International Graduate Program

"Biological Inorganic Chemistry"

Guide for Postgraduate studies

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Title: Guide for Postgraduate Studies
Biological Inorganic Chemistry (uoi.gr)

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Written and edited by Professor Sotiris K. Hadjikakou, Department of Chemistry, University of Ioannina and Dr. Christina Banti, Adjunct Lecturer, University of Ioannina. The Study Guide is consistent with the Postgraduate Operating Regulations as incorporated in the Official Gazette (Re-establishment 2612/5-7-18, vol. B., Modification 1649/17-3-2023, τ.Β.).

Issues not directly provided for in this Study Guide will be resolved by Curriculum Committee.
The Curriculum Committee also has the right to modify the operation of the Master's Program whenever it deems that doing so would be beneficial for the students and the quality of the Study Program.

General Information for the Biological Inorganic Chemistry Program

The International Graduate Program entitled "Biological Inorganic Chemistry" (Government Gazette Re-establishment 2612/5-7-18, p. B., Modification 1649/17-3-2023, τ.Β.).) has been operating since the academic year 2016−2017, at the University of Ioannina with the collaboration of the Chemistry Departments of University of Ioannina, National Kapodistrian University of Athens, Aristotle University of Thessaloniki, University of Patras, University of Crete and University of Cyprus. The expedited University of the master program is the Department of Chemistry of the University of Ioannina. The continuation of the extensive experience gained already from the more than ten years of operation of MSc in Bioinorganic Chemistry, which was a precursor of this program. The latter should be considered as the natural successor of the MSc "Bio-inorganic Chemistry".

The website of the MSc provides all information and announcements
http://bic.chem.uoi.gr/

Scope

The objective of the MSc entitled " Biological Inorganic Chemistry", is the development of postgraduate studies and high-level research in the cutting-edge field of Biological Inorganic Chemistry. Biological Inorganic Chemistry deals with the study of the role played by various metal ions (trace elements) and other inorganic elements in biological systems and life. Biological Inorganic Chemistry has many applications, such as: the development of metal-based inorganic drugs, the role of heavy metals in environmental pollution, the clarification of how metalloenzymes work, the development of biocatalysts and biocatalysis, the development of diagnostics for the early diagnosis of cancer and other diseases, etc.

The success of the project's objectives is based on a) the coordinated teaching and research efforts of the specialized faculty members of all participating departments, b) the attraction of students from all over Greece, Cyprus and abroad, and c) the creation of the appropriate laboratory and research infrastructure in Greece and Cyprus,

In particular, with the collaboration of the Departments of Chemistry of University of Ioannina, National and Kapodistrian University of Athens, Aristotle University of Thessaloniki, University of Patras, University of Crete and University of Cyprus, are pursued:

1. The utilization of Greek and Cypriot scientific potential of the Departments specialized in the interdisciplinary cognitive area of MSc
2. The utilization of the material and technical infrastructure of the Departments and Faculties that collaborate
3. The effective interaction of knowledge areas and laboratory techniques

aiming at the comprehensive training of young scientists and their use in development areas of the National Economy, such as the staffing of public and private health service providers (e.g. Laboratories and Clinics of Hospitals, Diagnostic Centers, etc.), Universities, Research Centers, Pharmaceutical and Chemical Industry, etc.

4. The continuation of the extensive experience gained already from the more than ten years of operation of the MSc in Bioinorganic Chemistry, which was the forerunner of this program. The latter should be considered as the natural successor of the MSc "Bioinorganic Chemistry".

Venue and infrastructure

The courses take place at the premises of the departments participating in the program. Part of the lectures can be done by distance learning, depending on the needs of students and faculty members. The programme shall be implemented according to the timetable:

1. **Winter semester:** On the first Tuesday of October, classes begin, which take place every Tuesday, Wednesday and Thursday. The winter semester exams take place in the first half of February.
2. **Spring semester:** The spring semester begins every beginning of March and the spring semester exams take place in the first half of July.

Titles awarded by the program

MSc awards Postgraduate Diploma in Biological Inorganic Chemistry.

Reception of Postgraduate Students

Every year a "Reception-Briefing of Postgraduate Students" takes place. This briefing takes place on the first day of the beginning of the courses of the winter semester. This includes a welcome talk by the Director of the MSc Biological Inorganic Chemistry and faculty members.

Students are informed about the program of MSc, its Quality Policy, the study regulations, the Mobility Program, and the institution of the Academic Advisor.

Administrative bodies of the Master's Program

The competent bodies for the organization and operation of the Postgraduate Program are:

a) the Senate of the Education Institution

b) The Curriculum Committee (CC), the number of members and the composition of which are determined in the Cooperation Protocol of the MSc. The Curriculum Committee consists of members of the Teaching Research Staff of the

collaborating Departments in accordance with the provisions of the Cooperation Protocol of the MSc. The CC includes one (1) representative from each collaborating institution.

c) The Coordinating Committee (CoC), with a two-year term, in which the Director of the MSc and four (4) of the members of the curriculum committee should participate. The Coordinating Committee consists of the Director of MSc and four (4) members of the Teaching Research Staff of the Department, who have a related subject to that of the MSC and undertake teaching work at the MSc. The members of the CoC are determined by curriculum committee.

d) The Director of the MSc comes from the faculty members of the Department with priority of rank of Professor or Associate Professor and is appointed by decision of the curriculum committee for a two-year term, with the possibility of renewal without limitation.

The responsibilities of the Curriculum Committee are responsible for the organization, administration and management of MSc.

a) establishes Committees for the evaluation of the applications of candidate postgraduate students and approves their enrollment in MSc

b) assigns the teaching work to the professors of the MSc

c) recommends to the Senate the amendment of the decision establishing the MSc, as well as the extension of the duration of the MSc

d) establishes examination committees for the examination of postgraduate students' dissertations and appoints the supervisor per thesis,

e) ascertains the successful completion of studies, in order to be awarded the title of MSc

f) approves the report of the MSc, upon the recommendation of the Coordinating Committee (CoC). By decision of the Curriculum Committee, the responsibilities of per. a) and d) may be transferred to the CoC of the MSc.

The CC is responsible for monitoring and coordinating the operation of the programme and in particular:

a) prepares the initial annual budget of the Postgraduate Program and its amendments, provided that the Postgraduate Program allocates resources in accordance with article 84, and recommends its approval to the Research Committee of University of Ioannina ,

b) prepares the report of the program and recommends its approval to the Curriculum Committee,

c) approves the implementation of expenses of the MSc,

d) approves the granting of scholarships, contributory or not, in accordance with the provisions of the decision establishing the MSc and the Regulation of postgraduate and doctoral studies,

e) recommends to the Curriculum Committee the distribution of teaching work, as well as the assignment of teaching work to the categories of teachers referred to in

Article 83,

f) recommends to the Curriculum Committee the invitation of Visiting Professors to meet the teaching needs of the Postgraduate Program,

g) prepare a plan for the modification of the curriculum, which it submits to the Curriculum Committee,

h) recommends to the Curriculum Committee the redistribution of courses between academic semesters, as well as issues related to the qualitative upgrading of the curriculum.

The Director of the MSc has the following responsibilities:

a) chairs the CC, as well as the Curriculum Committee, draws up the agenda and convenes its meetings,

b) recommends issues related to the organization and operation of the MSc. to the Curriculum Committee

c) recommends to the CC and the other bodies of the MSc and the Higher Educational Institution (HEI) issues related to the effective operation of the MSc,

(d) be the Scientific Coordinator of the programme in accordance with Article 234 and exercise the corresponding responsibilities;e) monitors the implementation of the decisions of the bodies of the MSc and the Internal Regulation of postgraduate and doctoral programs, as well as the monitoring of the implementation of the budget of the MSc f) exercise any other competence, which is defined in the decision establishing the MSc

Categories of graduates

Graduates of Departments of Chemistry, Biology, Biological Applications and Technologies, Medicine School, Pharmacy, Biochemistry, Chemical Engineering, Materials Engineering and related Departments of Greece or Departments of recognized equivalent institutions abroad are admitted to the MSc. The competent Secretariat of the advancing Department checks whether the institution awarding the title of a foreign institution belongs to the National Register of Recognized Institutions abroad and whether the type of this title belongs to the National Register of Types of Degrees of Recognized Institutions posted on the website of DOATAP.

Duration

The duration for the award of the Postgraduate Diploma is set at three (3) academic semesters, corresponding to ninety (90) ECTS credits.

Program Language

The language of instruction of the courses is Greek. Under certain conditions, a different language of the Program (and mainly English) may be set. The language of writing of the Master's Thesis is Greek or English (under certain conditions).

Course Schedule

All courses are semester-long, compulsory and include thirteen (13) weeks of teaching and workshops, tutorials, discussions, exercises or assignments where required plus an additional two (2) weeks for the examinations. The total number of European Credits (ECTS) required for the award of the MSc is ninety (90) ECTS. The program combines graduate courses and practical experience in both basic and laboratory research. The courses, teaching and research activities, practical exercises and any other kind of educational and research activities for the award of the MSc are defined as follows:

For the award of the MSc, compulsory attendance and successful examination in 4 theoretical courses and 1 laboratory course of the first semester are required, as well as all laboratory and research activities of the second semester. The total number of credits in the first 2 semesters is sixty (60) ECTS. Each course is credited with five (5) ECTS and each laboratory course with ten (10) ECTS. The elaboration of the diploma thesis takes place in the third semester of studies and is credited with 30 ECTS.

In detail, the courses and workshops are distributed as follows:

First Semester

	Courses	ECTS
1	Bioinorganic Chemistry	5
2	Physicochemical, spectroscopic and biochemical methods in Bioinorganic Chemistry.	5
3	Biophysics Of Pharmaceutical Action	5
4	Special Topics in Biochemistry-Molecular Biology	5
	Laboratory Course (10 ECTS)	
1	Laboratory of spectroscopic and physicochemical techniques.	10
	Total first semester credits	30

Second Semester

		ECTS
1	Introduction To The Research Laboratory	10
2	Collection Of Bibliographic Data And Presentations Concerning The Research Field Of The Postgraduate Diploma Thesis	5
3	Thesis A	15
	Total second semester credits	30

Third Semester

		ECTS
1	Thesis B	30

	Total 3rd semester credits	30

Courses

Attendance of the courses of MSc is compulsory. The duration of the educational semesters is set at (15) working weeks, of which thirteen (13) for courses and two (2) for exams. If for various reasons the teaching weeks are not held, the semester is repeated. In order not to lose teaching weeks, if a specific class date falls on a public holiday, the course is determined for the next or previous day of the holiday.

The courses can take the form of lectures and/or seminars and/or workshops and/or assignments or a combination thereof. Candidates have the obligation to attend the courses of the MSc regularly. In the case that less than 3/4 of the teaching hours are attended, deprives them of the right to be examined and leads to the re-attendance of the course. Loss of laboratory exercises is prohibited. Excused absence in only one (1) laboratory exercise is allowed, but it is repeated at the end of the period. Loss of two (2) laboratory exercises, even justifiably, leads to the repetition of one the following year and exclusion of the candidate from the final exams. The teaching of courses can be carried out by means of distance learning. The examination of each course is done in a way determined by the professors and takes place within a single examination period.

Credit Units

In order to obtain an MSc, the completion of 90 credits is required. Each postgraduate course has the following credits according to the European Credit Transfer System (ECTS).

First Semester

N/A	Courses offered	ECTS
1	Bioinorganic Chemistry	5
2	Physicochemical, spectroscopic and biochemical methods in Bioinorganic Chemistry.	5
3	Biophysics Of Pharmaceutical Action	5
4	Special Topics in Biochemistry-Molecular Biology	5
	Laboratory Course (10 ECTS)	
1	Laboratory of spectroscopic and physicochemical techniques.	10
	Total first semester credits	30

Second Semester

		ECTS
1	Introduction To The Research Laboratory	10

2	Collection Of Bibliographic Data And Presentations Concerning The Research Field Of The Postgraduate Diploma Thesis	5
3	Thesis A	15
	Total second semester credits	30

Third Semester

		ECTS
1	Thesis B	30
	Total 3rd semester credits	30

Course Evaluation and Grading

Students are required to attend the teaching of the courses continuously. Finding that less than 3/4 of the teaching hours are attended, deprives them of the right to be examined and leads to the re-attendance of the course. During the assessment in a course, participation in class and performance in home exercises, assignments and tests are taken into account. The exact way of evaluation is determined by the responsible Professor of each course. The final mark shall be expressed on a decimal scale from 0 to 10 in increments of 0.5. In order for performance in a course to be considered successful, it must have scored at least five (5). If the postgraduate student fails the examination of a course or courses, so that, according to the provisions of the Postgraduate Studies Regulation, he is considered not to have successfully completed the program, he is examined, upon request, by a three-member committee of faculty members of the Program of Studies, who have the same or related subject matter with the examined course and are appointed by the Program of Studies Committee. The teacher in charge of the examination is excluded from the committee.

Course Description

The courses, teaching and research activities and any other kind of educational and research activities for the award of the MSc are defined as follows:

(a) Attendance of theoretical courses

For the award of the MSc, the candidate must attend 4 compulsory postgraduate courses of 3 hours per week (5 credits) during the first semester of the first year of study and 1 compulsory postgraduate course of 3 hours per week (5 credits) during the second semester. The total number of credits for the two semesters is 25. These courses are:

First Semester

1. Bioinorganic Chemistry

2. Physicochemical, spectroscopic and biochemical methods in Bioinorganic Chemistry.

3. Biophysics of pharmaceutical action

4. Special Topics in Biochemistry-Molecular Biology

Second Semester

1. Collection of bibliographic data and Presentation of Thesis regarding the research field of the diploma thesis

(b) Laboratory Attendance

In addition to these theoretical courses, the candidate must attend a total of 2 compulsory workshops of 5 hours per week (10 credits), one during the first semester of studies and one during the second semester of studies. Also, the candidate should attend laboratories during the second semester for the postgraduate diploma thesis (15 credits). The number of credits for all laboratories and the Diploma Thesis-Writing-is 75 in total.

First Semester

1. Laboratory of spectroscopic and physicochemical techniques.

Second Semester

1. Introduction to Research Laboratory

2.Thesis A

Third Semester

Thesis B

The total number of credits required for each candidate of the postgraduate student of the MSc "Inorganic Biological Chemistry" is 90.

The examinations of the various courses and workshops take place at the end of each semester with single topics and last 3 hours. When there is more than one teacher, a professor is appointed as coordinator of the course by decision of the Curriculum Committee. He is obliged to ask each teacher to raise relevant topics depending on his participation in the course. The total number of topics allocated to teachers is ten (10). Each teacher corrects his/her own questions, and the final grade is extracted as an average of the grade of all teachers and submitted to the program secretariat by the course coordinator. In case of impediment of a faculty member, he/she is replaced by another faculty member by decision of the coordinator of the course. It is possible for teachers to conduct periodic examinations during courses or workshops, which will be taken into account by 25% in the formation of the final grade. The student must succeed in all examined courses and laboratories with a grade of at least (5) with excellent (10) in a maximum of two examination periods, i.e. February-June or July-September. In case the candidate fails even one course in both (2) examination periods of February-June or July-September, he/she is deleted from the registers of postgraduate students.

(c) Attending seminars

Postgraduate students must attend during the first and second semester all seminars provided for in the framework of the program, both by chemical associates

of industry and research institutes or universities, Greeks and foreigners. It is necessary to attend at least 3/4 of these seminars. Students may be examined in the periodic or final examinations on topics of these seminars.

Learning Outcomes acquired by students after the completion of the Program

1. Bioinorganic Chemistry

The aim of the course is to teach and consolidate basic principles of Inorganic Biological Chemistry-Bioinorganic Chemistry which are considered necessary for the completion of postgraduate students' education. The aim of the course is to present and describe bioinorganic systems through the correlation of the function, structure and activity of inorganic elements in organisms.

In particular, this course will include:

a) systematic study of trace element biosystems,

b) effect of trace element concentration on health and environment and

c) pharmaceutical chemistry of inorganic compounds.

Upon successful completion of the course, students should be able to:

1. To recognize the contribution of the chemistry of metal-biomolecules both to the development of chemistry and other related branches of science

2. Be able to evaluate the role of metal ions in biological systems.

3. Know the function of metalloporphyrins, hemoglobin, oxygen binding by metal ions. 4. Know the structure and function of metalloenzymes and metalloproteins.

5. Know the biochemistry of iron 6. Understand the role of metal ions in photosynthesis, cobalamins B12 and basic functions of living beings.

7. Know how trace elements participate in basic functions of the body.

8. Recognize the applications of metal-biomolecules in development

9. Be able to evaluate the applications of metallurgium molecules as metallureutics.

10. Know the applications of metallurium molecules as photoactive drugs

11. Know the applications of metallurium molecules as diagnostics.

12. Know the applications of metallife molecules in toxicology.

General Competencies

-Knowledge and understanding of the basic concepts, principles and theories related to Inorganic Biological Chemistry-Bioinorganic, the role of metal ions in biological systems, the structure and function of metalloproteins and metalloenzymes, the role of metal ions in nucleic acids, metalloporphyrins.

-Skills in predicting and evaluating the role of metal ions in biological systems as both an external and internal factor.

-Ability to apply the provided knowledge in dealing with problems related to Inorganic Biological Chemistry and Bioinorganic Chemistry.

-Ability to interpret the type of bond of metal ions with biomolecules.

-Ability to correctly assess – selects the data provided to solve complex problems.

-Ability both in the independent way of working and in the interaction with other

students on course topics

2. Physicochemical, spectroscopic and biochemical methods in Bioinorganic Chemistry

The aim of the course is to familiarize students with the physicochemical, spectroscopic and biochemical methods used in Bioinorganic Chemistry and to understand the basic principles of operation of instruments used in chemical analysis, their simple applications, as well as the characteristics and uses of the most common instruments and to evaluate their results.

After the end of the course students will be able to:

• Know basic analytical/physicochemical methods, choose the most appropriate one based on the properties of complex compounds.

• Interpret the various scanning spectra, recognize characteristic peaks of infrared spectra, make evaluation, structure and spectrum correlation.

• Organize the analysis by choosing the right method, taking into account the relevant parameters (obstacles) and making the necessary calculations.

• Understand the basic concepts of spectrophotometry, the laws and combine and apply them in chemical analyses.

• Understand the principle of sample preparation, the use of protocol, methods of sampling, sample preservation.

• Know the basic methods of determining the molecular structure and studying the properties of biomolecules in solution and solid state.

General Competencies

The general competencies that the student should have acquired and to which the course aims are:

-Search, analyze and synthesize data and information and make decisions.

-Conversion of theory into practice.

-Promotion of free, creative and inductive thinking.

-Autonomous and teamwork.

-Acquisition of the appropriate theoretical knowledge background to enable further education at doctoral level (theoretical and laboratory).

3. Special Topics in Biochemistry-Molecular Biology

The course provides the student with deepening in selected chapters of Biochemistry and Molecular Biology with the ultimate goal of forming a general knowledge base and perceptions necessary for the understanding of biochemistry, physiology, pharmacology and clinical chemistry, learning, through examples, the application of chemical knowledge in the interpretation of biomedical phenomena, the familiarization of students with the principles of Biochemistry and Molecular Biology and the familiarization of students with the principles laboratory studies. Also, students should be able to have the ability to describe basic cytobiological mechanisms.

General Competencies

The general competencies that the student should have acquired and to which the course aims are:

-Search, analyze and synthesize data and information and make decisions.

-Conversion of theory into practice.

-Promotion of free, creative and inductive thinking.

-Autonomous and teamwork.

-Acquisition of the appropriate theoretical knowledge background to enable further education at doctoral level (theoretical and laboratory).

4. Biophysics of pharmaceutical action

Upon successful completion of the course, descriptive indicator 6 of the European Qualifications Framework, students should be able to:

• Know basic principles of biophysics of biomolecules and drugs

• Know the effect of functional groups and stereochemistry on the biological activity of compounds

• Know basic structural biology information sites

• Know types of software and the principles of molecular simulation

• Know basic concepts of multiparametric statistical analysis

• Know the basic principles governing Quantitative Action Structure Relationships (QSAR) General Competencies-Protein-ligand interactions (molecular binding and molecular dynamics)-Thermodynamics of the interaction (electronic, steric, topological and hydrophobic parameters)-QSAR methodology-Familiarity with molecular modeling-Familiarity with the analysis of bio-physicochemical properties through multiparametric methods -Ability to work in groups or independently-Ability to learn relevant computer packages

5. Laboratory of spectroscopic and physicochemical techniques

The aim of the course is to familiarize students with the physicochemical, spectroscopic and biochemical methods used in Bioinorganic Chemistry and to understand the basic principles of operation of instruments used in chemical analysis, their simple applications, as well as the characteristics and uses of the most common instruments and to evaluate their results.

To involve students in conducting simple experimental exercises to familiarize them with the instruments and devices of an analytical laboratory as well as to consolidate their respective theoretical knowledge.

After the end of the course students will be able to:

• Know basic analytical methods, choose the most suitable one based on the properties of complex compounds.

• Interpret the various scanning spectra, recognize characteristic peaks of infrared spectra, make evaluation, structure and spectrum correlation.

• Organize the analysis by choosing the right method, taking into account the relevant parameters (obstacles) and making the necessary calculations.

• Understand the basic concepts of spectrophotometry, the laws and combine and apply them in chemical analyses.

• Understand the principle of sample preparation, protocol use, sampling methods, sample preservation.

• Know thermal analysis and its applications, know various methods of separating mixtures, become familiar with the corresponding chromatograms and recognize the different peaks.

General Competencies

The general competencies that the student should have acquired and to which the course aims are:

-Search, analyze and synthesize data and information and make decisions.

-Conversion of theory into practice.

-Promotion of free, creative and inductive thinking.

-Autonomous and teamwork.

-Acquisition of the appropriate theoretical knowledge background to enable further education at doctoral level (theoretical and laboratory).

6. Introduction To The Research Laboratory

This laboratory has as its content the "Introduction To The Research Laboratory ", as well as the spectroscopic techniques related to it and the purpose of teaching research methodology and familiarizing postgraduate students with the various research objects of Inorganic Biological Chemistry. Students will be given a research topic, either known or original. This topic requires students to first process bibliographies and end up reproducing in the laboratory, either already published research from relevant publications in well-known journals, or start a new research topic and reach the first acceptable results.

The examination in the course takes place through public presentation, to an audience of postgraduate students and faculty members. Supervising professors of this laboratory may be all faculty members dealing with the subject of Biological Inorganic Chemistry. Faculty members are required to allocate all postgraduate students to their laboratories and provide them with the necessary facilities for this purpose.

Expected Learning Outcomes

Upon completion of the course students should be able to:

• Demonstrate initiative and confidence in their ability to make decisions and follow the consequences created.

• Apply an analytical approach to problem solving.

• Effectively apply appropriate communication skills as experts.

• Produce critical overview using and appropriate citation of information sources.

• Draw logical conclusions and make suggestions based on the work of the project undertaken.

• Produce a structured written report using the appropriate format with appropriate references.

General Competencies

The general competencies that the student should have acquired and to which the course aims are:

-Search, analyze and synthesize data and information and make decisions.

-Conversion of theory into practice.

-Promotion of free, creative and inductive thinking.

-Autonomous and teamwork.

-Acquisition of the appropriate theoretical knowledge background in order to be able to further train, at doctoral level (theoretical and laboratory)

-Project planning and management

-Generation of new research ideas

-Working in an interdisciplinary environment -Adaptation to new situations

7. Collection Of Bibliographic Data And Presentations Concerning The Research Field Of The Postgraduate Diploma Thesis

The student will develop and submit a detailed project proposal, including the rationale basis, research methodology, experimental plan (which includes a timeline and incorporates milestones in detail), and costs. The program proposal must be approved by the supervising professor before the student begins practical work. The student will be in close contact with the supervisor throughout the program with regular feedback of information.

Expected Learning Outcomes

Upon completion of the course students should be able to:

• Demonstrate initiative and confidence in their ability to make decisions and follow the consequences created.

• Apply an analytical approach to problem solving.

• Effectively apply appropriate communication skills as experts.

• Produce a comprehensive plan of self-management to achieve set goals.

• Produce critical overview using and appropriate citation of information sources.

• Produce and justify a viable project proposal and pilot project that is appropriate in terms of methodologies, available resources, time and cost.

• Undertake a work programme that generates raw data, followed by analysis and interpretation of the data using appropriate means.

• Draw logical conclusions and make suggestions based on the work of the project undertaken.

• Produce a structured written report using the appropriate format with appropriate references.

General Competencies

The general competencies that the student should have acquired and to which the course aims are:

-Search, analyze and synthesize data and information and make decisions.-

Turning theory into practice.

-Promotion of free, creative and inductive thinking.

-Autonomous and teamwork.-Acquisition of the appropriate theoretical knowledge background in order to be able to further train, at doctoral level (theoretical and laboratory)

-Project planning and management

-Generation of new research ideas

-Working in an interdisciplinary environment -Adaptation to new situations

8. Start of the Master's Thesis and Continuation and Completion of the Diploma Thesis-Writing-Presentation of the Diploma Thesis

The Master's Thesis is an individual in-depth research / investigation of a specific topic. The work should be carried out based on the particular interest of the student or academic supervisor and should be in harmony with the research strategy of the Department. The overall objective is to provide students with the opportunity to develop and apply research methodologies. This process will lead to the development of a range of skills. It is important to acquire the ability to self-manage in order to achieve the specific objectives set within a specific period of time. The ability to identify problems and find appropriate solutions should also be demonstrated, as well as the ability to evaluate results and propose alternative strategies.

The student will develop and submit a detailed project proposal, including the rationale basis, research methodology, experimental plan (which includes a timeline and incorporates milestones in detail), and costs. The program proposal must be approved by the supervising professor before the student begins practical work. The student will be in close contact with the supervisor throughout the program with regular feedback of information.

Expected Learning Outcomes

Upon completion of the course students should be able to:

• Demonstrate initiative and confidence in their ability to make decisions and follow the consequences created.

• Apply an analytical approach to problem solving.

• Effectively apply appropriate communication skills as experts.

• Produce a comprehensive plan of self-management to achieve set goals.

• Produce critical overview using and appropriate citation of information sources.

• Produce and justify a viable project proposal and pilot project that is appropriate in terms of methodologies, available resources, time and cost.

• Undertake a work programme that generates raw data, followed by analysis and interpretation of the data using appropriate means.

• Draw logical conclusions and make suggestions based on the work of the project undertaken.

• Produce a structured written report using the appropriate format with appropriate references.

• Demonstrate an in-depth understanding of the work through advocacy with a

posted or oral presentation (support of a master's thesis).

General Competencies

The general competencies that the student should have acquired and to which the course aims are:

-Search, analyze and synthesize data and information and make decisions.

-Conversion of theory into practice.

-Promotion of free, creative and inductive thinking.

-Autonomous and teamwork.

-Acquisition of the appropriate theoretical knowledge background in order to be able to further train, at doctoral level (theoretical and laboratory)

-Project planning and management

-Generation of new research ideas

-Working in an interdisciplinary environment

-Decision-making

-Adaptation to new situations

Award of scholarships

If the resources of the MSc program allow it, it is possible to award up to two (2) scholarships per year to a postgraduate student, following a relevant decision of the CC. Scholarships are awarded on the basis of academic, objective criteria. Indicative criteria may be the meritorious classification of postgraduate students during their selection, the average grade of the first semester, etc., and must be included in the approved budget of the MSc. The terms of grant, obligations and rights of scholars are determined by decision of the Curriculum Committee and in accordance with Law 4957/2022.

Erasmus mobility

In addition to the selection criteria for candidates for an Erasmus+ scholarship established by the University of Ioannina, the Department of Chemistry of the University of Ioannina decides the following criteria for the selection and classification of candidates for an Erasmus+ scholarship. Postgraduate students moving within the framework of the Erasmus program are ambassadors of the MSc in the reception laboratories. There, the postgraduate student will gain increased experience and qualifications both in terms of his educational process and in the interaction diffusion with other educational institutions. In order to best ensure these objectives of the programme, the following criteria constitute the minimum requirement for selecting a candidate for the Erasmus+ grant.

Postgraduate Master's students must:

• have succeeded in all courses of the MSc of the 1st semester.

• have the approval, for his/her Erasmus transfer abroad through Erasmus, of his/her

Master's Thesis Supervisor, and
• have the agreement of the Director of the Postgraduate Program for his/her transfer abroad through Erasmus.

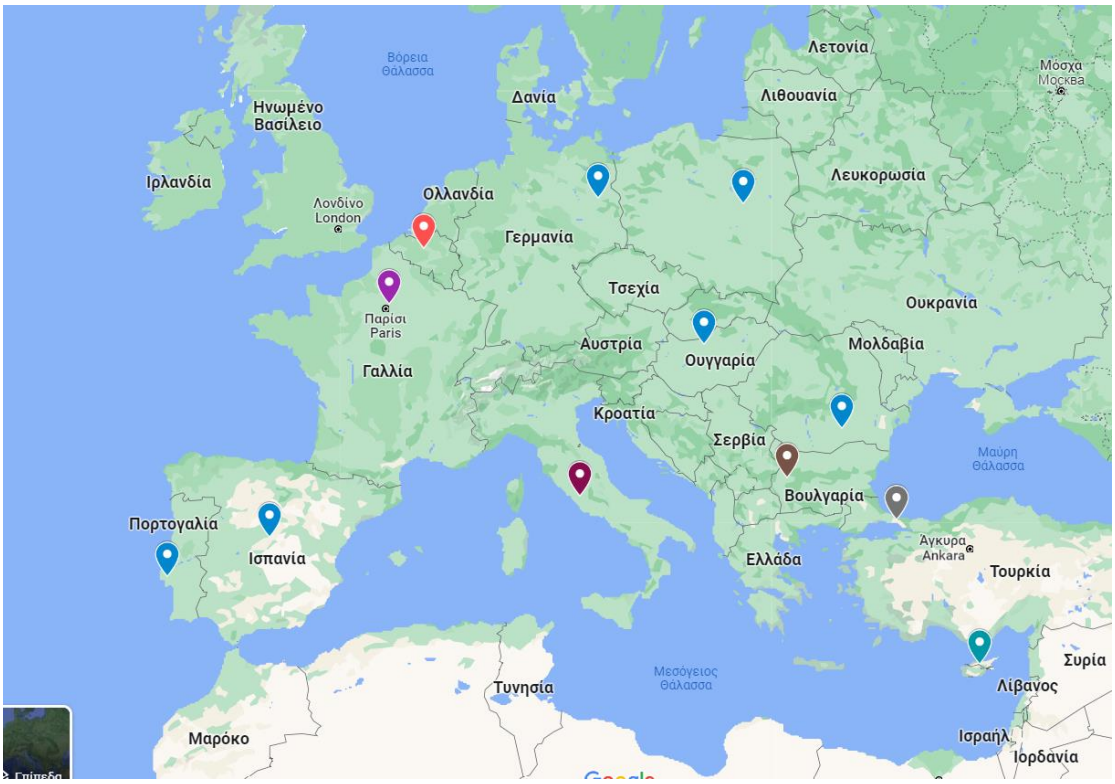
Candidates submit their applications to the International Relations Office of the University of Ioannina. The application states the host country and the period they wish to be funded, as well as the period (if they wish) that they would like to go abroad without funding (zero grands).

According to the Department of Chemistry of the University of Ioannina, there are 3 categories of Erasmus Scholars:
• PhD Candidates (PhD),
• Postgraduate Students (MS), and
• Undergraduate or graduates Students (ST)

In order of evaluation, the most "mature" scholarship is considered to be that of the PhD, then of the MS and then of the ST (PHD > MS > ST).For the allocation of positions, the Depart5ment of Chemistry adopts the relationship MD / MS / ST = 1 / 2 / 3This relationship has two axes:• (PHD + MS) / ST = 1 / 1, and• PHD / MS = 1 / 2.Any vacancies that remain unallocated per category after the first evaluation of applications are redistributed based on the ratio MD / MS / PHD = 1 / 2 / 3.If, due to the available funding, this relationship is not exactly satisfied, then the one closest mathematically to the relationship (PHD + MS) / ST = 1 / 1 is preferred from the alternative proposals, with priority given to the places for PHD + MS.

The Erasmus Scientific Coordinator will first check which applications can be evaluated and which cannot because they do not meet the Criteria mentioned in section A. From the applications that meet the Criteria of section A, the Scientific Coordinator evaluates the applications in each category and proposes for funding, depending on the available, for the Department of Chemistry, Budget. The classification of Postgraduate Students of a Specialization Diploma for mobility purposes is based on the Average Grade in the courses of the Postgraduate Specialization Diploma at the time of submission of the application and from the copy of the Transcript. In case of a tie, the student who has succeeded in most courses is selected. If there is still a tie, then the General Assembly of the Department may decide on the basis of additional criteria (such as publications, presentations at conferences, examinations, etc.).

The bilateral agreements of the expedited Department of Chemistry of the University of Ioannina


Βόρεια Θάλασσα
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Δανία
Λετονία
Μόσχα Москва
Λιθουανία
Ιρλανδία
Λονδίνο London
Ολλανδία
Λευκορωσία
Γερμανία
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Μαύρη Θάλασσα
Βουλγαρία
Πορτογαλία
Ισπανία
Άγκυρα Ankara
Ελλάδα
Τουρκία
Συρία
Μεσόγειος Θάλασσα
Τυνησία
Λίβανος
Μαρόκο
Ισραήλ
Ιορδανία

Prospective Postgraduate Students

Students Categories of graduates admitted

Graduates of Departments of Chemistry, Biology, Biological Applications and Technologies, Medicine, Pharmacy, Biochemistry, Chemical Engineering, Materials Engineering and related Departments of Greece or Departments of recognized equivalent foreign institutions are admitted to the MSc. The competent Secretariat of the advancing Department checks whether the institution awarding the title of a foreign institution belongs to the National Register of Recognized Institutions abroad and whether the type of this title belongs to the National Register of Types of Degrees of Recognized Institutions posted on the website of DOATAP.

As far as graduates of Universities of other disciplines of science, health sciences of a related subject (Food Technology, Nutrition, Medical Laboratories, Public Health Supervisors) are concerned, they may be admitted to the MSc, provided that they attend and are examined in additional undergraduate courses, which are determined upon their enrollment in the MSc by the CC upon the recommendation of the Postgraduate Studies Selection Committee of the MSc attendance and examination in these courses must be successfully completed during the 1st year of study.

Number of students admitted

The annual number of students admitted to the MSc is set at a maximum of fifteen (15) students. In addition to the number of admissions, one (1) scholar of the National State Scholarships Foundation (I.K.Y.) who succeeded in the relevant competition for postgraduate studies in the field of study of the MSc and one (1) foreign scholarship holder of the Greek State are admitted, by decision of the CC.

Admission requirements & criteria

The announcement for the admission of new postgraduate students to the program for the acquisition of MSc is announced once a year (between June and August) at http://bic.chem.uoi.gr/, with the deadline for the submission of applications determined by the CC.

Applications include:

1. Completed application, form of which is available from the website of the postgraduate program (http://bic.chem.uoi.gr/)

2. Copies of diplomas and transcripts per course. The matching of submitted degrees (foreign or national) is the responsibility of the University of Ioannina.

3. Scientific papers or dissertations or participation in conferences with papers (up to 5), 2nd foreign language other than English proven by a corresponding degree, training in another useful field (e.g. computer) proven by a relevant degree, previous

experience in another research laboratory or in industry, diploma thesis

4. Curriculum vitae

5. Two letters of recommendation

The selection shall assess and take into account the following elements, as evidenced by documents attached to the candidates' application:

1) Overall degree grade, transcript

2) Grade in courses related to the direction of studies of the MSc

3) Research activity as it results from publications in scientific conferences and scientific journals (up to 5).

4) Letters of recommendation from faculty members that comment substantially and evaluate the candidate's ability to cope with the requirements of the postgraduate program.

5) Professional experience in subjects relevant to the postgraduate direction for which the application is submitted.

6) Proven knowledge of the English language, which usually results from relevant certificates (B2 level) or, depending on the case, and according to the judgment of the CC of the MSc, from studies in Universities with English as the official language. The certification (if there is no certificate) can be done through a written examination by the Postgraduate Studies Selection Committee of the MSc on a date prior to the evaluation of the applications.

7) The Postgraduate Studies Selection Committee of the MSc, in order to formulate its proposal to the CC, invites prospective students to an interview.

Candidates who owe up to three (3) degree courses, are allowed to receive their degree until October 31 of the same year. For their selection, however, the average grade of their other courses is taken into account, both as the final grade of their degree, and for the extraction of their average grade in the relevant courses of Inorganic Chemistry and Biochemistry.

After the results of the graduation examinations have been extracted, those candidates who do not receive their degree are deleted from this list and their places are occupied by the candidates next in the ranking.

The list is finalised by a decision of the CC which meets immediately afterwards, when the selected students must present their diploma.

Postgraduate students admitted to the MSc submit a document accepting any regulations and safety rules of the laboratories they will work in. Students from abroad can participate in the MSc as supernumeraries through programs (e.g. Erasmus, State Scholarship Foundation, etc.), the number of which is determined by the Curriculum Committee.

Evaluation of applications

The evaluation of applications and the selection of postgraduate students is mainly done taking into account the following criteria:

1. Overall degree grade: up to 50 credits.

2. Average grade in the courses of Inorganic Chemistry and Biochemistry: up to 10 points.

3. Research activity resulting from publications in scientific conferences and journals (up to 5): 20 credits.

4. Interview, Gravity factor 20%.

Registration Procedure of MSc

The registration of new students in MSc the declarations of full-time or part-time attendance, the statements of attendance of courses are made one week before the beginning of the first semester. Registrations for courses of the following semesters are made during the first week of each semester. Those who are admitted to MSc acquire the status of postgraduate student upon their enrollment.

At that time, the responsible faculty member or lecturer who participates in MSc and who deals with the subject of Inorganic Biological Chemistry and accepts the responsibility of the academic and scientific monitoring of the student as supervisor may be appointed.

For the category of students who prepare their dissertation outside the University of Ioannina, in one of the laboratories of the collaborating Institutions, the Departments are informed and assure the secretariats that these students will attend the Foundation in order to be granted all the benefits given to undergraduate students. In this case, the University of Ioannina reserves only the administrative support for the student in question.

The appointment of a supervising professor also take place during the first (1) semester of studies and not later, upon request of the student and approval of the Committee. Program of Studies of the MSc Students who have a basic degree in areas other than that of the postgraduate program of studies are required to attend a number of supplementary undergraduate courses, which are determined upon their enrollment in the MSc by the Program of Studies Committee upon the recommendation of the Coordinating Committee and which must be successfully completed during the 1st year of study.

Duration of Study - Suspension and Extension of Study

In the postgraduate program, the duration of studies is three (3) academic semesters for full-time students and five (5) academic semesters for part-time students. Students who wish to follow the part-time program must state this during their registration. This declaration is binding and cannot be modified during the course of studies. Part-time students may not complete their studies in less than the above academic semesters of five (5).

Attendance of MSc for the acquisition of Master has a maximum duration of

three (3) calendar years. In exceptional cases, for the completion of the postgraduate thesis, an extension of one (1) or up to two (2) additional semesters may be granted upon the recommendation of the supervising faculty member and decision of CC.

For exceptional reasons (e.g. for health reasons, by employees, military service personnel, etc.) it is possible to grant a suspension of studies of one (1) or up to two (2) semesters. During the period of suspension, the rights of the postgraduate student are also suspended. The time of suspension does not count towards the maximum duration.

Applications for extension or suspension of studies are accepted no later than two (2) weeks before the beginning of the teaching of the courses of the semester to which they refer and are approved by the Curriculum Committee upon the recommendation of the Coordinating Committee. Suspension of studies is not granted for the first semester of the MSc.

Postgraduate Thesis (M.Sc.)

The Master's Thesis takes place, for the full-time and part-time program, in the 2-3rd and 4-5th semester of studies respectively.

The preparation of a postgraduate thesis is mandatory and the total duration of its preparation cannot be less than two (2) semesters.

The supervision of the postgraduate thesis is undertaken by a Professor of the MSc. If the supervisor is not a Professor of the MSc, then the postgraduate thesis is co-supervised by a faculty member who teaches at the MSc. By decision of the CoC, the maximum number of postgraduate students per instructor is determined.

The supervisor of the postgraduate dissertation may be a lecturer of the MSc, in accordance with article 83 of Law 4957/2022, and more specifically to members of Teaching Research Staff, Special Educational Staff, Laboratory Teaching Staff, Special Technical Laboratory Personnel of the Department or other Departments of the same or another Higher Education Institution (HEI), Emeritus Professors or retired faculty members of the Department or other Departments of the same or another HEI, collaborating professors, adjunct lecturers, visiting professors or visiting researchers, researchers and special functional scientists of research and technological bodies of article 13A of Law 4310/2014 (A' 258) or other research centers and institutes in Greece or abroad, scientists of recognized prestige, who have specialized knowledge and relevant experience in the field of study of the MSc.

The process of preparing postgraduate dissertations is the following:

a) At the request of the student and with the agreement of the supervisor (and the co-supervisor if appointed), the CoC approves the subject, the abstract, the three-member examination committee and the language of writing of the postgraduate dissertation. The application is submitted at the beginning of the 2nd or 4th semester of study, for the full-time and part-time program respectively. The committee consists of the supervisor (and, if appointed, the co-supervisor) and other members who teach at the MSc (according to article 83 of Law 4957/2022), who hold a doctoral degree. The members of the committee must have the same or related scientific specialty with the subject of the dissertation.

b) At the end of the writing, with the agreement of the three-member examination committee, the time and place of examination of the postgraduate thesis is announced.

c) The Master's thesis is submitted electronically to the members of the three-member examination committee, at least 10 days before the final examination. The final examination procedure before 10 days can proceed only if all members of the selection board agree. The first, second and third pages of the text of the Master's Thesis are given in Annex II (see end of the text of the Rules of Procedure).

The postgraduate thesis is evaluated by the three-member examination committee in terms of its research orientation, the presentation of the literature review, the scientific methodology, the usefulness of the results and the way of its written and

oral presentation. The thesis is judged as "satisfactory" or "unsatisfactory". If the thesis is judged to be "satisfactory", the candidate may be declared holder of an MSc after making any corrections proposed by the committee.

If the thesis is deemed "unsatisfactory", then the candidate must complete it according to the recommendations of the committee and undergo a second and final examination on a date decided by the CoC upon the recommendation of the supervisor and within three (3) months from the first examination. After the fruitless lapse of this period of time, the thesis is judged as 'unsatisfactory'. Postgraduate theses, if approved by the examination committee, must be posted on the website of the MSc (http://bic.chem.uoi.gr/).

The form of the Diploma Thesis that is required to be submitted through this MSc is shown in the following templates and is posted on the website of the MSc (http://bic.chem.uoi.gr/):

i. The cover of the Diploma Thesis
ii. The first page of the Diploma Thesis
iii. The second page of the Diploma Thesis

Change of topic MSc - Termination of cooperation - Change of supervisor

It is possible to change the subject of the MSc within an exclusive deadline of six months (6) from the submission of the issue to the secretariat if the following reasons are met:

1. If it is found that the subject does not fall within the general field of Inorganic Biological Chemistry
2. If the subject is found not to be original
3. If a lack of infrastructure is detected. An application by either the candidate or the supervisor to the secretariat and approval by the CC is required.

There is also the possibility for both the supervisor to withdraw from the supervision of the Dissertation, and the candidate to change supervisor, if the following reasons are present:

(i) termination of the supervisor's service for any reason;

(ii) if it is found by the supervisor or candidate that cooperation is not possible;

(iii) if it is found that the topic of the Thesis is not original or that it does not fall within the field of "Inorganic Biological Chemistry"

(iv) If a lack of infrastructure is detected. An application by either the supervisor or the candidate to the Programme Secretariat and approval by the CC is required.

If a new supervisor is appointed, the candidate may continue the previous research topic only if the previous supervisor agrees in writing. All the above changes, except in case of departure of the faculty member from the service, can be made within six months from the submission of the dissertation topic to the secretariat. After that period, no such change shall be justified.

Postgraduate Diploma Degree

In order to obtain the Postgraduate Diploma, ninety (90) credits are required, which is achieved by successfully attending 7 courses, successfully completing a postgraduate thesis and a total grade of five (5).

The grade of the Diploma is calculated as the sum of the products of the grade of each course multiplied by the corresponding ECTS, divided by the total ECTS. The concept of the course includes any kind of research and educational activity, to which ECTS credits are awarded. The grade of the I.P.P.S. is calculated to an accuracy of two decimal places. The scale for the distribution of grades for the qualification is:

EXCELLENT: 8.50 to 10

VERY WELCOME: 6.50 to 8.49

WELCOME: 5.00 to 6.49.

A Postgraduate Diploma is not awarded to a student whose first cycle degree from a foreign institution has not been recognized by the Interdisciplinary Organization for the Recognition of Academic Qualifications and Information (D.O.A.T.A.P.), in accordance with Law 3328/2005 (A' 80).

Dissertation Format

The form of the Diploma Thesis required is shown in the following templates:

i. The cover of the Diploma Thesis
ii. The first page of the Diploma Thesis
iii. The second page of the Diploma Thesis

Nomination and Award of Master's Thesis

From the second semester of studies, the candidate begins to engage in research in the framework of the laboratory of introduction to the research methodology of Bioinorganic Chemistry and the postgraduate thesis. The candidate continues his research effort throughout the third semester of study, after successfully completing the examinations of all courses and laboratories of the first year of study and presenting the results of his research effort in the form of a thesis at the end of the 3 semesters, which bears the name Diploma Thesis, under the guidance of the supervisor of the postgraduate dissertation.

This work is submitted to the secretariat of the program requesting in writing the award of MSc. The request of the interested party is accompanied by a document of the supervisor, in which he expresses his opinion on the quality of the work and the continuation of the procedure. The examination of the Diploma Thesis is carried out by a 3-member examination committee appointed by proposal of the supervisor to the CC of the program and consists not only of the supervisor, but also of at least one instructor of one of the other collaborating institutions. At least one of the 3 members

of the examination committee must belong to the rank of Professor. The decision to approve or not the dissertation can be taken with the agreement of at least two (2) of the three (3) members of the committee. The verification of the successful completion of the Postgraduate Diploma in postgraduate students is made by the Program Committee.

The diplomas are awarded at a special ceremony of the Department of Chemistry of the University of Ioannina, which takes place together with the corresponding swearing-in ceremony of the students of the Department, in the presence of the Rector's Authorities, the Deans of the Faculties and the Directors of the Inter-institutional Postgraduate Programs.

Rights and Obligations of Postgraduate Students

Postgraduate students are entitled to all undergraduate student benefits, as defined by the current legislation of Law 4957/2022 (Government Gazette A 141/21.7.2022) (meal card, student ticket, accommodation in dormitories, reduced participation costs in cultural-entertainment events, insurance through the University, etc.) except for the right to provide free textbooks to all participating Institutions.

Institutions are obliged to ensure that students with disabilities and/or special educational needs have accessibility to the proposed textbooks and teaching.

Postgraduate students are obliged to:

• To complete within the prescribed deadlines:

(a) their enrollment in the MSc

(b) the statements of full-time or part-time attendance,

(c) the final statements of attendance of courses,

(d) the submission of applications for extension or suspension of studies no later than two (2) weeks before the beginning of the teaching of the courses of the semester to which they refer. Those enrolled in the first semester of the MSc are not entitled to suspension of studies.

• Successfully attend postgraduate courses.

• Attend the prescribed examinations.

• Must be engaged in the preparation of their dissertation on a full-time basis• They must follow the general directions and instructions of the supervisor and the members of the advisory committee.

• They must constantly inform the supervisor about the progress of his work.

• Perform or repeat experiments in the presence of the supervisor if requested.

• If they wish to participate in other research programs of the same or another laboratory that are related to the topic of their dissertation, they must have the written approval of the supervisor. In addition, postgraduate students may receive remuneration from them if there are relevant funds.

• They must meticulously follow the operating regulations and safety rules of the laboratory and the places where they work.

• Write a dissertation on a topic related to the subject of the program. The Master's thesis, which is approved by the Curriculum Committee upon the recommendation of the three-member examination committee.• Complete their studies within the prescribed time limits.

• Postgraduate students may receive remuneration from auxiliary teaching and laboratory employment, if there are relevant funds.

• To respect and abide by the decisions of the bodies of the MSc as well as the academic ethics.

Obligations of the tutor supervisor

i. He must be available to the candidate in order to solve questions and guide him in his work

ii. It must provide the candidate with the basic necessary infrastructure and consumables for the successful development of his work.

iii. Must ensure that the candidate is engaged exclusively and full-time in the preparation of his/her dissertation.

iv. Must accept or make his/her comments on a typed copy of the dissertation within a period of not more than six months, from the day the candidate delivers it.

v. When publishing all or part of the research results, the candidate must be included as a co-author.

Removal of postgraduate students from the postgraduate program of studies

The removal of a student from MSc takes place when:

• exceeds the maximum permissible study time,

• One (1) semester is unjustifiably absent from the studies and obligations of the postgraduate student.
• completes three (3) failures in the courses,
• fails two (2) times in the oral examination of the postgraduate thesis,
• fails to successfully complete within the 1st year of study the prerequisite courses assigned to him/her, and is removed from the program, but is entitled to receive a certificate of attendance of all courses he/she has completed.

Participation in copying or generally falsifying the postgraduate course examination process or the writing of a thesis or postgraduate dissertation, entails deletion from the program following a relevant decision of the Curriculum Committee. In the same cases, withdrawal of the postgraduate diploma is provided for when the violation is found after graduation. Checks on the fulfilment of obligations and deletions of postgraduate students are carried out before submitting their statements or registration each academic semester.

Accreditation Procedure of MSc

MSc will be evaluated periodically in accordance with the applicable legislation in the context of the periodic evaluation/accreditation carried out by the National Authority for Higher Education (HAHE), in order to continue its operation in accordance with the establishment decision and the Postgraduate Studies Regulation. The evaluation of the teaching work and the teachers is carried out by the Quality Assurance Unit and the completion of questionnaires by the students twice a year (every December and May).

The completion of questionnaires is done electronically (>2019), anonymously and is not mandatory. The questionnaires apply to all courses and workshops and to all professor. The assessment concerns the modules (Student-Centered Teaching and Learning, Students and Teachers, Assigned Assignments, Degree of Difficulty of the Course, Learning Outcomes). Specifically at the end of each semester, postgraduate students evaluate each course and each instructor. The special questionnaire of the University of Ioannina is used as a diagnostic tool for the evaluation of educational work.

Responsible for the process of evaluation of the educational work is the Committee for the Evaluation/Evaluation of the educational work, which is appointed at a meeting of the Curriculum Committee of the present MSc. From the academic year 2019-2022, the questionnaires are completed by students after contacting the Quality Assurance Unit announced on the website of MSc (http://bic.chem.uoi.gr/anakoinoseis.html) and by personal email, which can be completed from a computer or mobile phone. The questionnaire is posted on the link https://classweb.uoi.gr which postgraduate students have access by entering their personal information. The questionnaire is anonymous and takes about 10 minutes to answer. The announcement notes that participation and feedback from postgraduate students is necessary to make improvements where needed. At the end of the term of office of the MSc, under the responsibility of the outgoing Director, a detailed report is drawn up of the research and educational work of MSc, as well as its other activities, with the aim of upgrading studies, better utilization of human resources, optimization of existing infrastructure and socially beneficial use of the available resources of the MSc. The report is submitted to the Curriculum Committee.

Members of the Curriculum Committee (2022-2024)

1. Professor Sotiris Hadjikakou, Department of Chemistry, University of Ioannina, Director of MSc
2. Associate Professor Gerasimos Malandrinos, Department of Chemistry, University of Ioannina, Member
3. Professor Athanasios Coutsolelos, Department of Chemistry, University of Crete, Member
4. Professor Christiana Mitsopoulou, Department of Chemistry, National Kapodistrian University of Athens, Member
5. Professor Anastasios Tasiopoulos, Department of Chemistry, University of Cyprus, Member
6. Associate Professor Georgios Psomas, Department of Chemistry, Aristotle University of Thessaloniki, Member
7. Professor Theocharis Stamatatos, Department of Chemistry, University of Patras, Member

Members of the Coordinating Committee (2022-2024)

1. Professor Sotiris Hadjikakou, Department of Chemistry, University of Ioannina, Director of MSc
3. Professor Athanasios Coutsolelos, Department of Chemistry, University of Crete, Member
4. Professor Christiana Mitsopoulou, Department of Chemistry, National Kapodistrian University of Athens, Member
5. Professor Anastasios Tasiopoulos, Department of Chemistry, University of Cyprus, Member
6. Associate Professor Georgios Psomas, Department of Chemistry, Aristotle University of Thessaloniki, Member

Committees Of Biological Inorganic Chemistry (2023-2024)

Postgraduate Student Selection Committee	A. Coutsolelos
	C. Mitsopoulou
	S. Hadjikakou
	G. Psomas
Website MSc	C. Banti
	S. Hadjikakou
Timetable	N. Kourkoumelis

Course Coordinators (2023-2024)

Bioinorganic Chemistry	G. Psomas
	S. Hadjikakou
Physicochemical, spectroscopic and biochemical methods in Bioinorganic Chemistry	A. Tasiopoulos
	S. Hadjikakou
Biophysics Of Pharmaceutical Action	N. Kourkoumelis
Special Topics in Biochemistry-Molecular Biology	V. Boumba
Collection of bibliographic data and Presentation of Work regarding the research field of the diploma thesis	I. Plakatouras
Laboratory of spectroscopic and physicochemical	E. Manos
Introduction to Research Laboratory	G. Malandrinos
Thesis A	S. Hadjikakou
Thesis B	S. Hadjikakou

Regulation for the Academic Advisor at the University of Ioannina

1. In general

The present Academic Advisor Regulation was approved by the Quality Assurance Unit of the University of Ioannina in its meeting no. 12/2-11-2020. According to the regulation, no later than December of each academic year, the Curriculum Committee assigns the duties of Academic Advisor for each newly admitted postgraduate student to the supervising Professor he will choose. The selection of the Supervisor of the postgraduate dissertation takes place after the first semester or during the first semester with an application to the Curriculum Committee of the MSc, which is co-signed and the supervisor selects the supervisor of the postgraduate dissertation (Application for Appointment of Supervisor, http://bic.chem.uoi.gr/entipa.html). The supervisor then proposes the three-member examination committee which, after examining the candidate after the completion of the dissertation, proposes to the Curriculum Committee accordingly (Application for appointment of a three-member examination committee, http://bic.chem.uoi.gr/entipa.html). The supervising professor also proposes the topic of the candidate's dissertation (Subject Definition Application, http://bic.chem.uoi.gr/entipa.html).

The Academic Advisor of a postgraduate student remains the same until the completion of his studies. In case of absence of the Academic Advisor for a long period of time (e.g. educational leave, health problem, retirement), the Curriculum Committee assigns the students of this Advisor to another faculty member or lecturer at the MSc. The process is repeated after the completion of the admission of students of special categories to the MSc.

2. Role of the Academic Advisor

The Academic Advisor is responsible for informing and advising students on all of the following:

a) Course content, participation in workshops, utilization of the infrastructure of the laboratories of the Postgraduate program, ways of evaluating course performance, encouraging the student to participate in progress, tests, series of exercises, remedial teaching with additional tutorials, etc., which help the student understand and successfully complete the courses in which he has difficulty, ways of studying, bibliography.

c) Selection of dissertation topic, minimizing failure in the public presentation of the dissertation and discussion with the student, so that the choice of the topic of the dissertation is consistent with his/her personal interests, skills and abilities.

d) Discussion of examination results.

f) Participation in Erasmus Postgraduate programmes

g) Professional prospects (opportunities in the public sector, private sector, freelance profession, job abroad).

h) Discussion of any issue that creates obstacles to studies.
i) Issues with teachers.
j) Information on the services offered by the University to its students (Student Welfare, DASTA, SKEPI, Internship Office, etc.).

The Study Advisor informs the Curriculum Committee in writing, by filling in forms A11A and A11B, about the progress of the student's issue and conveys to it any problems posed by students regarding the above. In its report, it may point out malfunctions or shortcomings that create problems for students and propose measures to address them. In exceptional cases and following a documented application by the student or the Student Advisor, a new Student Advisor may be appointed.

3. Contact the Consultant

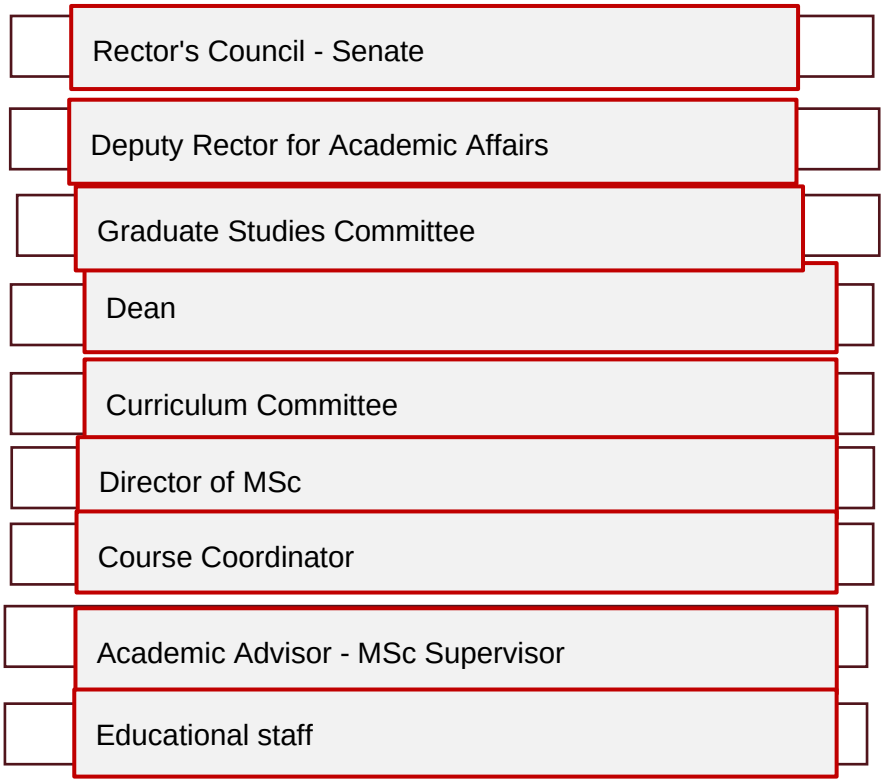
The Academic Advisor has a list of the email addresses of the postgraduate students assigned to him and communicates with them about issues of their studies. In addition, it announces on the website of the MSc a specific time of discussion with the students it advises. In order for the meetings to be effective, both one-on-one meetings with each student and group meetings are held on issues of common interest. The first meeting (welcome meeting) is recommended to be set within the first month of the official start of the winter semester. Subsequent meetings will be set on mutually agreed dates. The Curriculum Committee and the members of the EGTCs of the Departments should cooperate and support the Academic Advisors in their work and take into account their comments, suggestions, recommendations and requests.

4. Protection of student personal data and confidentiality

For the exercise of what is mentioned in Paragraphs 2 and 3, the legislation on the protection of students' personal data and the obligation of confidentiality apply, which continues after the termination of the duties of the Academic Advisor.

Student complaint handling mechanism

Flowchart and Problem Reports and Resolution Process



 Students can report any problem related to their studies and depending on its severity will be dealt with by the appropriate body

 Teaching staff may also report problems in student behaviour or events that hinder the proper conduct of teaching or examination

 The discussion starts internally in the Curriculum Committee and reaches the Rector's Council

Additional arrangements

Individual issues that are not addressed in the relevant articles of the Laws and Ministerial Decisions referred to in the general provisions of this regulation and concern special regulations or operational issues of the MSc will be dealt with by the Curriculum Committee of the program, as well as by the Rules of Procedure of the Postgraduate Program of the Department of Chemistry of the University of Ioannina and the general regulations for postgraduate studies on behalf of the Administration of the University of Ioannina.

Forms for prospective students

http://bic.chem.uoi.gr/entipa.html

Forms for the Master's Degree

http://bic.chem.uoi.gr/entipa.html

Contact

- Laboratory of Inorganic Chemistry
- Department of Chemistry
- University of Ioannina
- Ioannina, TK 45100

- telephone
  - 26510-08362, 8374
- e-mail
  - Director, Professor S. Hatjikakou, shadjika@uoi.gr
- facebook
  - https://www.facebook.com/bioinorganic.chemistry.2016

Annexes

A. Model Regulation for the Management of Complaints and Objections of Students of the University of Ioannina (Senate Decision 1139/08-11-2022)

A1. Student Complaints & Objections Form

A2. Consolidated Form for the Recording of Complaints & Objections

B. Research Ethics Regulation

Πανεπιστήμιο Ιωαννίνων

ΜΟ.ΔΙ.Π.
ΜΟΝΑΔΑ ΔΙΑΣΦΑΛΙΣΗΣ ΠΟΙΟΤΗΤΑΣ ΠΑΝΕΠΙΣΤΗΜΙΟΥ ΙΩΑΝΝΙΝΩΝ

MODEL REGULATION FOR THE MANAGEMENT OF COMPLAINTS AND APPEALS OF STUDENTS OF THE UNIVERSITY OF IOANNINA

Senate Decision 1139/08-11-2022

SEPTEMBER 2022

Edition 1

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ARTICLE 1: Purpose

The present Regulation for the Management of Complaints and Objections of students is drafted in the framework of the Internal Quality Assurance System (IQAS) and the improvement of the work produced by the University of Ioannina.

The purpose of the Regulation is to ensure, through a mechanism for managing student complaints and appeals, the improvement of the quality of the educational and administrative services provided by the academic Departments to all students participating in the Programs of Study.

Specific objectives for the establishment of the Regulation are to be defined in order to implement the procedures for the reliable, systematic and constantly improving treatment of difficulties encountered by the student during his/her studies. Also, to define regulatory standards through which the analysis and handling of complaints and objections that may arise in each student will become more reliable, user-friendly and systematic, in order to contribute to the improvement of his/her learning and teaching experience, as well as to the smooth operation of all Programs of Study of the Departments of the University of Ioannina. In addition, a student-based support framework will be created, which will contribute to the redesign and continuous improvement of the studies and services provided.

ARTICLE 2: Definitions

A complaint is defined as the expression of a protest (oral or written) by a student regarding the quality of the academic and administrative services provided by academic departments of the University.

An objection is defined as any written expression of objection or doubt by the student regarding a pending or problematic resolution of the issue/problem that concerns him/her. The reasons on the basis of which students will formulate and submit either written or oral complaints are related to:

1) Problems arising from actions or decisions of a member of the Department or a collegiate body. These problems may (indicatively) be:

 Problems arising from non-compliance with study and attendance regulations.

 Problems arising from non-observance of the prescribed procedures concerning teaching and research.

 Problems related to exam and grading issues. Problems in student-teacher interaction.

 Problems related to the spirit of cooperation between students and members of the scientific staff of the university community, as well as the equal treatment of all students.

 Issues arising from non-observance of consistency (timetables, non-timely notification of changes, extraordinary replacement of teacher, etc.), related to the educational process.

 Issues arising from inappropriate behavior of academic staff or harassment issues of any nature.

 Problems related to the implementation of the learning process, such as late response to the assignment or grading of assignments and/or written exams, resolution of questions, or provision of clarifications, etc.2) Problems in the communication of students with the administrative services of the Department and/or the Institution are indicatively due to:

 Inappropriate behavior of administrative employees.

 Late or incomplete response by administrators.

3) Problems related to the building and logistical infrastructure of the Department and/or the Institution. These problems may (indicatively) be:

 Inadequate facilities (heating, ventilation, seats, auditoriums, laboratories,

etc.).

 Deficiencies in the logistical infrastructure (equipment, accessibility, etc.) that make it difficult for the student in his/her daily life and in his/her studies.

 Difficulties arising from deficiencies in the administrative services provided, which support the operation of the Departments.

4) Problems that arise in the relations between students. Indicatively, it may be:

 Issues arising from cooperation between students on academic issues.

 Issues arising from cooperation between students and their collective bodies.

5) Other issues related (indicatively) to infringement/appropriation of copyright.

ARTICLE 3: Scope

The complaints and objections management policy is addressed to the entire active student population of the three study cycles of the University's Departments. Students must, before submitting their complaint or objection, study the Guides and the general and specific Study Regulations of the Study Programs they attend, as well as the general Operating Regulations of the University, so that they know their rights and obligations. As the competent body in each Academic Department for the monitoring and proper implementation of the management process of student complaints and objections, it is defined the Student Affairs Committee. During the implementation of the process in all its stages, those involved have the obligation to respect and protect personal data, as determined by the applicable legislation at any given time.

ARTICLE 4: Procedure for lodging complaints and objections

The process of submitting complaints and objections aims to define actions so that the student can communicate the issues that concern him/her as well as to resolve them. The process is developed in steps:

Before any action is taken in writing to formulate any complaint or objection, as a first stage-step, the student, depending on the nature of his/her complaint, should contact a faculty member or his/her Academic Advisor, who, according to the University regulation (Senate decision 1104/30-03-2021), discusses with the student any issue that creates obstacles to his/her studies and is related to the responsibilities of the Academic Advisor. If the problem is not resolved through the above informal procedure or a conflict of responsibilities or roles arises with the Academic Advisor, then the following written/formal procedure is followed:

STEP 1: The student records the issue that concerns him/her in the Complaints and Objections Submission Form (Form A9a) and submits it to the Secretariat of his/her Department. In case of an informal resolution procedure, the hearing and mediation procedure followed should also be mentioned in the Form.

STEP 2: The Secretariat of the Department, after registering the Complaint and Objection Submission Form completed by the student, forwards it to the Student Affairs Committee of the Department. This, in turn, examines the dimensions of the problem that concerns the student and takes the necessary actions to resolve it, referring it, when necessary, to any competent member or body of the Postgraduate Program (Curriculum Committee) or to a competent service or structure of the Institution. Depending on the nature of the problem, the Student Affairs Committee may invite the student concerned to a private meeting to present his/her views before taking the necessary actions. The student should be informed promptly and in the most appropriate way about the time and day of the meeting, as well as about the participants who will be present at it. In the context of the 2nd step, if the Student Affairs Committee has not resolved the issue and the situation remains problematic or the offered solution does not satisfy the student, then the student may resubmit the issue that concerns him/her to the Curriculum Committee of the IPPS following the procedure mentioned in Step 1, adding additionally the actions, which have been

carried out so far.

STEP 3: In the case that the issue is referred to the Curriculum Committee of the MSc, any decisions related to its resolution are final and irrevocable. If the case is complex, the Curriculum Committee of the MSc may refer the case to another body or structure of the University. If the resolution of the issue is achieved without referring it to the Curriculum Committee of the MSc, then the case is closed. In case all the above procedures have been applied but the student still disagrees with the decision to resolve the issue, he/she may contact the Vice-Rector for Academic Affairs of the University for a new settlement.

ARTICLE 5: Right to information

The student should be informed in writing by the Department within 20 days from the submission of his/her complaint about the actions taken, as well as about any decision taken on his/her issue. In case the student does not receive the answer within the above period, he/she may contact the Vice-Rector of Academic Affairs for the further settlement of his/her complaint.

ARTICLE 6: Evaluation of the application of the procedure for resolving complaints and objections

It is appropriate to implement actions that will help streamline the process of resolving complaints and objections. Complaints and objections submitted through the written/formal procedure should be registered and classified electronically, in order for the results of their resolution to be measurable, assessable and comparable, both qualitatively and quantitatively (Form A9b).

The Student Affairs Committee assesses and classifies complaints and objections. It is proposed to classify complaints and objections regarding their origin (teaching-academic environment, administrative services, Department infrastructure,

problems of cooperation between students) and to evaluate the results of the process.

In the above context and at the end of each academic year, the Committee prepares a report that includes the following information:

- All complaints and objections submitted by students to the Department.
- All complaints and objections of students examined, according to the procedure provided by the Department.
- All complaints and objections of students that after their examination were resolved by the Department or the Institution.

ARTICLE 7: Adoption-amendment of this regulation

The model regulation is adopted in the Number 1139/08-11-2022 decision of the Senate and may be amended and revised according to a decision of the Senate.

Date: _____

No.: _____

STUDENT COMPLAINTS & OBJECTIONS FORM

To the Secretariat of Department:

_____

Student Identification Details

Name: _____ Last name: _____

Registration Number: _____ Phone: _____ Email: _____

Year of study: _____

The issue that concerns the student are following:

ACADEMIC-TEACHING ENVIRONMENT ❒
DEPARTMENT ADMINISTRATIVE SERVICES ❒
DEPARTMENT INFRASTRUCTURE ❒
COOPERATION BETWEEN STUDENTS ❒

Other (description)

_____

_____

Summary of the complaint/problem

(Please describe briefly and clearly the problem/complaint that concerns you)

_____

_____

_____

Description of hearing and mediation process followed:

(Please briefly describe the competent body you addressed (e.g. Head of Department, lecturer, Academic Advisor, etc.) for the problem/complaint that concerns you and what actions were taken to resolve it)

_____

_____

_____

By signing this application I declare that I expressly consent, freely and unconditionally and accept the collection, processing and storage of my personal data solely for the purpose of completing the above procedure.

Ioannina, …….

The applicant

(Name-Signature)

The collection and processing of personal data submitted is carried out in accordance with the provisions of Law 4624/19 and Regulation (EU) 2016/2019. The University of Ioannina collects and processes personal data exclusively in the context of the implementation of the purpose of this process. For the period of time that the personal data will remain at the disposal of the University of Ioannina, the subject has the possibility to exercise his rights in accordance with the terms of the General Regulation on the Protection of Personal Data 2016/679 (EU) and the provisions set out in the articles 34 and 35 of Law 4624/2019. The Foundation's Personal Data Manager is Ms. Stavroula Stathara (email: dpo@uoi.gr).

CONSOLIDATED FORM FOR RECORDING COMPLAINTS & OBJECTIONS

(concerns complaints submitted by students to the Department and have received a protocol number)

Department _____

Academic year _____

PLEASE COMPLETE THE FOLLOWING FIELDS:

	Total number*	*Complaint categorization as to**:*			
		Academic/teaching environment	*Department administrative services*	*Department infrastructure*	*Collaboration between students*
Total Complaints: *(All objections, complaints, recommendations, etc. submitted by students during the academic reference year, i.e. from 1/9 to 31/8 of the reference year)*	*	**	**	**	**
Complaints examined: *(All objections, complaints, recommendations, etc. of students that were examined according to the prescribed procedure during the academic reference year, i.e. from 1/9 to 31/8 of the reference year)*	*	**	**	**	**
Acceptable complaints: *(All objections, complaints, recommendations, etc. of students that were examined according to the prescribed procedure during the academic reference year, i.e. from 1/9 to 31/8 of the reference year)*	*	**	**	**	**

** Mandatory field completion because it concerns ETHAAE*

*** Optional categorization and field completion*

The coordinator

Student Affairs Committee

Annexes