

The Romanian Agency for Quality Assurance in Higher Education



**External Evaluation Report (REE) for the
procedure for obtaining maintaining
accreditation of Doctoral Study Domain**

Higher Education Institution/Education Provider Organization:	Alexandru Ioan Cuza University
Doctoral School:	Chemistry
Doctoral Domain:	Chemistry
The objective of the external evaluation:	Maintaining accreditation of DSD, UAIC, Iasi



**THE ROMANIAN AGENCY FOR QUALITY ASSURANCE IN HIGHER
EDUCATION**

*Member of the European Association for Quality Assurance in Higher Education - **ENQA**
Listed in the European Quality Assurance Register for Higher Education - **EQAR***

Members of the ARACIS Evaluation Panel

No.	Last Name and First Name	Team role	Signature
1.	<i>Gabriela Nicoleta Nemes</i>	Expert evaluator	
2.	<i>Jordi Villà i Freixa</i>	International Expert	
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I. Introduction

- the context in which the external evaluation report was drafted (the type of evaluation, the period covered by the evaluation, membership of the external quality experts' panel, etc.);
- description of the higher education institution / Romanian Academy (establishment, evolution, mission, governance, structure, study program/domains, external quality evaluation procedures applied);
- general description of the doctoral study domain (why it was established - in the case of a provisional authorization to operate; evolution and/or changes since the last external quality evaluation procedure - in the case of procedures intended for accreditation or maintaining accreditation, as applicable).

The external evaluation report (REE) for maintaining the accreditation of the field of doctoral studies in Chemistry at the "Alexandru Ioan Cuza" University of Iași was carried out by the evaluation committee approved by ARACIS. The evaluation period (July 8-10, 2026) was established by mutual agreement between the members of the evaluation committee and the contact person, Ms. Prof. Dr. Cecilia ARSENE. The evaluation committee is composed of the coordination committee Prof. Dr. Gabriela Nicoleta Nemes (Babeș-Bolyai University of Cluj-Napoca), international expert evaluator Prof. Jordi Villà i Freixa (University of Vic - Central University of Catalunya) and Radu Anton Moldovan, as student evaluator.

The "Alexandru Ioan Cuza" University of Iași (UAIC), a higher education institution with an academic tradition in Romania, founded in 1860, is a pole of excellence at the national and international level in education and research. Currently, the university offers a diverse range of study programs covering all university levels (bachelor's, master's, doctorate) and has a well-defined and consolidated academic and research infrastructure. The academic mission assumed by the "Alexandru Ioan Cuza" University of Iași is to ensure for the young generation an advanced formation in education and research, in direct correlation with the respect for the society values and commitment to promoting a society based on flexible and creative knowledge that can face the challenges of the globalized world.

UAIC supports and promotes, by all specific means, fundamental research and applied research, in multiple fields, from exact sciences, natural sciences, social sciences and humanities, to engineering sciences, physical education and sports, in accordance with the demands of a society based on progress, in the name of the public good and with respect for professional ethics.

UAIC is an important part of the development and modernization of the local, regional and national community, through the transfer of knowledge, technological innovations, and proposals for the optimization of institutional practices.

The Organizing Institution for Doctoral University Studies (IOSUD) within the UAIC coordinates the activity of the 14 doctoral schools, organizing doctoral studies in 29 scientific fields. Doctoral activity is regulated according to the national laws in force and the institutional regulations, being based on the principles of quality, transparency and academic integrity (see https://www.chem.uaic.ro/files/File/2025-2026/scoala-doctorala/carta-uaic/carta-uaic_martie2025_site.pdf and REI, Part I).

UAIC went through several ARACIS external evaluation procedures, obtaining the qualification "High degree of confidence" and maintaining the accreditation of study programs, including for doctoral studies (<https://www.chem.uaic.ro/files/File/2025-2026/scoala-doctorala/i.2-evolutie/01-hotararea-consiliului-aracis-nr.-96-25-11-2021.pdf>)

The Doctoral School of Chemistry (SD Chem) is a distinct structure within the Faculty of Chemistry - UAIC, established in 2017 and accredited for the organization of doctoral studies in the field of Chemistry (see <https://www.chem.uaic.ro/files/File/2025-2026/scoala-doctorala/i.1-infiintare/hotarare-senat-nr-3-25-05-2017.pdf>) .



SD Chem is organized and works in accordance with the institutional regulations of IOSUD-UAIC, being led by the Director of the Doctoral School and the SD Council, structures democratically elected and validated according to the law <https://www.chem.uaic.ro/ro/scoala-doctorala/conducere-sd-chem.html>.

The academic community includes doctoral supervisors, specialists in the guidance committees and doctoral students (<https://www.chem.uaic.ro/ro/scoala-doctorala/structura-sd.html>).

The mission of the doctoral school is oriented towards the training of highly qualified specialists, capable of conducting original research and contributing to the development of scientific knowledge and society. The domain of doctoral studies in Chemistry is organized within SD Chem and aims to train graduates with qualification level 8 (EQF/CNC), capable of generating original knowledge and responding to the demands of the academic and socio-economic environment <https://www.chem.uaic.ro/ro/scoala-doctorala/domeniu-program-sd.html>.

The doctoral program lasts 4 years and is structured based on the transferable credit system (240 ECTS), including:

- the advanced university training program (PPUA);
- scientific research program (PCS);
- complementary development activities.

The program is organized based on learning outcomes and integrates teaching, research and evaluation activities, contributing to the development of professional and transversal skills of doctoral students (<https://www.chem.uaic.ro/ro/scoala-doctorala/program-de-studii-sd.html>).

The mission, vision and the main objectives of SD Chem within IOSUD-UAIC are very well highlighted in REI presentation (part I.2) with emphasis on fundamental values (REI pg.7), general and specific objectives (REI pg. 7-9).

II. Methods used

- Analyzed documents (internal evaluation report and its annexes; additional documents requested before and during the on-site visit, if any; other documents or data);
- On-site visit (general list of visited locations and categories of persons with whom debates have been organized);
- Other relevant methods or aspects.

The internal evaluation report was developed for the period 2021–2025 by the Director of the Doctoral School of Chemistry, in collaboration with the members of the Commission for Evaluation and Quality Assurance (CEAC) of SD Chem within IOSUD-UAIC.

The process of developing the report involved: analysis of institutional documents and internal reports; consulting doctoral supervisors and doctoral students; integration of stakeholder feedback; data correlation with ARACIS requirements and indicators

The report reflects the result of the implementation of the Streamlined Management System (SME) (<https://www.chem.uaic.ro/ro/scoala-doctorala/sistem-management-sd.html>) at the doctoral school, which allows the monitoring of academic and administrative activities, as well as the collection of relevant data for quality assurance.

Discussions during the ARACIS panel visit with the director of the doctoral school, the members of the team that drafted the REI, and the other members of the doctoral school show that they all contributed to the completion of the file submitted to ARACIS. Finally, the REI was validated by the internal quality assurance committee.

The content of the report has been reviewed, reviewed and approved by the SD Chem Board, ensuring compliance with institutional quality and transparency standards (see REI, pg. 14-15).

Following discussions with the team that prepared the Self-Evaluation Report (REI), it became clear that the main challenge was adapting the documentation to comply with the new ARACIS standards.



At the same time, the process had a significant positive outcome: the complete redesign of the Doctoral School website, which now provides doctoral candidates and supervisors with comprehensive information to support doctoral studies and ensure appropriate academic management (see the minutes of the meeting between the external quality evaluation panel and the REI drafting team).

During the on-site visit, the ARACIS panel held a series of meetings with representatives of the Doctoral School of Chemistry (DS Chem) at UAIC Iași, institutional management, the ethics and quality assurance committees, as well as other key stakeholders, including doctoral candidates, graduates, employers, and academic staff. The working methodology of the panel, the visit schedule, meeting locations, participants, and summaries of the discussions are documented in the *External Quality Assessment Visit Schedule / Calendarul vizitei de evaluare externă a calității* and the corresponding meeting minutes.

The visit schedule also includes detailed information on the facilities visited, including the names of the laboratories, the persons responsible for each, and the list of participants, together with their institutional roles. The panel visited three analytical chemistry laboratories, three inorganic chemistry laboratories, two biochemistry laboratories, and five organic chemistry laboratories, all of which support doctoral research. In several laboratories, master's students also conduct research alongside doctoral candidates. In addition, the panel visited the CERNESIM and RECENT AIR advanced research platforms (see Visit Schedule, p. 11), which provide doctoral candidates with access to strategic research infrastructure under established operational regulations (included in the annexes as examples).

For each meeting, the venue and participants are listed in the visit schedule, while the corresponding minutes provide a detailed account of the discussions. At the beginning of every meeting, the ARACIS panel coordinator introduced the evaluation team and explained the objectives of the session. Prior to the visit, the panel members jointly prepared a concise set of approximately eight to ten core questions for each meeting, based on the REI documentation and discussions held during preparatory technical meetings, including an online pre-visit session. During the meetings, additional questions and requests for clarification were raised as necessary. Each meeting was chaired by one panel member, while the other two evaluators recorded the minutes and participated actively in the discussions. This organizational approach is reflected in the meeting minutes.

During the meetings with the DS Chem team, the panel requested several clarifications and additional supporting evidence related to the REI. These included links or documentation describing the procedure for reporting ethical issues and resolving complaints; information on research infrastructure available to doctoral candidates and the procedures for accessing it; examples of qualification-based certification of activities included in doctoral study plans; records of doctoral student mobility; progress reports prepared since the previous ARACIS evaluation (or links to their online versions); and examples of laboratory health and safety documentation. These supplementary materials will be submitted to ARACIS together with this report as annexes to the External Evaluation Report (REE).



Judgement on the extent to which the standards and performance indicators are fulfilled

DOMAIN A. Institutional capacity

Criterion A.1. Managerial and administrative structures and processes involving students and other stakeholders

Standard S.A.1.1. Organizational components and institutional processes

The HEI has organizational components in its structure, which function based on adequate competences, responsibilities, processes, and implementation procedures, and ensure an effective management system.

Indicator
I.P.A.1.1.1

For delivering the study program/domain, the HEI has adequate organizational components and an adequate management system, which operate based on methodologies, regulations and procedures that are periodically reviewed as required by law.

- ✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

UAIC and IOSUD-UAIC provide a formal regulatory framework for doctoral studies, and SD Chem operates through its Director and Doctoral School Council under institutional regulations and school-level rules. The REI documents recurrent review of regulations, admission rules, habilitation procedures, recognition procedures, postdoctoral regulations, thesis-defense procedures, similarity checks, thesis-writing guidance and file-preparation instructions. The SD Chem website publishes Council decisions, procedures and management-system forms, increasing transparency and traceability of academic and administrative decisions. Evidence reviewed:

- SME (<https://www.chem.uaic.ro/ro/scoala-doctorala/sistem-management-sd.html>);
- CSD (<https://www.chem.uaic.ro/ro/scoala-doctorala/consiliu-csd-sd.html>);
- Decisions (<https://www.chem.uaic.ro/ro/scoala-doctorala/hotarari-csd.html>);
- Procedures (<https://www.chem.uaic.ro/ro/scoala-doctorala/regulamente-metodologii.html>).

The evidence supports a judgement of fulfilment. The governance architecture is not merely formal: it is linked to the Streamlined Management System (SME), public decisions and a structured document circuit. This also aligns with the European quality-assurance expectation that internal QA should be public, strategically embedded and implemented through appropriate structures and processes.

- ✓ Analysis of the state of facts, in relation to the state of facts acknowledged from documents and considering the analyzed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

It is commendable that SME is a solid practice, as it transforms quality assurance from scattered documentation into a structured management tool; the public availability of the Council's decisions and procedures supports transparency and institutional memory; the concurrent modernization of the website during the preparation of the REI demonstrates responsiveness to external evaluation requirements. The quality of SD Chem's work can be improved by continuing current practices such as maintaining the annual review cycle of regulations and procedures and adding a short public review log indicating what has changed, why and which interested body approved the update; for each key procedure, publishing an owner, the date of the last review, the date of the next review and evidence of approval to make the quality cycle more auditable; considering adding a concise governance map on the website linking IOSUD, CSUD, SD Chem Council, CEAC, PhD supervisors and student representatives.

- ✓ Recommendations

Not applicable.

The indicator is: fulfilled



Standard S.A.1.2. Stakeholder engagement

The HEI proves that it engages the relevant stakeholders in developing methodologies and regulations, as well as implementation procedures.

Indicator
I.P.A.1.2.1

The opinions of the faculty and department members, of the subsidiary or extension¹ and of other stakeholders are considered in the process of adopting and revising methodologies, regulations and implementation procedures.

- ✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The REI describes consultation mechanisms for doctoral supervisors and doctoral students, including SME packages for Council work, supervisor consultations and student participatory activities. Doctoral supervisors are consulted annually on the HR Plan, educational offer, admission topics, admission of new supervisors and composition of Guidance and Academic Integrity Committees. The evidence indicates that consultations may occur physically or online and that resulting resolutions are submitted to the SD Chem Council for endorsement or approval. Evidence reviewed:

-SME (<https://www.chem.uaic.ro/ro/scoala-doctorala/sistem-management-sd.html>);

-Supervisors (<https://www.chem.uaic.ro/ro/scoala-doctorala/conducatori-doctorat.html>);

-Reports (<https://www.chem.uaic.ro/ro/scoala-doctorala/conducatori-doctorat.html#sme-FL-RU-Conducatori>).

- ✓ Analysis of the state of facts, in relation to the state of facts acknowledged from documents and considering the analyzed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The consultation process is documented and embedded in the school's decision-making workflow. The next quality step is to demonstrate more systematically how stakeholder input changes decisions, not only that stakeholders were consulted.

It is commendable that the use of standard forms for Board, supervisor and student participation is good practice for continuity and traceability; formal student representation in governance is aligned with the participatory spirit of ESG 1.1. In this respect, the activity could be improved by completing a simple table with stakeholder feedback: issue raised, stakeholder group, decision taken, implementation status and completion date; including evidence of external stakeholder input where relevant, particularly employers, alumni and research partners, as ESG expects engagement beyond internal structures where appropriate; for online consultations, keeping anonymized summary reports showing participation rates and main conclusions so that evidence of the consultation can be fed into information management and follow-up planning.

- ✓ Aspects that constitute best practice examples

The use of standard forms for board, supervisor and student participation is good practice for continuity and traceability; formal student representation in governance is aligned with the participatory spirit of ESG 1.1.

- ✓ Recommendations

Develop a periodic stakeholder feedback report that outlines issues raised, actions taken, and implementation status; increase external stakeholder engagement.

The indicator is: fulfilled

Criterion A.2. The material resources and optimization of the use of the material resources

Standard S.A.2.1. Material resources

¹ The faculty, department, subsidiary, extension - hereinafter "organisational components"



The HEI owns adequate movable and immovable assets to enable it to carry out the study programme/domain.

Indicator I.P.A.2.1.1	The HEI legally owns venues for the related education, research and administrative processes, as well as for services for students, doctoral students and trainees, thus providing an enabling environment for living and studying, including for disabled persons. Optimal venues are also provided for activities of the staff. Such venues are adequately equipped.
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- ✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The REI reports access to UAIC teaching spaces, Faculty of Chemistry classrooms and laboratories, research laboratories, libraries, accommodation, canteens, counselling, internet, institutional e-mail and medical services. The doctoral school maintains public pages for logistical spaces and research resources, including SME forms for monitoring spaces and equipment. The research environment is supported by access to RECENT AIR and CERNESIM, plus research groups coordinated by doctoral supervisors. Evidence reviewed:

- Spaces (<https://www.chem.uaic.ro/ro/scoala-doctorala/resurse-logistice-spatii.html>);
- Research resources (<https://www.chem.uaic.ro/ro/scoala-doctorala/resurse-logistice-cercetare-sd.html>);
- Academic resources (<https://www.chem.uaic.ro/ro/scoala-doctorala/resurse-academice-sd.html>).

The indicator is supported by sufficient evidence and can be judged fulfilled.

- ✓ Analysis of the state of facts, in relation to the state of facts acknowledged from documents and considering the analyzed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The combination of central UAIC services, Faculty infrastructure, research laboratories and dedicated research centers provides an adequate environment for doctoral training and research, in line with European expectations on adequate and readily accessible learning resources and student support. On-site visiting of research spaces confirms the existence of the infrastructure described in the REI. It is commendable that access to specialized centers such as RECENT AIR and CERNESIM is an important asset for doctoral research in chemistry; public description of research groups and logistical resources improves visibility for candidates and PhD students. To facilitate PhD students' access to research infrastructure, a regular publication of an updated inventory of key research equipment accessible to PhD students, including access conditions and responsible contact persons on a dedicated website would be welcome; adding explicit information on accessibility for teaching, research and administrative spaces, including access for people with disabilities and support measures; considering a short annual report on the use of major research infrastructure by PhD students to highlight impact, not just availability, would highlight the student-centered orientation of education.

- ✓ Recommendations

Periodically publish an updated inventory of major research equipment and accessibility information for teaching and research facilities.

The indicator is: fulfilled

Standard S.A.2.2. Management of material resources	
The organizational components manage the movable and immovable assets used for the evaluated study program/domain in an optimal, sustainable manner.	
Indicator I.P.A.2.2.1	The movable and immovable assets are properly maintained to ensure optimal conditions for studying, living and research, as well as for work.

- ✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

SD Chem records teaching, research and administrative spaces and research infrastructure through SME forms for logistical resources. The REI states that space records are updated when new supervisors join the school, while equipment records are updated when supervisors report new equipment available for doctoral activity. Collaboration protocols with RECENT AIR and CERNESIM regulate access to additional research infrastructure. Evidence reviewed:

- Spaces (<https://www.chem.uaic.ro/ro/scoala-doctorala/resurse-logistice-spatii.html>);
- Research resources (<https://www.chem.uaic.ro/ro/scoala-doctorala/resurse-logistice-cercetare-sd.html>).

The indicator can be considered fulfilled. The school has a recognizable system for tracking resources and managing access.

- ✓ **Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analyzed performance indicator, to justify judgement on the extent to which the indicator was fulfilled**

To increase robustness, the documentation should provide better evidence maintenance cycles, sustainability criteria and risk management for critical equipment. It is commendable that the two-form SME approach to facilities and equipment is clear and operational; collaboration protocols with research centers provide a formal basis for access beyond the usual faculty infrastructure. To support research activity in SD Chem, it would be helpful to add if possible the inventory of equipment maintenance status, calibration data where relevant, safety requirements and access priority rules; develop a simple sustainability and renewal plan for critical research infrastructure, including expected replacement needs and funding routes; collect basic management data on equipment usage, downtime, student access and bottlenecks and ask, during the site visit, for examples where monitoring has led to improvements in access, maintenance or procurement.

- ✓ **Recommendations**

Include maintenance, calibration and sustainability information for major research equipment and infrastructure.

The indicator is: fulfilled

Criterion A.3. Adequate human resources and transparent staff recruiting procedures developed according to the law

Standard S.A.3.1. Human resources

The HEI has the required human resources to organize and deliver the evaluated study programme/domain.

Indicator I.P.A.3.1.1	The human resources of the organisational component are suitable to perform the activities pertaining to the evaluated study programme/domain. The teaching staff has the required qualifications and professional competences to teach the subject matters assigned to them in the job list.
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- ✓ **Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)**

The REI identifies 11 doctoral supervisors in Chemistry, 8 tenured at UAIC and 3 associates, covering analytical chemistry, organic chemistry, inorganic chemistry, radiochemistry and biochemistry. Doctoral supervisor profiles include CVs, publication lists, habilitation or doctoral-supervision orders, UAIC affiliation decisions, internal evaluation result reports, admission topics and contact data. Guidance and Academic Integrity Committees are monitored and approved by the SD Chem Council; since 2024-2025 they must include a member from another IOSUD. Evidence reviewed:

- Supervisors (<https://www.chem.uaic.ro/ro/scoala-doctorala/conducatori-doctorat.html>);
- Committees (<https://www.chem.uaic.ro/ro/scoala-doctorala/comisii-indrumare.html>);
- HR (<https://www.chem.uaic.ro/ro/scoala-doctorala/resursa-umana-sd.html>);
- Reports (<https://www.chem.uaic.ro/ro/scoala-doctorala/resursa-umana-sd.html#smeResursaUmana>).



- ✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analyzed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The human-resource base is adequate and documented, with evidence of qualification, thematic coverage and committee-level support. The inclusion of external IOSUD members in CIIA is particularly relevant for independence and broader expertise. The evidence also supports the European quality-assurance emphasis on assuring teacher competence and maintaining a supportive environment for students.

From the on-site meeting with the teaching staff, it results that they ensure the training of doctoral students through academic courses with a modern, constantly updated curriculum (see syllabus) and to which the new doctoral supervisors have access, but also through scientific research activities specific to the doctoral topic. The research topics at DS Chem are in line with the university's development strategy.

It is commendable that individual public profiles for supervisors provide strong transparency and help doctoral candidates assess research compatibility; the CIIA structure, especially the requirement for a member from another IOSUD, strengthens academic guidance and integrity guarantees; the SME forms for monitoring supervisors and committee composition support continuity across academic years. Annual monitoring of supervisor workload and PhD student-supervisor ratios, including active students, would highlight their activity and provide a compact dashboard to show disciplinary coverage, external committee participation and supervisory capacity, demonstrating how the CIIA guidance structures support student-centered doctoral progression, not just the formal composition of committees.

- ✓ Recommendations

Not applicable.

The indicator is: fulfilled

Indicator I.P.A.3.1.2	The HEI ensures professional and personal development for its staff.
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- ✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The REI reports that staff development is supported through the UAIC International Relations Service, including Erasmus+ mobility and cooperation opportunities. Professional development is monitored through SME reporting forms and the school's quality and activity reports. The REI links development activities to conferences, workshops, research projects, mobility, digital resources and scientific databases. Evidence reviewed:

- Reports (<https://www.chem.uaic.ro/ro/scoala-doctorala/rapoarte-sd.html>);
- DCDI (<https://www.uaic.ro/organizare/departamentul-de-comunicatii-digitale-d-c-d/>).

The institution provides opportunities and the school monitors reported activities. The evidence would be stronger if it showed the effect of development activities on teaching, supervision, research guidance and doctoral-student outcomes.

- ✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analyzed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

It is commendable that annual reporting on supervisor development activities creates a basis for evidence-based staff development; international mobility opportunities are relevant for doctoral education in chemistry and for research collaboration. The focus on staff development can be better highlighted by: defining a narrow set of indicators in line with internal quality norms, staff development: mobility, pedagogical training, supervision training, research methods training, integrity training and digital skills training; including a reflective section in annual reports showing how staff development activities have improved doctoral supervision or programme delivery; developing a more explicit



professional development policy for doctoral supervisors, including supervision, evaluation, research integrity and digital skills training and linking it to programme monitoring results.

✓ Recommendations

Not applicable.

The indicator is: fulfilled

Standard S.A.3.2. Recruitment procedures

Teaching staff recruitment procedures compliant with the provisions of the law.

Indicator I.P.A.3.2.1	Recruitment procedures comply with the provisions of the law, and are established and carried out transparently.
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✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The REI describes transparent recruitment for courses, seminars, thesis supervision and guidance activities, aligned with the HR Plan and applicable law. The dedicated recruitment procedure states that vacancies in the SD Chem HR Plan are published on the school website and sets stages for publication, candidate submission and selection. The procedure defines document requirements and centralized lists for candidate assessment and committee appointments. Evidence reviewed:

- HR (<https://www.chem.uaic.ro/ro/scoala-doctorala/resursa-umana-sd.html>);
- HR procedure (<https://www.chem.uaic.ro/ro/scoala-doctorala/resursa-umana-sd.html#RecrutareResursa>).

✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analyzed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The existence of a specific recruitment procedure for doctoral-school activities is a positive development and is aligned with European expectations for fair and transparent recruitment and staff development. It is commendable that the explicit publication of vacancies supports transparency and equal access; the procedure distinguishes different types of activities and documents the selection workflow. For better transparency, websites containing information regarding the publication of the annual recruitment calendar and archived vacancy announcements, including selection criteria and results in an anonymized or legally appropriate format should be more visible; developing the proposed unified procedure at IOSUD level, while maintaining school-level specificity for disciplinary expertise could support transparency; ensuring that recruitment criteria recognize both research excellence and the quality of doctoral supervision are in line with legislation; adding conflict of interest declarations for members involved in selection and appointment to committees for all levels, if this is not already implemented.

✓ Recommendations

Not applicable.

The indicator is: fulfilled

Criterion A.4. Digitalization of institutional processes

Standard S.A.4.1. Digital transformation

The digital transformation process in the organizational component seeks to achieve administrative simplification and improve the quality of the services provided to the members of its own community, as well as to third parties.

Indicator I.P.A.4.1.1	The organizational component uses IT tools in its own procedures, to improve access and provide good quality services for the members of its own community and the indirect beneficiaries of education.
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✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)



UAIC's Digital Communications and Informatization Directorate supports connectivity, internet, e-mail, telephony, video services and other digital services. Doctoral students have access to electronic databases through ANELIS PLUS and the Central University Library, Turnitin for originality checks, eSIMS/grades for records, Moodle for course support and 360.uaic.ro for community information. The SD Chem website has been updated and operates as a central access point for admission, programme information, thesis defense, research resources and quality assurance. Evidence reviewed:

- Academic resources (<https://www.chem.uaic.ro/ro/scoala-doctorala/resurse-academice-sd.html>);
- DCDI (<https://www.uaic.ro/organizare/departamentul-de-comunicatii-digitale-d-c-d/>);
- Grades (<https://grades.uaic.ro/>);
- Moodle (<https://students.chem.uaic.ro/>; <https://students.chem.uaic.ro/login/index.php>);
- SME (<https://www.chem.uaic.ro/ro/scoala-doctorala/sistem-management-sd.html>)

- ✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analyzed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The digital ecosystem is broad and useful, and the website is becoming a strategic transparency tool. The main enhancement would be to connect digital tools to service-quality indicators, user feedback and response times, so that digitalization supports information management and public information as well as access. It is commendable that the updated SD Chem website is an important tool for public information and management; the combination of bibliographic databases, Turnitin, Moodle and institutional records systems support doctoral work throughout the academic cycle. In the process of digitalization, developing digital platforms with services for doctoral students that explain access routes, credentials, support contacts and expected response times; collecting and reviewing baseline analyses or feedback on website usage, access to resources and issues related to digital services and including follow-up actions in annual quality reports; using the website review process to check that public information remains clear, accurate, up-to-date and easily accessible.

- ✓ Recommendations

Monitor digital services through user feedback and website analytics and include results in annual quality reports.

The indicator is: fulfilled

DOMAIN B. Educational efficacy

Criterion B.1. Content and relevance of study programmes

Standard S.B.1.1. Content of study programme/s²

The study programme is based on a curriculum designed so that students can acquire the expected learning outcomes.

Indicator I.P.B.1.1.1	The study programme is developed and structured according to the expected learning outcomes, and organized based on transferable study credits. It includes all learning, teaching, practical training, research and evaluation experiences, which, together, lead to a higher education qualification.
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- ✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The doctoral study program in Chemistry is structured in accordance with the expected learning outcomes (<https://www.chem.uaic.ro/ro/scoala-doctorala/domeniu-program-sd.html>) and organized accordingly with the transferable credit system (ECTS) (Planuri de învățământ | Facultatea de Chimie Iași). This program includes:

² The term "programmes" concerns the external quality evaluation for the study programmes contained in a master/doctoral domain. The term "programme" shall be used hereinafter.



-the advanced university training program (PPUA); <https://www.chem.uaic.ro/ro/scoala-doctorala/modul-i-ppua-sd.html>. The PPUA contains as mandatory discipline "Ethics and Academic Integrity" (including "Ethics and academic integrity – Ethics in scientific research") and also advanced disciplines in chemistry (see REI pg. 24-25 and <https://www.chem.uaic.ro/files/File/2025-2026/doctorat/fise-discipline-ppua-2025-2026/2025-2026-pd1111103-fd-etica-integritate-modul-i-scd-sem-i-eng.pdf>). The disciplines included in the Curricula are delivered by Professors holding the status of doctoral supervisor and/or habilitated, with proven expertise in the field (<https://www.chem.uaic.ro/files/File/2025-2026/scoala-doctorala/state-de-functii/site-2025-2026-stat-de-functii-sd-chimie.pdf>).

-the scientific research program (PCS); <https://www.chem.uaic.ro/ro/scoala-doctorala/modulul-ii-pcs-sd.html>. involves the preparation and presentation by the doctoral student of four Research Reports: i) one report at the end of the first year, after completion of the PPUA; ii) two reports in the second and third years of doctoral studies; and iii) the fourth report, also called the final report, which represents the doctoral thesis proposed for analysis by the CIIA in order to obtain approval for public defense (accordingly with the national and institutional regulations <https://www.chem.uaic.ro/files/File/1-regulamente/2025/2025-09-18-regulament-institutional-studii-de-doctorat-hs-nr-13-18-09-2025-site.pdf>). For the PCS component, upon completion of the evaluation of the four research reports, the doctoral student obtains 120 ECTS credits (see REI pg. 26).

-complementary professional development activities <https://www.chem.uaic.ro/ro/scoala-doctorala/activitate-complementara-sd.html>.

-the curricula are developed and updated periodically, being correlated with national and European standards, as well as with the scientific developments in the field of Chemistry. https://www.chem.uaic.ro/files/File/2025-2026/scoala-doctorala/plan-invatamant-proiectat-2026-2030/sd-chem_plan-invatamant_curriculum-proiectat-pentru-seria-2026-2030.pdf

-the program structure ensures an appropriate balance between theoretical training and applied research activities, contributing to the development of advanced skills of the PhD students. <https://www.chem.uaic.ro/ro/scoala-doctorala/planificare-pcs-sd.html>

- ✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analyzed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The program is coherent and relevant to the scientific field of chemistry, supporting the formation of a new generation of researchers capable of generating original knowledge.

In this regard, the main objectives of the specialists acting in the doctoral school are:

- continuous updating of the content of the disciplines;
 - development of interdisciplinary components;
- adaptation of the program to the requirements of the labor market and modern research (<https://www.chem.uaic.ro/ro/scoala-doctorala/misiune-sd.html>). Completion of doctoral studies and public defense are organized in line with the national law and with the institutional regulations; each step; starting with the formation program, writing of the doctoral thesis, defense, evaluations criteria for doctoral thesis each step benefits from a well-established procedure accessible to doctoral students, on the institution's websites (<https://www.chem.uaic.ro/ro/scoala-doctorala/reg-org-funct-scoli-doctorale-sd.html>),(<https://www.chem.uaic.ro/ro/scoala-doctorala/sustinere-teze-sd.html#OMStandardeTeza>);(<https://www.chem.uaic.ro/ro/scoala-doctorala/finalizare-doctorat-sd.html>).

- ✓ Aspects that constitute best practice examples

The doctoral school has good practice regarding the management of PCS, including a guide and additional forms for each report included in the PCS.

- ✓ Recommendations

Not applicable.

The indicator is: fulfilled



Criterion B.2. Alignment of the curriculum with the qualification

Standard S.B.2.1. Alignment with the qualification level and the intended competences

In the curriculum design and development process, the organizational component seeks to ensure the qualification level, as well as correlation with the envisaged occupations.

Indicator I.P.B.2.1.2	The expected learning outcomes are correlated with the competences required by those occupations, according to the occupational standards and/or the European Skills, Competences and Occupations (ESCO).
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- ✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the REI.)

The learning outcomes are formulated in correlation with the specific competencies of the PhD field of Chemistry and are compatible with the 8th qualification level of the ESCO (see REI pg. 28-29).

The curriculum (https://www.chem.uaic.ro/files/File/2025-2026/scoala-doctorala/plan-invatamant-proiectat-2026-2030/sd-chem_plan-invatamant_curriculum-proiectat-pentru-seria-2026-2030.pdf) is designed to allow the acquisition of:

- professional competencies (advanced research, analysis, interpretation);
- transversal competencies (critical thinking, scientific communication, ethics).

- ✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analyzed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

Analyzing the current situation, it was found that there is an adequate correlation between learning outcomes, subject content and targeted competencies (Fisele disciplinelor din planul de învățământ al modului PPUA | Facultatea de Chimie Iași), which ensures the relevance of the program for the professional insertion of graduates.

From the discussions with the teaching staff at the on-site meeting, it results that all doctoral supervisors can get involved from the SD Chem curricula, including courses or course modules in the curriculum in accordance with the professional competencies of each doctoral supervisor.

From the point of view of the training process, the REI analysis shows that the Doctoral School has several directions of action to improve performance, such as:

- permanent updating of targeted competencies;
- correlation with European occupational standards (ESCO);
- integration of feedback from graduates and employers in the formation program.

- ✓ Recommendations

Further integrate graduate and employer feedback in curriculum development and competency review.

The indicator is: fulfilled

Criterion B.3. Student-centred learning, teaching and evaluation

Standard S.B.3.1 Principles

The organizational component implements the principles of student-centred learning.

Indicator I.P.B.3.1.1	The organizational component ensures implementation of the student-centred learning in the curriculum and through the teaching strategies used in the learning and teaching activities and experiences.
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- ✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

At SD Chem within IOSUD-UAIC the educational process (learning, research, evaluation) is student-centered, being adapted to the individual needs of doctoral students, through the development of individual study and research plans (see information on web sites: <https://www.chem.uaic.ro/ro/scoala-doctorala/program-de-studii-sd.html>; [Regulamentele Scolii Doctorale: https://www.chem.uaic.ro/ro/scoala-doctorala/reg-org-funct-scoli-doctorale-sd.html](https://www.chem.uaic.ro/ro/scoala-doctorala/reg-org-funct-scoli-doctorale-sd.html))

Students have the opportunity to participate in:



- research activities;
- academic mobilities (Erasmus+);
- conferences and scientific projects.

The main objectives (<https://www.chem.uaic.ro/ro/scoala-doctorala/domeniu-program-sd.html#OSP-01-Program-Doctorat>) regarding the student centered learning activities are: PSO-01: Providing advanced knowledge for the latest concepts and theories in the field, PSO-02: Development of advanced research skills and dissemination of research results; PSO-03: Stimulating critical thinking and interdisciplinary communication; PSO-04: Promoting ethics and academic integrity; PSO-05: Promoting diversity, cooperation and non-discrimination. These objectives are described in detail in REI, pages 29-31, and are made known to the academic community through the unit's website of the Doctoral School (<https://www.chem.uaic.ro/ro/scoala-doctorala/modul-i-ppua-sd.html>).

- ✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analyzed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The analysis of the state of fact shows that the applied teaching and assessment methods support the development of research skills and academic autonomy of doctoral students.

From the discussions with the teaching staff and PhD students during the on-site meetings, it results that SD Chem is concerned with finding the most suitable solutions for quality professional training, centered on the student. In addition to the training courses that also include ethics and career development courses, the discussions (see the minutes of the two meetings) showed that the research activity and the access of PhD students to the infrastructure are a concern of the staff at SD Chem. In this regard, the procedures for the access of PhD students to the research infrastructure are being implemented. Some laboratories have processed the access; others are in the process. The suggestions for improving the preparation of doctoral students are:

- development of interactive teaching methods;
- increasing participation in learning and scientific multidisciplinary programs;
- diversifying assessment forms.

- ✓ Recommendations

Not applicable.

The indicator is: fulfilled

Indicator I.P. B.3.1.2	The organizational component ensures opportunities for students to participate in academic mobility programmes organized in person and/or virtually.
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- ✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

Through the international relations service, UAIC encourages international mobility of doctoral students, especially ERASMUS-type programs (<https://www.uaic.ro/international/programul-erasmus/noutati-si-evenimente/>), but also bilateral cooperation programs or other international cooperation programs in which UAIC is a partner (<https://www.uaic.ro/international/proiecte-de-mobilitate-si-cooperare/>). Mobility opportunities and their selection and organization regulations are in accordance with the national laws and are accessible to doctoral students on the institution's website: https://www.chem.uaic.ro/files/File/1-regulamente/2025/2025-07-17-srei-regulament-erasmus-ka131_revizie-2025-1.pdf and <https://www.uaic.ro/international/programul-erasmus/38892-2/>. PhD students are permanently informed about new research opportunities regarding: the availability of scholarships for PhD students, the possibility of involvement in Mentoring and Training Activities; and the possibility of participating in Summer/Winter Schools or Conferences, etc. <https://www.chem.uaic.ro/ro/scoala-doctorala/noutati-opunitati-cercetare-sd.html>.

- ✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled



Analysis of the state of fact show that the institutional mobility mechanisms (Erasmus+) provide doctoral students opportunities for stud mobilities, not only by ERASMUS program but also using different mechanisms and opportunities which act at the institutional level.

The SD Chem within IOSUD-UAIC highlight in the REI (pg. 32) the need to propose for approval the establishment of a Commission responsible for the analysis and monitoring of Erasmus+ mobilities accessed by doctoral students, as well as for the recognition and equivalence (total or partial) of courses attended and internships completed with the components of the Education Plan of the doctoral study program in the field of Chemistry.

Starting with 2026, doctoral students from SD Chem within IOSUD-UAIC will be able to access mobility programs (Erasmus+ or others) only based on a formally registered application submitted to the School's Secretary, with the mandatory approval of the doctoral supervisor and subsequent approval of the Director of SD Chem. Upon completion of the mobility, the doctoral student will submit a Mobility Report, based on a template to be published on the school's website.

Increased efforts will be made to inform and support doctoral students and teaching staff in accessing mobility opportunities at partner universities, with the objective of identifying and transferring good practices and creating new premises for improving teaching, learning and research activities (see REI pg. 32).

✓ **Recommendations**

Not applicable.

The indicator is: fulfilled

Standard S.B.3.2. Fairness

The organisational component provides fair opportunities for students.

Indicator I.P.B.3.2.1	The organisational component provides fair opportunities for students, in line with their potential and aspirations, taking into account the diversity of learning styles and abilities
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✓ **Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)**

The UAIC ensures fair access to doctoral studies, promoting equal opportunities, non-discrimination and meritocracy for all the candidates and doctoral students. Support measures are implemented for students from vulnerable groups and for those with special needs. All these values and principles are included in the University Charter and Ethical Code, <https://www.uaic.ro/wp-content/uploads/2025/02/Carta-UAIC-%C8%99i-Codul-de-Etica-UAIC-ianuarie-2025.pdf>, but also in the institutional regulations (<https://www.uaic.ro/wp-content/uploads/2024/09/Anex%C4%83-la-HS19-18.07.2024.pdf>; <https://www.uaic.ro/wp-content/uploads/2022/07/Plan-de-Egalitate-de-Gen-2022-2025-landscape.pdf>; <https://www.chem.uaic.ro/ro/scoala-doctorala/admitere-sd-chem.html>), and are accessible to all interested on the institution's website, as mentioned in REI, pg. 32-33. It is worth mentioning that in order to complete the doctoral study program, candidates have disponibile all the necessary information at their disposal, from the moment of their admission until the completion of the program, by defending their doctoral thesis before the committee of specialists (see REI pg. 33).

Admission in the doctoral school is a selective process where both the candidates' previous academic results but also their research potential are evaluated. The entire PhD program is centered on the needs of the PhD student, to ensure good research formation. To monitor evolution of PhD students, an annual report form is used to track the progress of the doctoral students. At institutional level, UAIC provides scholarships from its own funds, for budget-admitted doctoral students who do not receive a Ministry-funded scholarship, thus contributing to the reduction of socio-economic barriers (REI pg. 33).

✓ **Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analyzed performance indicator, to justify judgement on the extent to which the indicator was fulfilled**



Analyzing the state of facts, we find that the principles of equity and inclusion are respected at all stages of the educational process, contributing to the creation of an academic environment favorable to diversity. All regulations in this regard are accessible on the doctoral school website and were also presented to us during the on-site visit (<https://www.chem.uaic.ro/ro/scoala-doctorala/actiuni-specifice-cerinte-educationale-sd.html>). Suggestions to improve the process are:

- development of support services for students;
- monitoring access for vulnerable groups;
- promoting academic diversity.

✓ Aspects that constitute best practice examples

The granting by UAIC of scholarships from its own funds for doctoral students admitted to the budget who do not receive a scholarship funded by the ministry is an example of good practice that contributes to reducing socio-economic barriers between students.

✓ Recommendations

Not applicable.

The indicator is: fulfilled

Criterion B.4. Accessibility and efficiency of the resources and support services, adequate for learning

Standard S.B.4.1. Access to resources and services

The organizational component provides access to adequate resources and support services, according to the needs of the students.

Indicator
I.P.B.4.1.1

The organizational component provides students, including those with special educational needs/disabilities, with access to resources and services designed to support the learning process, adequate for the individual learning needs, the study domain, the study cycle, and the form of organization of the study programme.

✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

Doctoral students at the Doctoral School of Chemistry - UAIC have access to adequate educational and research resources (<https://www.chem.uaic.ro/ro/scoala-doctorala/resurse-sd.html>), such as:

- scientific libraries and databases;
- research infrastructure;
- career counseling and guidance services.

Academic and research infrastructure, as well as institutional logistic resources (accommodations, student restaurants, etc.), are accessible for the PhD students from the Doctoral School (see REI pg. 33-34).

UAIC provides access to academic databases including ANELIS PLUS platform, the Central University Library, the Turnitin Platform, similarity verification, and the institutional eSIMS electronic catalog. Doctoral students benefit from institutional e-mail accounts, internet access, medical services, etc. Doctoral students may access research infrastructure within the research centers like RECENT AIR and CERNESIM (<https://www.chem.uaic.ro/ro/scoala-doctorala/resurse-logistice-cercetare-sd.html>). The PhD students are included in the research centers and groups which act in the Faculty of Chemistry – UAIC (<https://www.chem.uaic.ro/ro/cercetare/grupuri.html>). The important research centers are: Chemistry of Environmental Systems, Aerosols and Modeling for Climate and Health (ESCAM – CH); Coordinating Compounds and Inorganic Materials (CCIM); Chemistry of Heterocycles Applied in Nanosciences and Environment (HETNANMED); Supramolecular Compounds and Flavonoids with Biological Properties; peptide and Protein Biochemistry Research Group. Enzymology and Toxicology, The financial resources are assured by amounts from the doctoral grants, Ministry-funded scholarships, UAIC-funded scholarships (approved by Senate Decisions and specific financial support contracts), and additional funding opportunities through research projects (see REI pg. 34). Access to financial



resources is procedurally transparent, as shown in the REI and on the institutional website (<https://www.chem.uaic.ro/ro/scoala-doctorala/resurse-financiare-sd.html#smeResurseFinanciare>).

- ✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analyzed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The analysis of the current situation shows that the available resources (<https://www.chem.uaic.ro/ro/scoala-doctorala/resurse-sd.html>) contribute to the efficient conduct of learning and research activities, supporting the professional development of doctoral students.

During the visit, facilities for people with disabilities were identified, such as the existence of an elevator and special toilets. All these facilities are also present in the modern research spaces (e.g. the RECENT AIR platform). Suggestions for improving the activity are:

- expanding access to digital resources;
- developing academic support services;
- improving the infrastructure dedicated to students.

- ✓ Recommendations

Not applicable.

The indicator is: fulfilled

Criterion B.5. Learning outcomes

Standard S.B.5.1. Definition and evaluation

Learning outcomes are adequately defined and evaluated.

Indicator I.P.B.5.1.1	Learning outcomes are adequately described, and they support understanding of the students' and teachers' expectations regarding the content of the subject matters in the curriculum.
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- ✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

Learning outcomes are clearly defined and are assessed periodically through:

- exams within the training programs; • research reports; • evaluation of the doctoral thesis.

The doctoral program study in chemistry included two main components (training PPUA and scientific PCS) and a complementary one (ACS), all contributing to the professional and personal development of doctoral students. For each component, learning outcomes are clearly formulated in the Curriculum designed for the 2026-2030 series (<https://www.chem.uaic.ro/ro/scoala-doctorala/plan-invatamant-sd.html#Plan-Proiectat-2026-2030>), thus enabling appropriate evaluation and transparency of expectations (REI pg 35).

The doctoral study program in the field of Chemistry is implemented based on structured documentation including Curriculum, Syllabus, documented learning outcomes for PPUA component, learning outcomes for PCS component, information related to ACS component, including the Individual Presentation Sheet of Results and Credits, (<https://www.chem.uaic.ro/ro/scoala-doctorala/rapoarte-sd.html>) documentation regarding the completion of doctoral studies through the public defense of the doctoral thesis (<https://www.chem.uaic.ro/ro/scoala-doctorala/sustinere-teze-sd.html>).

- ✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analyzed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The analysis of the current situation shows that the evaluation system is coherent and ensures the verification of the achievement of the targeted competencies, contributing to the quality of the educational process.

During the visit to DS Chem, the staff presented the evaluation methodologies for each part of the doctoral program. It was mentioned that all information is accessible to the students on the doctoral school website and that all requests from the doctoral program are included in the doctoral study contract that the student signs. It was requested by the panel members that the link or a model contract,



and respectively an evaluation certificate for the PCS plan, be sent to the ARACIS panel, to support this information (additional links/pdf documents are accessible in the annexes). The doctoral students present at the specific meeting confirmed the above.

✓ **Recommendations**

Not applicable.

The indicator is: fulfilled

Indicator I.P.B.5.1.2	Achievement of the learning outcomes is checked in ongoing examinations and study completion exams.
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✓ **Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)**

From the analysis of REI and the institutional sites it can be observed that the doctoral study program in the field of Chemistry, organized within SD Chem at IOSUD-UAIC, requires the successful completion of the three curricular components: PPUA, PCS, and ASC. Completion of the doctoral degree program is certified through the public defense of the doctoral thesis.

PPUA program is evaluated at the end of the first semester of the first year of doctoral studies. The module is completed upon passing all subjects included in the Individual Advanced University Preparation Plan. The assessment is carried out through colloquium-type examinations (C). A total of 30 ECTS credits are allocated to the PPUA.

PCS program is carried out progressively, as follows:

- Evaluation of Research Report 1 (Scientific Research Project) by the end of the second semester of the first year,
- Evaluation of Research Report 2 by the end of the fourth semester (second year),
- Evaluation of Research Report 3 by the end of the sixth semester (third year),
- Evaluation of Research Report 4 by the end of the seventh semester (fourth year). This evaluation also includes the pre-defense of the thesis.

Validation of each research report occurs only if all members of academic guidance and integrity commission record and assume the qualification *Satisfactory* in the official Minutes of the defense. The obtaining at least the *Satisfactory* qualification guarantees the allocation of the corresponding ECTS credits.

The complementary program ACS is awarded with additional ECTS credits. Doctoral students must obtain results corresponding to at least 90 ECTS credits within this component. (See REI pg. 35-36).

The completion of doctoral studies through the public defense of the doctoral thesis involves the assessment of the doctoral thesis at the pre-defense stage by the members of the Academic Guidance and Integrity Committee, and the evaluation conducted during the public defense before a Doctoral Committee appointed by Decision of the UAIC Rector. The evaluation of doctoral theses is carried out in accordance with the Minimum National Standards for awarding the doctoral degree, as established by CNATDCU, for the doctoral field of Chemistry and approved by Ministerial Order. The doctoral thesis does not have allocated ECTS credits; its successful defense results in the award of the doctoral degree.

✓ **Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analyzed performance indicator, to justify judgement on the extent to which the indicator was fulfilled**

The Analysis of the state of facts revealed that the SD Chem IOSUD-UAIC ensures rigorous verification of the achievement of learning outcomes by a complete evaluation of each part of the doctoral formation program culminating with the public defense of the doctoral thesis. An updated list of the grades obtained by doctoral students enrolled at DS Chem UAIC confirms the rigor of the evaluation process and the transparency of information, in compliance with the GDPR (https://www.chem.uaic.ro/files/file/2025-2026/scoala-doctorala/sme-pcs/Formular%20DP_PCS_06_SSDC_situatie%20statistica%20penru%20distributie%20calificative%20la%20sustinerea%20Rapoartelor%20de%20cercetare%20si%20a%20tezei.pdf).



✓ Recommendations

Not applicable.

The indicator is: fulfilled

Criterion B.7. Procedures and practices regarding the admission competition, the journey, recognition and equivalence of studies, and result certification

Standard S.B.7.1. Admission

The admission procedures and principles ensure access to higher education.

Indicator
I.P.B.7.1.1

The organizational component applies the admission procedures.

✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The admission at the SD Chem IOSUD-UAIC is organized in agreement with the institutional rules.

The guides are available at the links: <https://www.chem.uaic.ro/ro/scoala-doctorala/reg-admitere-sd.html>; <https://www.chem.uaic.ro/ro/scoala-doctorala/admitere-sd-chem.html>. Admission to the doctoral study program in the field of Chemistry is conducted in compliance with the principles of equity and equal opportunities, through a transparent and competitive process designed to ensure diversity within the school's academic community. All the information regarding the admission process is disponible at the link: <https://www.chem.uaic.ro/ro/doctorat-2/admitere-doctorat-2025.html> The content of the data included at the link mentioned is described in REI pg. 37. SD Chem IOSUD-UAIC ensures full access to information and administrative support throughout the registration process via School's Secretary.

The Study Contracts (https://www.chem.uaic.ro/files/File/2025-2026/doctorat/contract-de-studii-doctorat-2025/chimia-a-2_contract-studii-doctorale-seria-2025-2029.pdf) includes identification data of IOSUD and the doctoral school, doctoral student identification data and field of study, type of doctorate, form of education, funding form, monthly scholarship, amount or tuition fee, duration of studies, research topic, language of instruction and thesis language, minimum and mandatory academic standards, deadline for completion, conditions for changing the doctoral supervisor, conditions for contract termination, personal data protection provisions (as described in REI pg. 37).

✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analyzed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The Analysis of the state of facts revealed that entire admission procedure is transparently organized. The admission to doctoral studies in the field of Chemistry at SD Chem within IOSUD-UAIC is conducted in full compliance with the Institutional Regulations. During the on-site visit, in discussions with the director of the Doctoral School, we were presented with the unit's new website, which includes all the information necessary for candidates for the admission process (<https://www.chem.uaic.ro/ro/doctorat-2/admitere-doctorat-2026.html>).

The school ensures transparent procedures, non-discriminatory evaluation criteria, and systematic monitoring of admission indicators through its internally developed SME. Admitted candidates formalize their enrollment through Doctoral University Study Contracts publicly available in template form.

✓ Recommendations

Not applicable.

The indicator is: fulfilled

Indicator
I.P.B.7.1.2

Admission in higher education study programmes complies with the principles of fairness and equal opportunities, and with the establishing of support measures to ensure access of vulnerable groups at social and educational risk, including candidates with special educational needs and/or disabilities.

✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)



For candidates with special educational needs and/or disabilities, SD Chem facilitates, upon request and within institutional regulations, reasonable accommodations in collaboration with the relevant UAIC structures (e.g., accessibility arrangements, scheduling adjustments, logistical support). For vulnerable socio-economic candidate categories, SD Chem provides guidance regarding available funding options (budgeted places, scholarships, institutional support mechanisms) and guarantees equal treatment in evaluation, based exclusively on transparent and uniformly applied criteria (REI pg. 38). Transparency of the admission process is ensured by publishing comprehensive information on the SD Chem website for each admission session (see the information for academic year 2025-2026 at <https://www.chem.uaic.ro/ro/doctorat-2/admitere-doctorat-2025.html>).

- ✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analyzed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The Analysis of the state of facts revealed that the admission to the doctoral program at SD Chem IOSUD-UAIC are guided by the principles of equity and equality. The entire admission procedure is transparently organized. The web page for the 2026 admission is accessible and contains all the necessary regulations (<https://www.chem.uaic.ro/ro/doctorat-2/admitere-doctorat-2026.html>).

- ✓ Recommendations

Not applicable.

The indicator is: fulfilled

Standard S.B.7.2. Academic journey of students	
The organizational component carries out actions supporting the students' academic journey.	
Indicator I.P.B.7.2.1	The organizational component applies the regulations concerning the students' professional activity.

- ✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The academic progress of doctoral students is systematically monitored through periodic assessments and the use of institutional academic management tools (see <https://www.chem.uaic.ro/ro/scoala-doctorala/domeniu-program-sd.html> and REI pg. 40-41)

PhD students enrolled in the SD-Chem IOSUD-UAIC are expected to acquire advanced research competencies and transferable skills while fulfilling all obligations established in their doctoral study contracts. They are responsible for conducting original, high-quality research and developing the expertise required to become independent and competent researchers. Key aspects of the doctoral program include:

- Development of Independent Researchers: The main objective is to prepare doctoral students to contribute to their research fields through independent scientific work.

- Supportive Research Environment: Recognizing the challenges inherent in doctoral research, SD Chem is committed to providing appropriate working conditions, access to research infrastructure, and support for student well-being.

- Shared Responsibilities: doctoral supervisors, members of the Guidance and Academic Integrity Committees, and doctoral students all share responsibility for ensuring successful research progress and academic development.

- Research Resources and Opportunities: Students receive access to research facilities, scientific infrastructure, training opportunities, and conference participation.

- Supervision and Mentoring: Doctoral supervisors meet regularly with students to plan, monitor, and evaluate research progress.

- Committee Support: Members of the Guidance and Academic Integrity Committees maintain regular formal and informal interactions with doctoral students to provide feedback and support.

- Transferable Skills Training (PPUA): Students obtain 30 ECTS credits through training courses



-Research Progress Evaluation (PCS): Research reports evaluated by the Guidance and Academic Integrity Committees contribute 120 ECTS credits to the doctoral program.

-Additional Scientific Achievements (ASC): High-quality research outcomes, achieved through effective collaboration between students and supervisors, contributing 90 ECTS credits.

-Scientific Integrity: SD Chem emphasizes ethical research practices, including responsible authorship, similarity checks, proper data management, and adherence to ethical review procedures.

Open Communication and Problem-Solving: Students are encouraged to maintain open dialogue with supervisors and committee members. Career Development Support: Doctoral students benefited from participation in the UAIC project "Educational and Training Support for Doctoral Students and Young Researchers" which supported professional development and employability through research commercialization initiatives. Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analyzed performance indicator, to justify judgement on the extent to which the indicator was fulfilled.

- ✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The Analysis of the state of facts revealed that SD Chem consistently applies regulations governing the professional activity of doctoral students in the Chemistry doctoral program.

Future Direction: The school aims to strengthen a culture of responsibility, collegiality, open communication, and shared commitment among doctoral students, supervisors, and academic mentors in order to ensure high-quality mentoring throughout the doctoral journey.

- ✓ Recommendations

It is recommended to establish procedures for doctoral students' access to research infrastructure for all research centers/laboratories, as part of the student-centered educational policy, which represents a major mission of UAIC.

The indicator is: fulfilled

Criterion B.8. Internationalization process

Standard S.B.8.1. Internationalization

Improving the quality of education and research through internationalization actions.

Indicator I.P.B.8.1.1	The organizational component carries out international cooperation actions supporting mobility of the members of its own community and collaboration in academic and research activities.
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- ✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The "Alexandru Ioan Cuza" University of Iași (UAIC) has established and implemented a comprehensive framework for international cooperation, primarily through the Erasmus+ Program, which supports the mobility of students, doctoral candidates, academic staff, and researchers while fostering international academic and research collaborations.

UAIC actively promotes international academic cooperation through Erasmus+ initiatives. This program facilitates: Student and staff mobility; Academic collaboration with international partner institutions; Joint research activities; Professional and personal development opportunities for university staff. SD Chem has prioritized the invitation of internationally recognized experts from leading universities, research institutes, and industry organizations (see REI pg.42). These experts have delivered: Scientific lectures; Specialized seminars; Short course modules for doctoral students; Presentations on recent advances in cutting-edge research areas.

- ✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled



The Analysis of the state of facts revealed that SD Chem UAIC maintains an active international cooperation strategy that supports mobility and collaborative academic and research activities. SD Chem effectively promotes international partnerships and visiting scholar opportunities to expose doctoral students to emerging scientific discoveries, advanced research methodologies, international academic perspectives, high-impact research topics etc (<https://www.chem.uaic.ro/ro/scoala-doctorala/internationalizare-colaborari-sd.html>).

✓ **Recommendations**

Not applicable.

The indicator is: fulfilled

Criterion B.9. Scientific research results

Standard S.B.9.1 Scientific research in the education process Scientific research activities support students in achieving the learning outcomes.	
Indicator I.P.B.9.1.1	Learning based on scientific investigation and research results support and are capitalized upon in achieving the learning outcomes envisaged through the study programme.

✓ **Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)**

The doctoral supervisors affiliated with the Chemistry Doctoral School (SD Chem) within IOSUD-UAIC <https://www.chem.uaic.ro/ro/scoala-doctorala/conducatori-doctorat.html#ConducatoriTitulari> conduct scientific research in areas directly related to the disciplines included in the doctoral curriculum. Their research activities constitute a fundamental component of doctoral training and are systematically incorporated into the learning and research activities of doctoral candidates. Doctoral supervisors maintain active research programs within the scientific field of Chemistry.

Their research outputs are documented through curriculum vitae and publication lists, research results reporting files, scientific publications, projects, research achievements etc.

The research activities cover topics aligned with the scientific scope of the doctoral field and reflect current national and international research trends.

Doctoral candidates are integrated into supervisors' research projects through an inquiry-based learning model, contributing to experimental investigations and scientific advancements while developing advanced research competencies and professional skills <https://www.chem.uaic.ro/ro/scoala-doctorala/rapoarte-sd.html#RapoarteSD>. This collaboration generates mutual benefits, including research progress, joint publications, and co-authored scientific outputs.

Research results are systematically incorporated into the doctoral training process, supporting the achievement of program learning outcomes and ensuring the relevance of doctoral education to current developments in Chemistry (REI pg. 43).

✓ **Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analyzed performance indicator, to justify judgement on the extent to which the indicator was fulfilled**

The Analysis of the state of facts revealed that research conducted by doctoral supervisors is effectively integrated into doctoral training and contributes significantly to students' academic and research development. DS Chem will continue to monitor the research performance of doctoral supervisors and the progress of doctoral candidates to maintain and enhance the quality of research-based doctoral education.

During the meeting with the doctoral supervisors, the minimum criteria for defending the doctoral thesis were discussed, which in certain situations can put pressure on the doctoral student (writing and publishing articles during the internship reduces the time dedicated to training as a researcher and advancing the research itself). DS Chem recognizes and rewards valuable scientific results through internal grants and by awarding prizes to doctoral students <https://www.chem.uaic.ro/ro/scoala-doctorala/excelenta-sd-chem.html>.



✓ Recommendations

Not applicable.

The indicator is: fulfilled

Standard S.B.9.2. Scientific research pertaining to the objectives of the study programme
The organizational component carries out scientific research activities aligned with the objectives of the evaluated study programme.

Indicator I.P.B.9.2.1	The results of scientific research are visible at national and international level in that scientific domain, and capitalized upon in an adequate manner.
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✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The Chemistry Doctoral School IOSUD-UAIC, conducts scientific research activities fully aligned with the objectives of the doctoral program in Chemistry. Research results generated by doctoral supervisors and doctoral candidates demonstrate strong national and international visibility through recognized academic platforms, including ORCID, ResearchGate, Web of Science (WoS), and Scopus.

Doctoral students are actively involved in research projects, scientific publications, conference presentations, and experimental activities, with many research outputs published in internationally indexed journals, particularly in WoS Q1 and Q2 journals. Doctoral research topics are closely connected to national and international research projects led by supervisors.

SD Chem also promotes scientific dissemination through the annual conference "Chemistry – An Open Frontier to Knowledge", where doctoral students contribute through presentations and organizational activities. Additional opportunities for research collaboration and professional development are provided through UAIC research centers such as RECENT AIR and CERNESIM, which facilitate interaction between doctoral students, researchers, and the wider academic community (see REI pg. 44).

✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analyzed performance indicator, to justify judgement on the extent to which the indicator was

The Analysis of the state of facts revealed that the research outcomes produced within SD Chem are highly visible both nationally and internationally, and are effectively exploited through high-quality publications, conference contributions, and research collaborations.

SD Chem IOSUD-UAIC will continue encouraging publication in highly ranked international journals and strengthen national and international research collaborations to further enhance the school's scientific visibility, reputation, and impact.

✓ Aspects that constitute best practice examples

UAIC awards published articles based on the prestige of the journal. The authors of the publication can use the grant for professional development. This recognition of prestige through internal grants is also an example of **good practice**.

✓ Recommendations

Not applicable.

The indicator is: fulfilled

DOMAIN C. Quality management

Criterion C.1. Quality assurance strategies and procedures, including in the field of academic ethics and conduct, which involve students, employers and other stakeholders and are applied in a consistent, transparent manner

Standard S.C.1.1. Application

Adequately implemented strategic directions, actions, and procedures

Indicator I.P.C.1.1.1	The organizational component consistently carries out actions and applies procedures, proving their impact on improving the quality of education at the level of the study programme
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- ✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The Doctoral School of Chemistry (SD Chem) within IOSUD-UAIC underwent its most recent external evaluation by ARACIS in 2021. The recommendations resulting from the external evaluation and subsequent progress monitoring highlighted the need to strengthen and optimize the school's internal management and quality assurance framework. In response, beginning in 2025, the school developed and implemented an Effective Management System (SME), integrated into the institutional governance structure and based on clearly defined workflows and responsibilities. The SME is publicly available through the School's website, ensuring transparency and accessibility for internal and external stakeholders. The system encompasses key areas such as organizational structure, quality assurance and evaluation processes, stakeholder satisfaction assessment, compliance with academic ethics and deontology, and the implementation of institutional procedures and operational guidelines.

- ✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The implementation of the Effective Management System (SME) demonstrates a systematic and coherent approach to quality assurance at the level of the doctoral programme. By establishing clear procedures, responsibilities, and monitoring mechanisms, the DS School has strengthened institutional oversight and improved the effectiveness of its educational and research activities. The SME contributes to enhancing the quality of doctoral training, increasing the scientific performance of doctoral research, aligning research topics with strategic priorities, and promoting greater transparency in decision-making. The continuous monitoring of the system and the planned integration of administrative and digital records further support the sustainability and effectiveness of quality assurance processes. These outcomes indicate that the organizational component consistently applies its procedures and that their implementation has a measurable impact on improving the quality of education, thereby fulfilling the requirements of the analyzed performance indicator.

- ✓ Recommendations

Not applicable.

The indicator is: fulfilled.

Standard S.C.1.2. Stakeholder engagement

The HEI proves that it engages the stakeholders who have relevant activity in applying the procedures.

Indicator I.P.C.1.2.1	The opinions of the members of its own community and of other stakeholders are taken into account in the procedure implementation process.
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- ✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The Doctoral School of Chemistry (SD Chem) within IOSUD-UAIC actively involves members of its academic community and external stakeholders in the development, implementation, and monitoring of institutional procedures. Through its Effective Management System (SME), the SD School has established dedicated instruments for recording decisions, monitoring activities, and facilitating stakeholder participation. These tools support the involvement of doctoral supervisors, doctoral students, and members of the School Council in quality assurance and decision-making processes. The SME also includes mechanisms for monitoring key indicators related to admissions, doctoral progress, thesis completion, academic integrity, and research performance. Communication with stakeholders is organized according to institutional governance structures and extends to external partners, including public institutions, industry representatives, funding organizations, and members of the wider community.

- ✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analyzed performance indicator, to justify judgement on the extent to which the indicator was fulfilled



The evidence demonstrates that stakeholder participation is an integral component of the school's quality assurance framework. The use of structured consultation and monitoring instruments ensures that the views of doctoral supervisors, doctoral students, and external partners are systematically considered when implementing procedures and improvement measures. The involvement of stakeholders with relevant expertise contributes to informed decision-making and supports the continuous adaptation of the Effective Management System to emerging needs and challenges. Furthermore, the existence of formal communication channels and collaborative mechanisms strengthens transparency, inclusiveness, and accountability within the doctoral programme. These practices confirm that stakeholder opinions are effectively incorporated into the implementation of procedures, demonstrating compliance with the analyzed performance indicator.

From the meetings organized on-site with various stakeholders (employers, alumni) it results that occasionally events are organized in which they participate but there is no institutionalized procedure for consulting them in the development of various educational policies (see minutes in annexes).

✓ **Recommendations**

A collaboration between various stakeholders (employers, graduates) and DS Chem is recommended, including providing students with practical skills, in collaboration with various industrial companies in the region (only representatives from education and research institutes were present at the meeting with employers).

The indicator is: fulfilled.

Criterion C.2. Functionality of education quality assurance structures, including in the field of academic ethics and conduct, according to the law

Standard S.C.2.2. Operation	
Quality assurance and academic ethics and conduct organisational structures adequately perform their specific role and functions.	
Indicator I.P.C.2.2.2.	The academic ethics commission operates based on the regulation approved by the University Senate, and performs actions that are compliant with the law, independently from any other structure or person in the higher education institution.

✓ **Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)**

The Alexandru Ioan Cuza University of Iași (UAIC) has established a comprehensive framework for university ethics and deontology through the Code of Ethics and University Deontology, which forms an integral part of the University Charter. The University Ethics Commission operates under regulations approved by the University Senate and functions independently, in accordance with legal requirements. Its activities are documented through annual public reports. Within the Doctoral School of Chemistry (SD Chem), educational and research activities are conducted in accordance with institutional values promoting excellence, integrity, and responsible academic conduct. The school applies specific procedures for monitoring compliance with ethics and academic integrity standards, including the verification of similarity indices for doctoral theses and scientific outputs. In addition, Academic Guidance and Integrity Commissions support doctoral students throughout their academic development and ensure adherence to ethical principles. SD Chem also aligns its practices with institutional regulations and the university strategy for preventing plagiarism and safeguarding academic integrity.

✓ **Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled**

The institutional framework demonstrates that ethics and deontology structures operate effectively and independently, supported by clear regulations, transparent reporting, and established monitoring mechanisms. The integration of ethics and integrity requirements into doctoral education, combined with preventive measures such as similarity checks and dedicated integrity procedures, contributes to maintaining high academic standards. The involvement of Academic Guidance and Integrity Commissions further strengthens the ethical culture of the doctoral programme by providing continuous

support and oversight. The absence of cases requiring intervention by the Ethics Commission within the Doctoral School reflects the effectiveness of the preventive and educational measures implemented. These elements confirm that the Ethics Commission and related structures adequately fulfil their roles and responsibilities in compliance with legal and institutional requirements, demonstrating fulfilment of the analyzed performance indicator. The meeting with the representatives of the ethics commission confirms the data entered in the REI.

✓ **Recommendations**

Not applicable.

The indicator is: fulfilled.

Criterion C.3. Procedures for the initiation, monitoring and periodic review of the study programmes and domains and of the performed activities, involving students, employers and other stakeholders

Standard S.C.3.1. Procedures and implementation of procedures	
The HEI has procedures for initiating, monitoring, and periodically reviewing the study programmes and domains and the performed activities, and applies them systematically.	
Indicator I.P.C.3.1.1	The organizational component consistently applies the procedures, and proves their impact on quality assurance.

✓ **Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)**

The Alexandru Ioan Cuza University of Iași (UAIC) has established and periodically updates regulations and procedures governing the initiation, monitoring, and evaluation of study programmes, including doctoral programmes and doctoral fields of study. These regulations are complemented by operational procedures dedicated to the internal evaluation and monitoring of doctoral schools. At the institutional level, quality assurance activities are coordinated by the Quality Evaluation and Assurance Commission (CEAC), supported by corresponding structures at the faculty, doctoral school, and research Centre levels. Within the Doctoral School of Chemistry (SD Chem), dedicated quality assurance commissions operate under the authority of the School Council and contribute to the monitoring and evaluation of academic activities. The school prepares annual activity reports and systematically applies institutional quality assurance procedures. In addition, SD Chem has developed its own Effective Management System (SME), designed to support the efficient management and monitoring of all educational, research, and administrative processes.

✓ **Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analyzed performance indicator, to justify judgement on the extent to which the indicator was fulfilled**

The evidence demonstrates that procedures for the monitoring and periodic evaluation of doctoral programmes are implemented consistently and integrated into the school's quality assurance framework. The existence of dedicated quality assurance structures, regular reporting practices, and alignment with institutional regulations ensures continuous oversight of programme performance and compliance with quality standards. The introduction of the Effective Management System has further strengthened monitoring mechanisms, enhanced organizational efficiency, and improved transparency in academic and administrative activities. Moreover, the ongoing digitization of quality assurance processes facilitates traceability, accountability, and collaboration both within the school and with external partners. These measures illustrate a systematic approach to quality assurance and demonstrate the positive impact of implemented procedures on the continuous improvement of the doctoral programmed, thereby fulfilling the requirements of the analyzed performance indicator. The meeting with the representatives of CEAC commission confirms the data entered in the REI. All SD Chem members are involved in the quality assurance process. In the on-site meeting with the students, it was confirmed that the proposals and requests of the doctoral students are considered (see the minutes in the appendix).

✓ **Recommendations**



Not applicable.

The indicator is: fulfilled.

Indicator I.P.C.3.1.2	Members of its own community and other stakeholders are involved in the procedure implementation process.
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- ✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The Doctoral School of Chemistry (SD Chem) within IOSUD-UAIC actively involves members of the academic community in the implementation of quality assurance procedures related to the doctoral study programme. To support these activities, the school maintains a dedicated Quality Control and Assurance section on its website, which provides access to quality assurance structures, annual reports, internal evaluation reports, doctoral student satisfaction assessments, ethics and deontology regulations, the Effective Management System (SME), operational procedures, and confidentiality governance mechanisms. Members of the School participate in the implementation of procedures concerning the initiation, monitoring, and periodic review of the doctoral programme. Administrative and quality assurance documentation is managed through both electronic and physical records, ensuring traceability, accountability, and formal validation of information through established verification and approval processes.

- ✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analyzed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The evidence indicates that the implementation of procedures is based on the active participation of the academic community and supported by transparent documentation and monitoring mechanisms. The involvement of doctoral supervisors, doctoral students, and administrative staff in quality assurance activities contributes to the effective application of institutional procedures and promotes shared responsibility for programme quality. The combination of electronic and paper-based document management systems strengthens data reliability and facilitates the verification of information used in decision-making processes. Through the annual implementation of institutional procedures and the continuous engagement of relevant stakeholders, the school ensures the consistent operation of its quality assurance framework and demonstrates compliance with the requirements of the analyzed performance indicator. From the meetings organized on-site with employers, alumni, it results that occasionally events are organized in which they participate but there is no institutionalized procedure for consulting them in the procedure implementation process.

- ✓ Recommendations

Involvement of alumni and potential employers in SD Chem's activity is recommended. Increase stakeholder participation and formal consultation mechanisms in quality assurance processes.

The indicator is: fulfilled

Criterion C.4. Procedures for the periodic evaluation of the quality of the activities of teaching staff, auxiliary teaching staff, and administrative staff

Standard S.C.4.1. Procedures Applying the methodologies and procedures contributes to improving the quality of the staff's activities.	
Indicator I.P.C.4.1.1	The organizational component analyses the results of the students' biannual evaluation of teachers.

- ✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The evaluation of academic staff at the Alexandru Ioan Cuza University of Iași is regulated through institutional provisions concerning the recruitment, evaluation, and promotion of teaching and research personnel. Within the Doctoral School of Chemistry (SD Chem), doctoral students' satisfaction is systematically assessed through dedicated questionnaires that evaluate various aspects of the doctoral experience, including the advanced training programme, scientific research activities, collaboration with



doctoral supervisors, the contribution of Guidance and Academic Integrity Commission members, and interactions with administrative staff. The collected feedback provides information on the quality of academic support, research supervision, and administrative services. The results are periodically centralized and analyzed by the school management in order to identify trends, monitor performance indicators, and detect areas requiring corrective or preventive action.

- ✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analyzed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The systematic collection and analysis of doctoral students' feedback demonstrate a structured approach to evaluating the performance of individuals involved in the doctoral programme. By examining satisfaction levels regarding supervision, academic guidance, and administrative support, the school obtains relevant information for assessing the effectiveness of its educational and research environment. The use of predefined thresholds and trend analyses enables the identification of potential weaknesses and supports evidence-based decision-making aimed at improving performance and service quality. Furthermore, the continuous refinement of the evaluation process reflects the school's commitment to ensuring reliable feedback mechanisms and maintaining a high standard of doctoral education. These practices confirm that the organizational component effectively analyzes evaluation results and uses them to support continuous quality improvement, thereby fulfilling the requirements of the analyzed performance indicator. From the meeting with the CEAC committee it results that all periodic evaluations are reported to the quality committee and included in the committee's annual reports.

- ✓ Recommendations

Not applicable.

The indicator is: fulfilled.

Criterion C.5. Systematically updated databases on internal quality assurance

Standard S.C.5.1. Databases

The HEI uses databases to support internal quality assurance activities.

Indicator I.P.C.5.1.1	The organizational component systematically collects and analyses data required for the internal quality assurance process.
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- ✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The Doctoral School of Chemistry (SD Chem) within IOSUD-UAIC systematically collects and processes information required for internal quality assurance activities. Data are gathered from both doctoral supervisors and doctoral students through standardized monitoring and reporting forms, which serve as the basis for institutional analyses and periodic reports. The collection and management of information are integrated into the School's Effective Management System (SME), which provides structured procedures and work packages for recording, organizing, and evaluating relevant academic and administrative data.

- ✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The use of standardized monitoring and reporting instruments demonstrates a systematic approach to collecting and analyzing information necessary for quality assurance. Through the Effective Management System, the School ensures the consistent generation of data that support performance monitoring, evaluation activities, and evidence-based decision-making. The structured organization of information facilitates the identification of trends, strengths, and areas requiring improvement, thereby contributing to the continuous enhancement of doctoral education and research activities. The ongoing efforts to ensure the reliable digital transfer and consolidation of collected data further strengthen the effectiveness and sustainability of the quality assurance process, demonstrating fulfilment of the analyzed performance indicator.



✓ Recommendations

Not applicable.

The indicator is: fulfilled.

Criterion C.6. Transparency of information of public interest, including those regarding the study programmes and domains offered, and transparency regarding the related certificates, diplomas and qualifications

Standard S.C.6.1. Transparency

The organisational component ensures transparency of information, as required by the law.

Indicator I.P.C.6.1.1	The organisational component ensures publication and access to information of public interest regarding the evaluated study programme.
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✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The Doctoral School of Chemistry (SD Chem) within IOSUD-UAIC ensures public access to information relevant to its doctoral programme through its institutional website. Information concerning governance, programme organization, academic activities, monitoring processes, reporting mechanisms, and quality assurance is made available in accordance with legal requirements. Through the Effective Management System (SME), the school also disseminates information regarding the implementation of its activities and the management of institutional processes, while ensuring compliance with data protection regulations. In addition, the DS Chem is developing dedicated privacy policies aligned with GDPR requirements to strengthen the protection and management of personal data <https://www.chem.uaic.ro/ro/scoala-doctorala/>.

✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The publication of information through dedicated digital platforms demonstrates a commitment to transparency, accountability, and accessibility. By providing stakeholders with access to information regarding programme governance, quality assurance activities, monitoring procedures, and institutional performance, the school supports informed participation and facilitates public understanding of its educational and research activities. The integration of transparency measures within the Effective Management System, together with ongoing attention to GDPR compliance, ensures an appropriate balance between public access to information and data protection requirements. These practices confirm that the organizational component effectively ensures the publication of and access to information of public interest regarding the doctoral programme, thereby fulfilling the requirements of the analysed performance indicator.

✓ Recommendations

Not applicable.

The indicator is: fulfilled.

Indicator I.P.C.6.1.2	The organisational component ensures transparent decision-making processes.
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✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The Doctoral School of Chemistry (SD Chem) within IOSUD-UAIC maintains a continuously updated website that provides comprehensive information regarding its academic, administrative, and quality assurance activities. The platform offers access to information on the DS Chem organizational structure, regulations, methodologies, procedures, doctoral admissions, thesis and habilitation defenses, research resources, international collaborations, recognition of qualifications, quality assurance activities, doctoral and postdoctoral programmes, and the Effective Management System (SME). In addition, the outcomes of governance and decision-making processes are made publicly available through a dedicated section containing the decisions of the SD Chem Council, ensuring accessibility for members of the academic community and other interested stakeholders.



- ✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The systematic publication of institutional information and governance decisions demonstrates a strong commitment to transparency and accountability. By providing stakeholders with direct access to regulations, procedures, programme-related information, and decisions adopted by the School Council, SD Chem promotes openness in its governance processes and facilitates informed participation in academic life. The integration of decision-making documentation within the Effective Management System enhances traceability and allows stakeholders to follow the implementation of institutional actions and policies. The continuous updating of publicly available information further supports transparency and ensures that relevant information remains accurate and accessible. These measures demonstrate that the organizational component effectively ensures transparency in decision-making processes, thereby fulfilling the requirements of the analyzed performance indicator. Decisional transparency was also confirmed in discussions with all those involved (meeting with Staff, meeting with Students, etc. see minutes in the annex).

- ✓ Recommendations

Not applicable.

The indicator is: fulfilled.

Criterion C.8. Participation in external evaluation processes, according to the law

Standard S.C.8.1. Compliance with the external evaluation obligation The HEI undergoes external quality evaluation as required by the law.	
Indicator I.P.C.8.1.1	The organizational component carries out the procedures pertaining to the external quality evaluation process, aiming to organize the evaluated study programme as provided by the law.

- ✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The Doctoral School of Chemistry (SD Chem) within IOSUD-UAIC participates in external quality assurance processes in accordance with national regulations governing doctoral education. As part of these procedures, the school publishes annual activity reports and internal evaluation reports within the Quality Control and Assurance section of its website. These documents constitute essential components of the quality assurance framework and serve as preparatory instruments for external evaluations. The doctoral study programme in Chemistry most recently underwent external quality assessment in 2021, in compliance with the requirements established by the national quality assurance framework.

- ✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analyzed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The evidence demonstrates that SD Chem systematically implements the procedures required for external quality evaluation and integrates them into its internal quality assurance processes. The preparation and publication of annual reports and internal evaluation documents ensure transparency, facilitate institutional self-assessment, and provide the necessary evidence for external review. By aligning its activities with national accreditation requirements and maintaining continuous readiness for evaluation, the SD Chem supports the lawful organization and continuous improvement of the doctoral program. The commitment to preparing future internal evaluation reports in accordance with ARACIS standards further reflects a proactive approach to quality assurance and regulatory compliance. These practices demonstrate that the organizational component effectively carries out the procedures associated with external quality assessment, thereby fulfilling the requirements of the analyzed performance indicator.

During the on-site meetings with the director of the doctoral school and the CEAC representatives, the implementation of the requests from the previous ARACIS visit was discussed. The implementation

report was presented, and the link to the website where this report is published is highlighted in the annex to the REE.

✓ **Recommendations**

Not applicable.

The indicator is: fulfilled.

IV. SWOT Analysis

Strengths: Long-standing academic tradition and strong institutional reputation of UAIC. Fully accredited doctoral study domain. Implementation of the Effective Management System (SME), representing good practice in quality assurance and academic management. Professional doctoral supervisors covering all major areas of Chemistry. Appropriate research infrastructure, including high modern CERNESIM and RECENT AIR platforms. High visibility of scientific research through publications, conferences and research projects. Strong commitment to academic integrity and institutional transparency. Modernized doctoral school website ensuring broad access to information and procedures. Good integration of doctoral students into research groups and scientific activities.	INTERNAL FACTORS ↻	Weaknesses: Limited formal involvement of employers and industrial partners in doctoral program development and evaluation. Doctoral students' access procedures to research infrastructure are not yet fully harmonized across all laboratories and research centers. International mobility participation could be increased. External stakeholder feedback is not systematically integrated into all quality assurance processes. Publication requirements may create pressure on doctoral students and reduce time dedicated to research development.
SWOT analysis		
Opportunities: Expansion of partnerships with industry, particularly in chemistry-related sectors. Increased participation in European research programs and international research networks. Development of interdisciplinary doctoral research addressing societal challenges in health, environment, climate change and advanced materials. Growth of international mobility opportunities through Erasmus+ and other cooperation programs. Attraction of international doctoral students through English-language resources and	EXTERNAL FACTORS	Threats: Possible reduction of national funding for higher education and research. Increased competition from national and international doctoral schools. Brain drains of young researchers and highly qualified graduates. Demographic decline affects the number of potential doctoral candidates. Rapid technological changes require continuous investments in research infrastructure. Legislative and regulatory changes



international collaborations. Access to European and international funding programs supporting research and doctoral education. Further digitalization of doctoral education and quality assurance processes.		may affect doctoral studies and research activities. Economic instability influences research funding and international mobilities.
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V. Extent to which the standards and performance indicators are fulfilled, and recommendations

No.	Performance Indicator	Extent to which it was fulfilled (F/PF/UF)	Recommendations
DOMAIN A. Institutional capacity			
1.	I.P.A.1.1.1 For delivering the study programme/domain, the HEI has adequate organizational components and an adequate management system, which operates based on methodologies, regulations and procedures that are periodically reviewed as required by law.	F	Not applicable.
2.	I.P.A.1.2.1 The opinions of the faculty and department members, of the subsidiary or extension and of other stakeholders are considered in the process of adopting and revising methodologies, regulations and implementation procedures.	F	Develop a periodic stakeholder feedback report that outlines issues raised, actions taken, and implementation status; increase external stakeholder engagement.
3.	I.P.A.2.1.1 The HEI legally owns venues for the related education, research and administrative processes, as well as for services for students, doctoral students and trainees, thus providing an enabling environment for living and studying, including for disabled persons. Optimal venues are also provided for activities of the staff. Such venues are adequately equipped.	F	Periodically publish an updated inventory of major research equipment and accessibility information for teaching and research facilities.
4.	I.P.A.2.2.1 The movable and immovable assets are properly maintained to ensure optimal conditions for studying, living and research, as well as for work.	F	Include maintenance, calibration and sustainability information for major research equipment and infrastructure.
5.	I.P.A.3.1.1 The human resources of the organizational component are suitable to perform the activities pertaining to the evaluated study programme/domain. The teaching staff has the required qualifications and professional competences to teach the subject matters assigned to them in the job list.	F	Not applicable.
6.	I.P.A.3.1.2 The HEI ensures professional and personal development for its staff.	F	Not applicable.
7.	I.P.A.3.2.1 Recruitment procedures comply with the provisions of the law, and are established and carried out transparently.	F	Not applicable.



THE ROMANIAN AGENCY FOR QUALITY ASSURANCE IN HIGHER EDUCATION

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No.	Performance Indicator	Extent to which it was fulfilled (F/PF/UF)	Recommendations
8.	I.P.A.4.1.1 The organizational component uses IT tools in its own procedures, to improve access and provide good quality services for the members of its own community and the indirect beneficiaries of education.	F	Monitor digital services through user feedback and website analytics and include results in annual quality reports.
DOMAIN B. Educational efficacy			
9.	I.P.B.1.1.1 The study programme is developed and structured according to the expected learning outcomes, and organized based on transferable study credits. It includes all learning, teaching, practical training, research and evaluation experiences, which, together, lead to a higher education qualification.	F	Not applicable.
10.	I.P.B.2.1.2 The expected learning outcomes are correlated with the competences required by those occupations, according to the occupational standards and/or the European Skills, Competences and Occupations (ESCO).	F	Further integrate graduate and employer feedback in curriculum development and competency review.
11.	I.P.B.3.1.1 The organizational component ensures implementation of the student-centred learning in the curriculum and through the teaching strategies used in the learning and teaching activities and experiences.	F	Not applicable.
12.	I.P.B.3.1.2 The organizational component ensures opportunities for students to participate in academic mobility programmes organized in person and/or virtually.	F	Not applicable.
13.	I.P.B.3.2.1 The organizational component provides fair opportunities for students, in line with their potential and aspirations, taking into account the diversity of learning styles and abilities.	F	Not applicable.
14.	I.P.B.4.1.1 The organizational component provides students, including those with special educational needs/disabilities, with access to resources and services designed to support the learning process, adequate for the individual learning needs, the study domain, the study cycle, and the form of organization of the study programme.	F	Not applicable.
15.	I.P.B.5.1.1 Learning outcomes are adequately described, and they support understanding of the students' and teachers' expectations regarding the content of the subject matters in the curriculum.	F	Not applicable.
16.	I.P.B.5.1.2 Achievement of the learning outcomes is checked in ongoing examinations and study completion exams.	F	Not applicable.
17.	I.P.B.7.1.1 The organizational component applies the admission procedures.	F	Not applicable.



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No.	Performance Indicator	Extent to which it was fulfilled (F/PF/UF)	Recommendations
18.	I.P.B.7.1.2 Admission in higher education study programmes complies with the principles of fairness and equal opportunities, and with the establishing of support measures to ensure access of vulnerable groups at social and educational risk, including candidates with special educational needs and/or disabilities.	F	Not applicable.
19.	I.P.B.7.2.1 The organizational component applies the regulations concerning the students' professional activity.	F	Establish procedures regulating doctoral students' access to research infrastructure in all research centers and laboratories.
20.	I.P.B.8.1.1 The organizational component carries out international cooperation actions supporting mobility of the members of its own community and collaboration in academic and research activities.	F	Not applicable.
21.	I.P.B.9.1.1 Learning based on scientific investigation and research results support and are capitalized upon in achieving the learning outcomes envisaged through the study programme.	F	Not applicable.
22.	I.P.B.9.2.1 The results of scientific research are visible at national and international level in that scientific domain, and capitalized upon in an adequate manner.	F	Not applicable.
DOMAIN C. Quality management			
23.	I.P.C.1.1.1 The organizational component consistently applies the procedures, and proves their impact on quality assurance.	F	Not applicable.
24.	I.P.C.1.2.1 The opinions of the members of its own community and of other stakeholders are taken into account in the procedure implementation process.	F	Strengthen collaboration with employers and graduates, particularly with industrial partners, for the development of doctoral students' practical skills.
25.	I.P.C.2.2.2. The academic ethics commission operates based on the regulation approved by the University Senate, and performs actions that are compliant with the law, independently from any other structure or person in the higher education institution.	F	Not applicable.
26.	I.P.C.3.1.1 The organizational component consistently applies the procedures and proves their impact on quality assurance.	F	Not applicable.
27.	I.P.C.3.1.2 Members of its own community and other stakeholders are involved in the procedure implementation process.	F	Increase stakeholder participation and formal consultation mechanisms in quality assurance processes.

No.	Performance Indicator	Extent to which it was fulfilled (F/PF/UF)	Recommendations
28.	I.P.C.4.1.1 The organizational component analyses the results of the students' biannual evaluation of teachers.	F	Not applicable.
29.	I.P.C.5.1.1 The organizational component systematically collects and analyses data required for the internal quality assurance process.	F	Not applicable.
30.	I.P.C.6.1.1 The organizational component ensures publication and access to information of public interest regarding the evaluated study programme.	F	Not applicable.
31.	I.P.C.6.1.2 The organizational component ensures transparent decision-making processes.	F	Not applicable.
32.	I.P.C.8.1.1 The organizational component carries out the procedures pertaining to the external quality evaluation process, aiming to organize the evaluated study programme as provided by the law.	F	Not applicable.

Summary Table of Performance Indicators – Degree of Fulfillment

Evaluation Domain	Number of Performance Indicators		
	Fulfilled	Partially fulfilled	Unfulfilled
Domain A. Institutional capacity	Fulfilled 8 indicators	-	-
Domain B. Educational efficacy	Fulfilled 14 indicators	-	-
Domain C. Quality management	Fulfilled 10 indicators	-	-
Total	Fulfilled 32 indicators	-	-

Other, general recommendations that were not given within the analysis of a specific performance indicator can be presented here.

Sum up the number of analyzed performance indicators, and specify how many were assessed as fulfilled, partially fulfilled, and unfulfilled, if any.

VI. Conclusions

A number of important aspects noted during the evaluation are reiterated here, and general conclusions are made about the quality of education delivered within the evaluated doctoral study domain.

The external ARACIS evaluation of the Doctoral Study Domain in Chemistry within the Doctoral School of Chemistry of IOSUD – Alexandru Ioan Cuza University of Iași demonstrates that the domain has reached a high level of institutional maturity, educational effectiveness, and quality assurance.

The evaluation confirms the existence of a coherent governance structure, supported by transparent regulations and a quality culture embedded at all organizational levels. The Effective Management System (SME) implemented by the doctoral school represents an example of good practice, ensuring systematic monitoring of educational, research, administrative, and quality assurance activities.



The doctoral study program is well structured with the expected learning outcomes and supported by qualified doctoral supervisors whose scientific expertise covers the major branches of chemistry. The research environment provides doctoral students with access to modern infrastructures, advanced laboratories, and internationally visible research groups. Scientific outputs generated within the doctoral domain demonstrate strong national and international visibility through publications, conferences, research projects, and academic collaborations.

The discussions held during the site visit confirmed the positive academic climate, student-centered approach, high accessibility of information, and active involvement of doctoral students in research activities. Stakeholders, doctoral students, graduates, and academic staff expressed a high level of satisfaction regarding the educational and research opportunities provided by the doctoral school.

Several opportunities (recommendations) for further development of SD Chem have also been identified. These include strengthening collaborations with stakeholders especially with the industrial sector, increasing doctoral student mobility, further formalizing access procedures to research infrastructures, and enhancing the systematic use of stakeholder feedback in strategic planning and quality assurance activities.

Overall, the Doctoral Study Domain in Chemistry complies with the ARACIS standards and performance indicators applicable for maintaining accreditation.

The ARACIS evaluation panel concludes that the SD Chem UAIC demonstrates the institutional capacity, educational effectiveness, and quality management necessary to ensure the continuous development of high-quality doctoral education and research within the domain of chemistry at Doctoral School of Chemistry at Alexandru Ioan Cuza University of Iasi.

Propose and substantiate a decision.

Following the completion of the accreditation³/maintaining accreditation procedure, the decision of the evaluation panel shall be one of the following:

- a) **maintaining accreditation (MAC);**

VII. Annexes

Enclose the schedule of the on-site visit, the list of the documents reviewed, as well as any other documents that are relevant for the evaluation procedure, which are referred to in the EER and cannot be accessed through links.

The documents annexed to the REE are:

1. *Schedule of the on-site visit*
2. Minutes of the on-site meetings
3. Annex - containing information on some updated links of the Doctoral School (according to discussions during the visit), evidence on the forms for awarding grades/qualifications, the model of labor protection regulations and the related sheet, the model of the methodology for accessing research laboratories, updated information on the number of students in the doctoral school (by years of study) and statistics on the qualifications obtained by them (anonymized).

REE is accompanied by the agreement of SD Chem UAIC Iasi

³ When the external quality evaluation for accreditation is performed with undergoing the procedure for obtaining a provisional authorisation to operate.