graduate	Current activity, affiliation
Abohalguma Tala	Libyan Petroleum Institute, Industrial Research Department, Scale and Corrosion Division; Material Science and Corrosion Unit, Gargarsh, Madina Syaheya; she works on corrosion related to oil exploration and is the head of one of the smaller research units. She is in close contact with her advisor; they are co-authoring a book chapter (Abdul Shaban, Tala Abohalguma, Gyöngyi Vastag, Judit Telegdi: Nanostructured materials and electronic noise devices, Springer, Singapore)
Adrienn Hanczvik	works at the National Public Health Center and is currently participating in a course at the European Centre for Disease Prevention and Control
Zsolt Szekrényes	Semilab Semiconductor Physics Laboratory Ltd. https://semilab.com
Ben Zine Haroune Rachid	Lecturer at Mohamed Khider University in Biskra (Algeria) https://www.linkedin.com/in/ben-zine-haroune-rachid-a73809114/
Anna Tegze	works at the Radiation Chemistry Laboratory of the ELKH Energy Research Center
Tamás Novotny	works at the Fuel Element and Reactor Materials Laboratory of the ELKH Energy Research Center
János Radó	is a postdoctoral researcher at Lakehead University (Ontario), Canada https://rezniklab.lakeheadu.ca/members/
Eddaif Larbi	works at Computacenter IT in Hatfield, England https://www.linkedin.com/in/larbi-eddaif-900bb5123/?originalSubdomain=hu
Ágoston Csaba Horváth	NeuroMEMS Implantable Microsystems Research Group, Pázmány Péter Catholic University, postdoc http://neuromems.hu/rushmore_teams/agoston-horvath/
Soukaina Lamnini	Lecturer and postdoctoral researcher at Mohammed VI University in Morocco (Ben Guerir, Rabat, Laayoune)

	https://www.linkedin.com/in/soukaina-lamnini-122b05109/?originalSubdomain=ma
Qadir Awais	TU Bergakademie Freiberg – researcher, https://www.linkedin.com/in/awais-qadir-a797a81b/?originalSubdomain=hu
Gábor Orbán	Instituto Italiano di Tecnologia Microtechnology for Neuroelectronics, postdoc https://www.iit.it/en/ https://www.iit.it/search?q=gabor+orban& ncforminfo=ChWzNYWom-NM6th8HYRALY0olg7Ga2HkZOnoNF_9SA_qvEY4ZW15xW5H-HSoGzopCGna2vfiIsrWv7ZAkrDN1w%3D%3D
Péter Varga	Óbuda University, Donát Bánki Faculty of Mechanical and Safety Engineering, Institute of Mechanical Engineering and Technology, Assistant Professor
M. Sahir Al-Zuariji	Currently holds a research position at the ELKH EK Surface Chemistry and Catalysis Laboratory, for the time being until the end of the year.
Hassanen Jaber	Óbuda University, Donát Bánki Faculty of Mechanical and Safety Engineering, Institute of Mechanical Engineering and Technology, Assistant Professor
Antal Ürmös	Óbuda University, Kálmán Kandó Faculty of Electrical Engineering, Institute of Instrumentation, Assistant Professor
Erzsébet Perezné Feró	Energy Research Center, Researcher at the Fuel Element and Reactor Materials Laboratory
Richárd Nagy	Research Center for Energy Sciences, Researcher at the Fuel and Reactor Materials Laboratory
János Kónya	Managing Director of Dent-Art-Technik Kft., Regional Director and Co-Chair of the Hungarian Medical Manufacturers and Service Providers Cluster (MediKlaszter), and President of the Hungarian Additive Technology Association (MATESZ)
Nikolett Hegedűs	HUN REN EK MFA, Research Associate
Bálint Varga	Óbuda University, Donát Bánki Faculty of Mechanical and Safety Engineering, Institute of Mechanical Engineering and Technology, Associate Professor
Eliza Angeli	János Neumann University, GAMF, Associate Professor
Ali Al-hilfi	Lecturer at the University of Misan, Baghdad, Iraq
Anikó Bezsenyi	Biologist-engineer at Budapest Sewerage Works Ltd.
Anita Bányai	Microsystems Laboratory HUN-REN EK / MFA MR [2019-]
Abdul Whab Mgherony	
József Nádas	Óbuda University, Kálmán Kandó Faculty of Electrical Engineering – Institute of Electronics and Communication Systems
Attila Zsolt Kenéz	Hilti Tools Ltd., Kecskemét, Hungary, attila.kenez@hilti.com
Levente Széles	Óbuda University, Donát Bánki Faculty of Mechanical and Safety Engineering - Faculty Research Coordination Center
Ismaeel Noor Taha	Assistant Lecturer at the University of Baghdad

Survey among graduates

An online survey conducted in 2023 among graduates received responses from 11 students. On a five-point scale, the final question—which asked about the usefulness of the time spent in the program—yielded an average score of 4.3. The lowest average score was 2.9, and the highest was 4.5. In this table, we have highlighted questions with exceptionally low scores in bold and those rated above average in red.

Question	Average
1. Were the conditions in the Doctoral School adequate for the education of doctoral students and the successful conduct of	4.1

2. How do you rate the structure of the doctoral program? / Were you satisfied with the structure of the doctoral training?	4.0
3. To what extent has the Doctoral School based its educational and scientific work on modern and recent scientific results? / To what extent has the Doctoral School built its educational and scientific work on modern and recent scientific results?	4.3
4. How would you rate the flow of information and communication within the Doctoral School? / Were you satisfied with the flow of information within the Doctoral School?	4.0
5. How satisfied were you with the organization of the doctoral program? / How satisfied were you with the organization of the doctoral program?	**3.8**
6. Were you satisfied with the range of courses available? / Were you satisfied with the range of subjects you could take?	4.1
7. Were you satisfied with the content of the chosen subjects?	4.2
8. How did you find the quality of the classes and consultations?	4.1
9. How did you find your supervisor's support in your research? / How did you find your supervisor's support in your research?	4.4
10. To what extent did you receive support from your supervisor in publishing your research results or presenting them at conferences?	4.5
11. To what extent did you receive guidance and help from your supervisor ? / To what extent did you receive guidance and help from your supervisor to prepare your dissertation?	4.3
12. How much has your research work been helped by attending regular biannual conferences? ? / How much has your research work been helped by attending regular biannual conferences?	**3.8**
13. To what extent did the Doctoral School provide opportunities for building external relationships (e.g., research institutes, industrial relations)? / Did the Doctoral School provide opportunities for building external relationships (e.g., research institutes, industrial rel	**2.9**
14. To what extent has your professional knowledge in your field of research increased during your doctoral training?	4.0
15. To what extent has your general professional knowledge increased during your doctoral training? / To what extent has your general professional knowledge increased during your doctoral training?	4.0
16. To what extent can you use the knowledge gained in your doctoral studies in your work?	4.1
17. To what extent has the PhD degree positively influenced your employment and career? / How has the PhD degree influenced your employment and career?	4.0
18. Overall, how would you rate the usefulness of the time spent in doctoral training?	4.3

Four students also provided verbal feedback on their years in the doctoral school, stating:

The doctoral school allowed me to place great emphasis on my scientific research without being hindered by mandatory teaching duties or excessive course completion requirements. The wide range of courses to choose from was a significant advantage; I had the opportunity to learn from a professor at another university on a topic truly relevant to my research. This kind of flexibility, along with the program's level of organization and transparent bureaucratic system, was simply unimaginable for me, an engineer coming from a much larger university , was simply unimaginable to me before. I can't suggest anything I would change about how the school operates; I was completely satisfied with it, and I'm glad I applied here.
It was okay. Excellent.
Why I didn't give the maximum score where I didn't: - ad2: the subject-specific part of the comprehensive exam is a waste of time (the sections on research progress, preliminary results, and plans are useful and necessary); - ad4: not all links were active/up-to-date on the DI website; aside from Professor Borsa, there was hardly anyone else who was fully aware of everything;

- ad5: I couldn't handle anything on my own through Neptun; everything required emails, phone calls, or in-person visits; - ad6: it was difficult to choose because few courses were related to my field of study, but in the end I did not regret taking the courses I selected; - ad8: In the vast majority of courses, I was fortunate to receive excellent, personalized instruction; however, the instructor of one course questioned the validity of my research topic and whether it was worthy of a PhD degree, but he was proven wrong; - ad13: I did not encounter such networking opportunities directly through the DI; the ÚNKP in-house conference and other conferences of my own choosing filled this gap; - ad17: It is not the DI's fault that I have not (yet?) enjoyed the benefits of a PhD degree during my career. | stars next to the fives: ad1: the very minimal teaching load provided ample time for research progress; - ad9-11: I am fortunate to have an exceptional person as my doctoral advisor, who is not only a professional role model, expert, and excellent leader, but also an outstanding motivator, partner, colleague, and empathetic boss; - ad12: I consider the opportunity to practice regular oral presentations, even in a foreign language, to be an excellent tool, and the frequency of these events was neither too high nor too low.
I must convey my utmost gratitude and appreciation for the unwavering support bestowed upon me by Prof. Judit Borsa and Dr. József Pap throughout my entire doctoral journey.

Based on the survey, the areas of the doctoral program's operations that were criticized by graduates or deemed lacking can be identified as follows:

- the organization of the program, the flow of information,
- mandatory attendance at doctoral student conferences,
- opportunities for external networking.

On the positive side, graduates also highlighted the effectiveness of their relationship with their advisors.

17. Financial performance: revenue, expenses, financial support provided to doctoral students and faculty members to fund activities carried out under the DI, e.g., conference attendance, publication grants, and other expenses

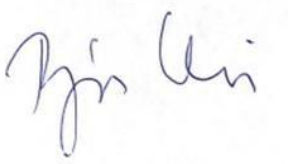
There was no central planning regarding the DI's budget, revenue, and expenses; budgeting was based on tracking estimated revenue and expenses. Revenue was projected at 34 million HUF per year, while the planned expenditure was approximately 19–20 million HUF. The latter includes the estimated fees for lecturers, thesis advisors, and administrative staff, as well as a subsidy of 100,000 HUF per student per year for materials or conference participation.

The student support provided by DI in the 2024 fiscal year—totaling more than 2 million HUF—is shown in the following table.

Name	Date	Event	HUF	Note
Ahmad Buhairi Minhalina Binti	March 21–22, 2024	FMTÜ March 21–22 Cluj-Napoca	180,400	registration fee
Lilia Bató	July 2–6, 2024	EUROoCS2024	135,300	Registration fee
Lilla Bató	April 24, 2024	Mátrafüred 2024 Conference	110,000	UNKP grant

Eszter Lencz	April 24, 2024	27th International Scientific PhD Conference	18,000	UNKP Call for Proposals
Attila Marczis	August 25–31, 2024	IMEKO 2024 XXIV World Congress	307 280	Accommodation
Attila Marczis	August 25–32, 2024	IMEKO 2024 XXIV World Congress	200 900	Registration Fee
Attila Marczis	August 25–33, 2024	IMEKO 2024 XXIV World Congress	2,569	insurance premium
Béla Mészáros	March 21–22, 2024	FMTÜ March 21–22 Cluj-Napoca	180,400	Registration fee
Anikó Moór	2023/24, 2nd semester	Metropolitan University	63,000	transfer
Sara Inez Moussaooui	August 18–22, 2024	CMTEE14 - Academy Publisher	53,300	Registration fee
Moussaooui Sara Inez	March 3–16, 2024	Košice - consultation with supervisor	18,560	train ticket
Moussaooui Sara Inez	March 3–16, 2024	Košice - consultation with supervisor	141,245	Accommodation
Moussaooui Sara Inez	March 3–16, 2024	Košice - consultation with supervisor	4,829	insurance premium
Moussaooui Sara Inez	June 23–July 5, 2024	Košice - consultation with supervisor	22,046	train ticket
Moussaooui Sara Inez	June 23–July 6, 2024	Košice - consultation with supervisor	130,380	Accommodation
Sara Inez Moussaooui	June 23–July 7, 2024	Košice - consultation with supervisor	4,507	insurance premium
Viktor Rácz	March 21–22, 2024	FMTÜ March 21–22, Cluj-Napoca	180,400	registration fee
Zsombor Szomor	April 25, 2024	Mátrafüred 2024 Conference	102,500	registration fee
Taha Zoubeida	April 2024	Biomass purchase	131,200	
Viktor Vass	September 19–21, 2024	SISY Conference	100,000	Participation fee
		Total:	2,086,816	

Budapest, September 17, 2025
Prepared by: Mihály Réger, Head of ATDI

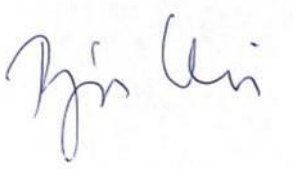


18. Action Plan

Based on the educational and organizational experiences of the 2023–24 academic year, as well as student feedback, the goals defined for the 2024–25 academic year and their implementation are as follows:

Goal	Task	Responsible	Deadline	Verification of completion	Note Notes
Improving the organization of the doctoral program and the information flow	Updating the document titled "Guide to the Doctoral Program" Judit Borsa	Judit Borsa	February 2025 20	2024-25 in the report	
	Improving and expanding the content of the Hungarian website	Mihály Réger	February 2025 25	March 2025	
	Expansion of the English website content	Mihály Réger	February 25	March 2025	
	Redesign of the Hungarian and English websites	Mihály Réger	June 2025	July 2025	3 DI jointly
Improving student administration	Mastering the use of the Neptun system to the extent necessary for student administration level	Bálint Bereczki	June 2025	June 2025	
Presenting publication opportunities to students	Launching a course titled "Scientific Paper Writing" Launch of the course	Tünde Kovács	September September	September 2024	
	Posting the publication guide on the website	Mihály Réger	September September	September 2024	
Support for student publications and conference attendance Support	Providing a grant of 100,000 HUF per semester instead of the previous 100,000 HUF/year	Mihály Réger	September September	September 2025	
doctoral conference increasing its effectiveness	careful preparation of the organization	Mihály Réger	January 10, 2025 June 10, 2025	September 2025	
	Updating the evaluation criteria	Mária Marosné Berkes	June 1, 2025	June 2025	
Clarification of needs and satisfaction assessment	Refinement of the external partner questionnaire and Conducting	Mihály Réger	January 15, 2025	September 2025	
	Refinement of the internal employee questionnaire and Conducting	Mihály Réger	January 15, 2025	September 2025	
	Student questionnaire refinement and data collection	Mihály Réger	January 15, 2025	September 2025	
Survey of student mobility needs	Compilation of the Methodological Guide and Questionnaire	Judit Borsa	November 2025		
Survey of student needs regarding community programs	Compilation of a focus group methodology guide and questionnaire	Judit Borsa	November 2025		

Budapest, September 17, 2025
Prepared by: Mihály Réger, Head of ATDI



Approved by: ATDI DIT September 17, 2025