

## **Regulations of the International Doctoral Studies at the Institute of Physical Chemistry of the Polish Academy of Sciences**

(valid for studies held under: “Interdisciplinary NAnoscience School: from phenoMEnology to applicationS”)

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### § 2.7.

- 2.7.1** The immediate superiors of the PhD student are his/her research advisor or supervisor(s) together with the co-supervisor (hereinafter referred to as: “the Tutors”), as indicated in the NaMeS grant agreement.

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### 2.7.3 The Tutor shall:

- 2.7.3.1 provide a doctoral student with scientific guidance and advice,
- 2.7.3.2 provide support to the doctoral student in his/her independent research,
- 2.7.3.3 express an opinion on periodical (triannual) reports prepared by the student,
- 2.7.3.4 assist the doctoral student in preparing his/her individual CDP and its regular updates, specifying in particular:
  - ✓ specialised lecture courses to be attended by a doctoral student,
  - ✓ trainings to be completed under the NaMeS Programme,
- 2.7.3.5 prepare, together with the doctoral student, a report on ethical issues potentially arising from the respective PhD project, with the recommendation of measures (incl. ethics committee involvement) adequate for the proper handling of these issues (within a month after the assignment of the project to a student, updated annually).
- 2.7.3.6 participate in triannual working meetings (obligatory for ICP-affiliated research advisors or supervisors), and, in the case of absence of the doctoral student, present the progress of his/her research work.

The educational programme of NaMeS will be compatible with the EU Principles for Innovative Doctoral Training and will follow the **Career Development Plans (CDPs)** of individual students. CDPs, prepared at the beginning of the course (students and supervisors being the key actors involved), will be regularly updated to students' expectations and needs.

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### § 3.1.

A doctoral student shall be obliged to:

- 3.1.1** act in accordance with taken oath, the *Regulations of the “Interdisciplinary NAnoscience School: from phenoMEnology to applicationS” at the Institute of Physical Chemistry of the Polish Academy of Sciences, Programme of the IPC International Doctoral Studies* (version for NaMeS) and legal regulations in force,
- 3.1.2** conduct regular research activity, under the guidance of the Tutors, aimed at the preparation of the doctoral dissertation,
- 3.1.3** participate in classes covered by the NaMeS Programme and individual Career Development Plan, passing the compulsory examinations and completing all required classes,
- 3.1.4** notify the Head of PhD studies in writing on the dates of his/her secondments abroad,
- 3.1.5** present, every 4 months, due on dates specified by the Head of PhD Studies, the progress of his/her research work: by submitting a written report to the Head of PhD Studies and by giving, at the NaMeS working meeting, a brief oral summary of the most important achievements,
- 3.1.6** prepare and update with the Tutors the individual CDP, as referred to in item 2.7.3.4, and submit it to the Head of PhD Studies,
- 3.1.7** prepare and update with the Tutors the report on ethical issues potentially arising from a respective PhD project, as referred to in item 2.7.3.5, and submit it to the Head of PhD Studies.

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	ECTS credits				Form of completion	ECTS sum
	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year		
Basic Physical Chemistry <sup>1)</sup> : 1) <i>Quantum chemistry and spectroscopy</i> 2) <i>Thermodynamics</i> 3) <i>Kinetics of chemical reactions</i> 4) <i>Structure of matter</i> 5) <i>Electrochemistry</i>	6	6	3	-	Examination by the lecturer	15
4 specialised lecture courses <sup>2)</sup>	3	3	3	3		12
Lectures in additional subject <sup>3)</sup> , (Options: <i>Philosophy</i> or <i>Economy</i> )	1				Credit awarded by the lecturer	1
Specialised seminar or conference presentation (min. 2 presentations; see Item 5.5.)	1		1		Credit awarded by the Tutor	2
Doctoral seminars (4 presentations in total)	1	1	1	1	Credit awarded by the Head of PhD Studies	4
Research reports (see item 5.1.) <sup>4)</sup>	0.5	0.5	0.5	0.5		2
Course on grant application writing	1				Credit awarded by the lecturer	1
Lectures on intellectual property protection and patenting practice	1					1
Coaching towards effective career management	0.5					0.5
Soft skills training <sup>5)</sup>	0.5					0.5
Laboratory internship <sup>6)</sup> (see Section 6.)	2				Credit awarded by the respective research team leader	2
<b>TOTAL <sup>7)</sup></b>						<b>41</b>

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**3.1.** Five 30-hour Basic Physical Chemistry lecture courses are organised by the Head of PhD Studies. **The attendance is compulsory.** Each lecture course shall be completed by an examination. The lecturer may, after having consulted the Tutor, permit a doctoral student who has not attended classes but declares appropriately advanced knowledge in a given field, to sit the examination.

**3.2.** A doctoral student must attend 4 specialised lecture courses (a minimum of 15 hours each, in-house or outside IPC, completed by examinations), in line with his/her individual CDP.

**4.2.** A doctoral student must notify the Head of PhD Studies about his/her attendance at a specialised lecture course within the framework of the NaMeS programme, before sitting for the examination. After the examination, he/she must ensure the grade is entered in the credit book as well as in the AYCC.



Quantum Chemistry & Spectroscopy	A1
Thermodynamics	A2
Chemical Kinetics	B
Structure of Matter	C1
Electrochemistry	C2

2014/15		2015/16		2016/17		2017/18		2018/19	
I	II	I	II	I	II	I	II	I	II
A1	A2	A1 → A2		A1 → A2		A1	A2	A1	A2
	A2								
	A1			A2 → A1		A2	A1	A2	A1
B		B		B		B		B	
		B				B		B	
		C1	C1 → C2	C1 → C2		C1 → C2		C1 → C2	C1
	C2		C2 → C1			C2 → C1		C2 → C1	C2

Lectures delivered in English are marked in red, otherwise the language of instruction is Polish.

**Programme**  
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## **6. Laboratory internship**

- 6.1.** A doctoral student must complete, **at IPC**, a laboratory internship **not directly related** to his/her own research work, but in line with the individual CDP.
- 6.2.** The choice of an internship is made from the offer compiled by the Head of PhD Studies.
- 6.3.** The internship shall be preceded by verifying if the doctoral student possesses the appropriate theoretical knowledge. A written report, documenting the course of the internship and accepted by the person providing guidance to the student, is subject to the awarding of a credit by the leader of the involved IPC research team.

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## 8. Rules for completion of each year of study

**8.1.** A necessary prerequisite for completing a year of study is that a doctoral student presents quarterly and annual reports on the progress of his/her research work (see item 5.1.), together with a positive opinion of his/her Tutor(s). In addition, to complete a year of study (as confirmed by the Head of PhD Studies with respective credit book and AYCC entries) the student is required to meet the conditions listed in the items 8.2-4 and 8.7 below, as well as in items 5.3-4.

**8.2.** A first year doctoral student must complete at least two of the five required lecture courses covering the principal branches of physical chemistry. Additionally, he/she must complete at least one specialised lecture course, and give a talk at the doctoral seminar (Item 5.2).

**8.3.** In total, during the first and second years of study, a doctoral student must pass examinations in at least four Basic Physical Chemistry lecture courses and two specialised lecture courses. The student must also present his/her research findings in two talks given at the doctoral seminar and in at least one talk given at a specialised seminar or conference (Item 5.5).

**8.4.** In total, during the first three years of study, a student of the International Doctoral Studies must pass examinations in all Basic Physical Chemistry lecture courses and three specialised lecture courses. The student must also deliver three talks at the doctoral seminar and at least one talk at a specialised seminar or conference.

**8.5.** The completion dates, as follows from Items 8.2, 8.3, and 8.4, may be rescheduled in justified cases on the Tutor's request, after obtaining acceptance by the Head of PhD Studies.

**8.6.** In exceptional cases, at the request of the doctoral student, approved by the Tutor, the Head of PhD Studies may conditionally complete a year of study if the student has no more than one

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Research reports (see Item 5.1.) <sup>4)</sup>	0.5	0.5	0.5	0.5		2
Course on grant application writing			1			1
Lectures on intellectual property protection and patenting practice			1		Credit awarded by the lecturer	1
Coaching towards effective career management			0.5			0.5
Soft skills training <sup>5)</sup>			0.5			0.5
Laboratory internship <sup>6)</sup> (see Section 6.)			2		Credit awarded by the respective research team leader	2
TOTAL <sup>7)</sup>						41

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### § 7.1.

- 7.1.1** The duration of the doctoral studies under NaMeS shall be no less than 2 years and no longer than 4 years. In justified instances, the duration of the doctoral studies may be extended.
- 7.1.2** The duration of the doctoral studies shall be extended by the Head of PhD Studies according to the rules set out in § 2.6. The request to extend the doctoral studies, together with an opinion expressed by the Tutors shall be submitted by the doctoral student.

