



From Postdoc to PI: Future leaders of ERA PD2PI

Guide for Applicants

Call deadline: Jan. 15th, 2020





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1. Introduction

1.1. PD2PI project

“From Postdoc to PI: the future leaders of ERA” (acronym: PD2PI) is a **research training project dedicated to postdoctoral fellows interested in broadly understood chemistry with its links to medicine/biology and physics**. The postdoctoral fellows, participants of the project, will carry out own research projects while attending training programme.

The project is carried out by **the Institute of Physical Chemistry, Polish Academy of Sciences (IPC)** with the support of the **European Commission** (H2020, Marie Skłodowska-Curie Actions) (EC) and the **Polish Ministry of Science and Higher Education (MSHE)**. The programme will cover **full costs of participation of the fellows in the programme, including:**

- remunerations,
- research and travels,
- training programme.

The programme of PD2PI is composed of 2 pillars:



research

- Each candidate to PD2PI will work on **individual research project submitted by a candidate at application stage** and evaluated by an independent evaluation committee.
- The **prerequisite for each project is its international and interdisciplinary dimension**. Possible business applications will be favoured.
- **Successful participants will be assisted by experienced mentors**. Each candidate to PD2PI **selects own mentors** – at least one from among the IPC researchers and at least one from partner - or other research institution. Mentors from business sector will also be welcome.
- **Selected mentors** will be value added to the proposal of the given candidate issuing an adequate **letter of support**.



training programme

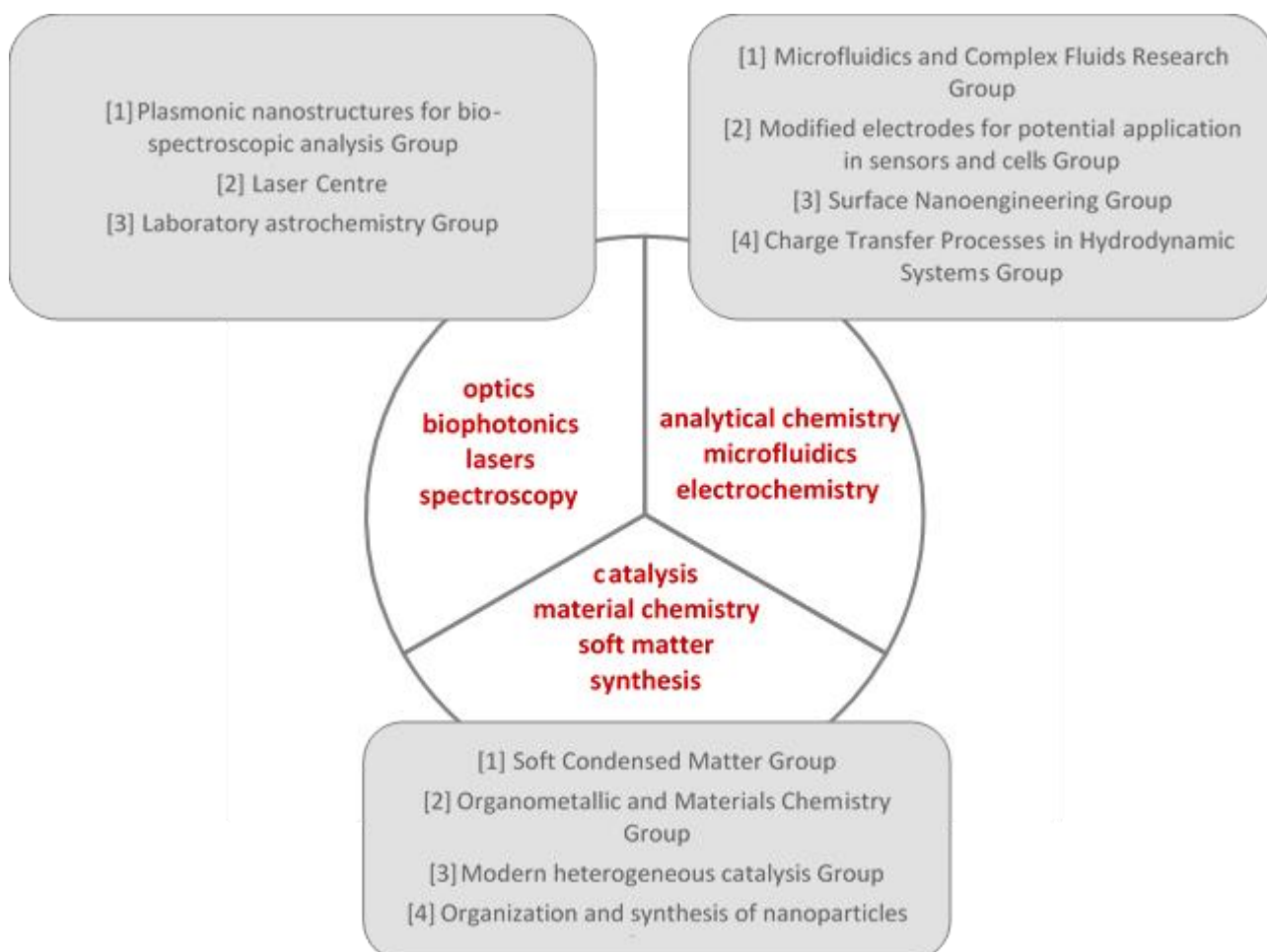
- While carrying out own research project, the PD2PI fellow will, simultaneously, **follow tailor-made training programme consistent with an individual Career Development Plan (CDP)**.
 - The training programme will support **development of the PD2PI fellows and their transition from post-docs to PIs** (Principal Investigators), capable of setting own research agenda and own research group. Personal development towards **alternative career paths** (e.g. head of R&D unit, founder of own company) are also welcome.
 - The individual training programme will be **elaborated after admission of the candidate to the programme by the PD2PI fellow with cooperation with his/her mentor and co-mentor(s)**.

Durations of **fellowships may vary from 3 to 36 months**. The length of the individual fellowship is related to the labour intensity of the proposed research project.

At the moment mentors from **11 research units and 6 companies declared their involvement in the project**. However, PD2PI fellow may choose other academic/business units as a partner organization. Partner institutions offer mentoring services to the PD2PI fellows but will also host them during secondments and train them.

The PD2PI educational programme will integrate specialized courses (e.g. interdisciplinary lectures delivered by distinguished researchers) with hands-on training (e.g. tool-kits on the use of specialized research apparatus, soft skills workshops & managing own research team experience). The PD2PI fellows may also **supervise & mentor own team i.e. 1 MSc and/or 1 PhD student** collaborating on their project to gain experience in team leading, research project management, co-supervision & advising to junior research staff. **This creates a unique offer for postdocs – increasing their chances to set own research group in the future or to become a skilful and effective manager at a company.**

Although the **PD2PI project is open to all research areas offered at IPC**, we particularly encourage applications from the following disciplines:





1.2. Hosting institution

The Institute of Physical Chemistry of the Polish Academy of Sciences (IPC) is a leading research entity localized in Warsaw, Poland (capital city). IPC has the **highest research excellence category among research units in Poland (A+)**, which places us in top 5% of the best research units. 2014, the European Commission granted to IPC the **“HR Excellence in Research” award** for striving for improvement of working conditions for researchers, strengthening recruitment procedure (based on open, merit and transparent principles) and development of professional educational offer for researchers.

At IPC there are 27 research teams dealing with broadly understood chemistry, that carry out interdisciplinary research in chemistry inspired by biology/ medicine, pharmacy & physics. The leaders of our research groups are very independent, and act as managers of their own units. IPC finds it very easy to set new research groups and close ineffective ones due to the existence of a very fair evaluation system, based on objective criteria.

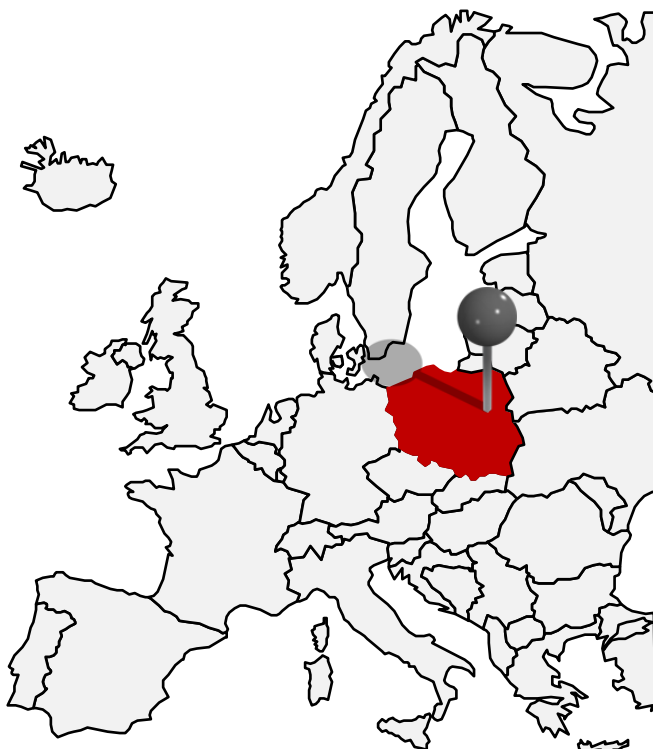
IPC is an employer for more than 300 employees, out of whom 30% are foreigners. Our foreign colleagues consider Warsaw as a very good place for living due to its dynamism, high quality of life, and moderate costs of living.

IPC has modern equipment, and extensive experimental & application experience. The research equipment database is publicly available at [IPC website](#).

Beside excellent research performance, IPC is also dedicated to commercialization. We carry out an initiative [“IPC for the companies”](#) offering consultancy, measurement services and patents for sale. We have a few spin-off and spin-out companies originated from our research. They act in the sectors of medical diagnostics ([Curiosity Diagnostics](#), [Scope Fluidics](#)), and equipment for industry ([Fluence](#)). We have also found a way to support very niche commercial initiatives of our researchers co-financing first stages of development of their inventions ([SERSitive](#), [Siliquan](#)).

IPC hosted ERC grant and has a chair funded by the European Commission under the prestigious programme **“ERA Chairs”** (H2020) ([CREATE project](#)). Apart from the PD2PI project we also implement another project acknowledged by the European Commission under Marie Skłodowska-Curie Actions – [NaMeS](#). The NaMeS project is dedicated to doctoral students.

We are also the only institution who awards researchers for their ambitious dreams. **“Dream Chemistry Award”** is a contest invented by IPC and currently conducted with the cooperation of the Institute of Organic Chemistry and Biochemistry, Czech Academy of Sciences, in which a prize is awarded to a young scientist with a chemistry background for an idea of a scientific project in the field of chemistry or chemistry-related disciplines that she/he dreams to solve. The decision is made by an international committee composed of worldwide-renowned researchers.





IPC is also committed to introduce researcher-friendly working conditions stimulating development of professional researchers, responsible about the way they operate. For these activities the European Commission has given us the award **“HR Excellence in Research”**. We believe that the conditions and environment we create are unique and serve good professional career development because:

“WE CREATE KNOWLEDGE TO CHANGE THE WORLD” (this is our mission).





2. Application process

2.1. Who can apply?

We invite **well-motivated experienced researchers (ERs) from all over the world** who want to carry out their own ambitious **interdisciplinary research in an international collaboration**.

If you want to apply please make sure that you comply with the following entry criteria:

➤ **Research experience:**

We invite researchers who **have a doctoral degree** (in chemistry, physics, materials science/engineering, biotechnology, biochemistry, biophysics, or related fields) or a formal document stating the scheduled date of PhD thesis defence prior to the deadline of the call.

If you don't have doctoral degree – there is another option. You can prove that you **have at least four years of full-time equivalent research experience** counting up until the deadline of the call. If you were a researcher half-time, you will need to show 8 years of adequate experience.

➤ **Mobility rule:**

We invite **researchers who have not resided or carried out their main activity (work, studies, etc.) in Poland and in the country of the selected Partner organization** for more than 12 months in the 3 years immediately prior to the deadline of the call. For this reason, please, choose partner organisation wisely.

The general requirement for the research project is its interdisciplinary dimension – on the border of chemistry, physics and/or biology/medicine.

2.2. Admission proceedings

Participants in the programme will be selected by **an international evaluation committee** composed of independent researchers and, if reasonable, business representatives. The evaluation will focus on evaluation of both the candidate and of the research project and will be divided into 3 stages:

- | | | |
|---|---|--|
| ➤ Evaluation against eligibility criteria
(0 – 4 pts/ min. 4 pts.) | } | based on documents
submitted by the candidate |
| ➤ Evaluation against substantive criteria
(0 – 100 pts/ min. 60 pts.) | | |
| ➤ Evaluation against other substantive criteria
(0 – 100 pts/ min. 70 pts.) | → | based on interviews |

The prerequisite of being transferred to the next evaluation stage is trespassing a defined threshold of points at each stage of the evaluation. The minimal number of points required for each of the stages is presented above.

Candidates to PD2PI will be requested to prepare an application composed of:

- **abstract**
- **research proposal**
- **CV**
- **letter of intent signed by at least 1 mentor from IPC and 1 from the external research organization** (business partner as value-added but not as a prerequisite)
- **scan of PhD diploma or other documents proving 4-year full time research experience**





- **references** (as value-added but not as a prerequisite).

2.3. How to start?

We may suggest to start planning your actions according to the following schedule:

Visit [the PD2PI webpage](#).

Choose a research group from IPC conducting research in the field that may interest you. Subsequently, **select a mentor from this group** who may support your project.

Enter IPC equipment database.

Make sure that we dispose of the infrastructure which is essential for your project. Under a budget of your research project you may only purchase tiny research apparatus. If IPC does not have a specific infrastructure you need, try to select partner who may supplement our equipment.

Outline your research project. Next, **contact your chosen IPC mentor**, introduce yourself to them, your research project and ask for a supporting letter. A template of this letter you may find at PD2PI webpage. You may also seek advice from them who may be best partner for this project.

Contact a co-mentor from an IPC partner organization from the list or select your own. Additionally, you may invite a partner from the business sector to be involved in your project. **Ask the selected co-mentor to sign a supporting letter.** A template of this letter you may find at PD2PI webpage. Make sure that the country of origin of your co-mentor is not the country in which you spent more than 12 months in the last 3 years (see “Mobility rule”, pt. 2.1).

Once you have the supporting letter from your IPC mentor and partner organization you may start preparing your proposal to PD2PI consistent with the plan below.

Please bear in mind that during your fellowship you can purchase only tiny research equipment to carry out research resulting from your proposal. For this reason IPC provides the candidates with an access to [equipment database](#) to make sure that implementation of a proposed research is doable at IPC. The candidates may as well propose using Partner organizations’ infrastructure if accessible during secondments to Partner organizations.





2.4. Submission of applications

Entering into the competition (i.e. submission of application under PD2PI) means that you agree with “Requirements and Procedure for Admission to the Postdoctoral Programme at IPC, and Rules for Appointing the Selection Committee” (valid for postdoctoral programme held under: “From Postdoc to PI: the future leaders of ERA”) and conditions set herein, including the consent to the processing of personal data by IPC on the terms set out in this document.

To apply to PD2PI the candidates are requested to go to the **PD2PI webpage** and **follow the application module**. Using this module please submit the following **required documents**:

1. **Name, surname & contact details** (e-mail, phone number, current or last workplace);
 2. **Abstract** (up to 1,500 characters);
 3. **Research proposal** – applicants are requested to propose their own interdisciplinary research project which they intend to carry out during their stay at IPC. For this reason, **please use the Research proposal template provided [here](#)**. The following sections must be followed:
 - a. **description of research project** (up to 5 pages), incl.:
 - **project objectives,**
 - **reasons for the selection of a research topic,**
 - **explanation of originality and innovative nature of the project,**
 - **explanation of interdisciplinary approach applied to the project,**
 - **research tasks and schedule,**
 - **explanation of research methods used and required equipment specification,**
 - **list of key actors involved and their role,** incl. indication of at least 1 mentor from IPC who supports the candidate & 1 co-mentor from another research organisation. Additional partner from the business sector is not necessary but is an added value to the project (see evaluation criteria).

If the selected co-mentor does not originate from IPC partner organizations listed in a call (please see a list below) – describe as well research profile and experience of a co-mentor relevant for the project.
 - **explanation of intersectoral approach applied to the project,**
 - **progress beyond the state of the art and expected impact,**
 - **literature;**
 - b. **budget table, justification and explanation of the costs;**
 - c. **a list of indispensable research infrastructure** required to carry out the project – *database of IPC research infrastructure is available [here](#);*
 - a. **ethical self-assessment form;**
4. **CV**, containing:
 - a. description of **the course of your career** in academia & other sectors,
 - b. description of **international experience,**
 - c. indication of **countries of residence,**
 - d. list of **most relevant publications,**
 - e. list of **patents, industrial and utility design applications or granted rights** – *if applicable,*





- f. list of **research and/or application projects** – *if applicable*;
5. **letter of support of at least 1 mentor from IPC and 1 from another research organization** (template provided);
 6. **scan of PhD diploma or other documents proving 4-year full time research experience** – you may present a scan of your PhD diploma or a formal document stating the scheduled date of PhD thesis defence prior to the deadline of the call; or proof that you have at least four years of full-time equivalent research experience prior to the deadline of the call.
 7. **reference(s)** – opinion(s) of an independent researcher on a candidate is not obligatory, but if delivered – a basis for additional scores.

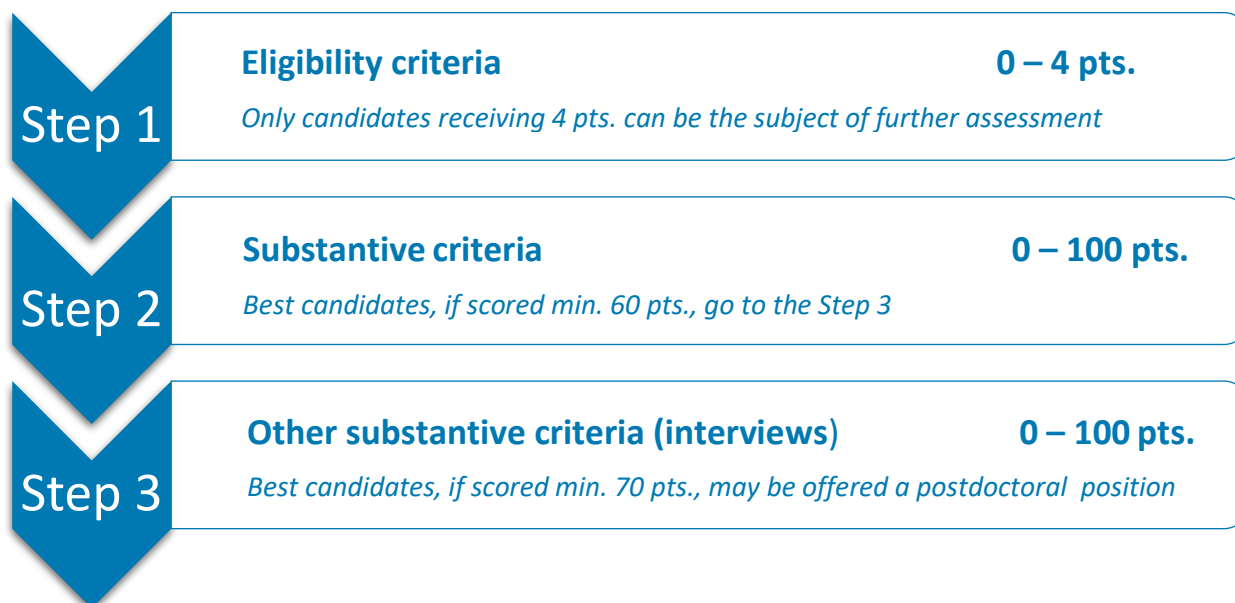
List of IPC Partner organizations and suggested co-mentors:

Partner Organization - ACADEMIA	Recommended co-mentor	Country
Radboud University Institute for Molecules and Materials	<ul style="list-style-type: none"> • Wilhelm Huck, head of Dept. of Physical Organic Chemistry 	Netherlands
Queen Mary University Blizard Institute, School of Medicine & Dentistry	<ul style="list-style-type: none"> • David Wareham, Antimicrobial Research Group 	United Kingdom
Leibniz Institute of Polymer Research Dresden	<ul style="list-style-type: none"> • Lars David Renner, Group Leader Microfabs and Microbiology 	Germany
Ecole Polytechnique de Lausanne Laboratory of Physical and Analytical Chemistry Laboratory of Photonics and Interfaces	<ul style="list-style-type: none"> • Hubert Girault, head of Laboratory of Physical and Analytical Chemistry • Michael Graetzel, Head of Laboratory of Photonics and Interfaces 	Switzerland
French National Centre for Scientific Research Institut des Sciences Moléculaires d'Orsay	<ul style="list-style-type: none"> • Claudine Crépin, head of 'Molecules in Matrices' Group 	France
University of Lille: Science and Technology	<ul style="list-style-type: none"> • Sabine Szunerits, ISE Regional Representative of France 	France
University of Limerick Department of Chemical Sciences	<ul style="list-style-type: none"> • Micheál Scanlon, Department of Chemical Sciences at the University of Limerick and PI - Scanlon Electrochemistry Group 	Ireland
Uppsala University Dept. of Chemistry - Ångström Laboratory	<ul style="list-style-type: none"> • Leif Hammarström, Dept. of Chemistry - Ångström Laboratory, Physical Chemistry 	Sweden
Ludwig Maximilian University of Munich Ultrafast Nanophotonics Laboratory	<ul style="list-style-type: none"> • Matthias KLING, head of Attosecond Imaging group, Munich Centre for Advanced Photonics 	Germany
Hamburg University Institute of Physical Chemistry	<ul style="list-style-type: none"> • Horst Weller, head of Nanochemistry Group 	Germany



3. Evaluation process

There are three steps of the evaluation process:



1. STAGE (DOCUMENTS CHECK BY IPC) – ELIGIBILITY CRITERIA

After document submission applications of the candidates are evaluated against the eligibility criteria by PD2PI Project Support Office (PSO). The eligibility criteria are as follows:

	Criterion	Explanation	Score
1	Completeness of the submitted application	All required documents (see above) were submitted by the candidate and contain all required information.	0 / 1
2	Mobility	Researchers must not have resided or carried out their main activity (work, studies, etc.) in Poland and in the country of the partner organization for more than 12 months in the 3 years immediately prior to the deadline of the call.	0 / 1
3	Doctoral degree	Possession of doctoral degree (in chemistry, physics, materials science/engineering, biotechnology, biochemistry, biophysics, or related field) or a formal document stating that the scheduled date of PhD thesis defence is prior to the deadline of the call; or have at least four years of full-time equivalent research experience prior to the deadline of the call.	0 / 1
4	Project eligibility under the PD2PI project	In particular: <ul style="list-style-type: none"> ✓ duration of proposed research project is within the timeframes indicated in the advertisement (3 - 36 months), ✓ the fellowship is planned to start in 2020, ✓ the research project ends 31/10/2024 at the latest. 	0 / 1
TOTAL *			0 - 4

At this stage you may be asked to deliver some supplements within time limit of 7 calendar days from the date of sending the request, so make sure that you regularly check your e-mail box.



Only applications of the candidates who received 4 pts. can be the subject of further assessment.

2. STAGE (APPLICATIONS EVALUATIONS BY EXTERNAL EXPERTS) – SUBSTANTIVE CRITERIA

At this stage **External Experts** evaluate the submitted applications. They are, independent from IPC, researchers - experts in the specific field covered by the given proposal. They give scores independently. The substantive criteria are as follows:

Criterion	Pts.
Ethics clearance <i>*Only applications fulfilling this criterion will be the subject for further assessment.</i>	-
– proposal complies with standards & legal provisions governing ethical issues	Yes/No*
Project is interdisciplinary <i>*Only applications fulfilling this criterion will be the subject for further assessment.</i>	-
– project combines elements of at least 2 research areas (physics, chemistry, biology/medicine)	Yes/No*
Scientific excellence of the research project	max. 60
– originality & innovative nature of the project	0 - 20
– appropriateness of the proposed methods & equipment	0 - 20
– project contributes to creation of new knowledge / technology	0 - 10
– project adopts inter-sectoral approach e.g. collaboration with business sector, business application	0 - 10
Applicant's experience	max. 40
– research achievements, measured by quality of scientific publications & candidate's role in them (first/ correspond./ significant)	0 – 10
– participation in industrial research projects	0 – 10
– projects coordination (research or application projects)	0 – 5
– obtained or pending patents, industrial and utility designs	0 – 5
– international experience (e.g. secondments abroad)	0 – 5
– quality of references – opinion expressed in reference letter(s) from trustworthy professional(s)	0 – 5
TOTAL	0 - 100

Only candidates who received at least 60 pts. can be the subject of further assessment.

3. STAGE (SKYPE INTERVIEWS) – OTHER SUBSTANTIVE CRITERIA

At this stage documents are no longer evaluated. The candidates are invited to take part in **Skype interviews** being subject for the assessment against other substantive criteria.

The invitation for an interview will be sent by e-mail, so make sure that you regularly check your e-mail box.





The interviews will be attended by **3 – 4 External Experts** from outside IPC. Additionally, the Selection Committee from IPC will support the experts. To make sure that the interviews are conducted in a fair way – an independent observer may also be present during the interview (with no right to give scores).

The course of the interview is as follows:

- 1. Candidate’s presentation (oral; 15 min.) on:**
 - a. Candidate’s profile (incl. previous research experience) and their carrier goals
 - b. The research project
 - c. Feasibility of the proposed project in the context of available research infrastructure, financial resources, mentor and co-mentor support
 - d. Motivation towards carrying out the proposed project
- 2. Questions from the Experts (10 min.)**

The experts will evaluate the candidates against the following **other substantive criteria**:

Criterion	Pts.
English proficiency <i>* ‘No’ eliminates an applicant from any further proceedings.</i>	-
– fluent communication in English on a daily basis and in a scientific environment	Yes/No*
Scientific potential	max. 50
– feasibility of the project	0 - 20
– candidates’ research experience and specialized knowledge, applicable in the proposed project	0 - 20
– potential influence of the project results on ERA/society	0 - 10
Soft skills	max. 30
– ability to present research project and his/her carrier goals in clear and coherent way	0 - 20
– leadership abilities (e.g. measured by past collaborations)	0 - 10
Motivation	max. 20
– motivation towards carrying out the proposed project in the aspect of selected research area, and selection of mentor and co-mentor	0 - 20
TOTAL	0 - 100

Following the last stage, the **overall grade will determine the candidate’s rank on the final list**. Only candidates with at least 70 pts. may be offered a postdoctoral position provided that the single mentor’s capacity and the total number of person months available under the call are not exceeded.





4. Appeal procedure

After completing each stage of evaluation, all applicants will be informed about results of the evaluation. Unsuccessful candidates have the right to appeal against the results of each stage evaluation.

The appeal should be submitted to the IPC Director within 7 days from the date of receipt of the feedback information. You can do it sending an e-mail to: pd2pi@ichf.edu.pl. Your appeal will be transferred to the IPC Director. If you want to file an appeal, please indicate evaluation criteria under which you consider the evaluation was done improperly and justify your reasons.

The Director may examine the appeal directly or may call an auxiliary consultancy body (Appeal Committee), ensuring presence of appropriate experts. The Director may also call other reviewers (e.g. if in doubt of impartiality of any member of evaluation committees). In all cases you will receive answer signed by the IPC Director.

The decision of the IPC Director is final.





5. Fellowship conditions

5.1. Employment conditions

PD2PI fellows will be employed by the Institute of Physical Chemistry of the Polish Academy of Sciences on an employment contract, full time on a fixed term (full time position for **3-36 months** – in line with the research project duration). Your contract may also include **secondment option** (if consistent with the proposal) to the partner organization, not exceeding 25% of the whole project duration.

According to Polish law, as full time workers, the PD2PI fellows will be expected to work 40 h per week (5-day week), ca. 8 h per day. **Training programme and business trips will be included in the work time.** Each PD2PI fellow, like other IPC researchers, will be entitled **to holiday leave of 36 days/yr** (proportionally). All fellows will be **eligible for maternity leave** (fully paid up to 20 weeks) and **shared parental leave**.

Their remuneration will also include obligatory **pension contribution**. The PD2PI fellows, their spouses and children will be included in the public healthcare system and a private healthcare package. They can also benefit from IPC social fund.

5.2. Remuneration package

PD2PI fellows will be offered **monthly gross salary of EUR 3,836** (after obligatory deductions ca. EUR 2,255). This salary includes living & mobility allowance and will be paid to a bank account payable in arrears in line with internal regulations of IPC (currently till the 10th day of the next month for which the salary is due).

Additionally, each fellow who has family obligations will be eligible for additional allowance of **EUR 200** (gross per month).

5.3. Research costs

PD2PI fellows will be provided to the access of their own budget up to the amount of **EUR 1,400 per month** to cover the costs of their research, **e.g.:**

- **costs of travels,**
- **costs of training** that contribute to the researcher's career development (e.g. participation in conferences, workshops, symposia, seminar, specialized courses, laboratory visits) – if in line with Career Development Plan, prepared by the fellow with his/her mentor(s),
- **costs of research** (e.g. consumables, tiny infrastructure),
- costs of **Open Access** to publications (obligatory).





6. Important dates

Opening of the 1st PD2PI Call	Dec. 1 st , 2019
Deadline for submission of the applications	Jan. 15 th , 2020
Documents check – eligibility criteria <i>(Project-Support-Office from IPC)</i>	Dec. 2019 – Jan. 2020
Applications evaluation – substantive criteria <i>(External Experts)</i>	Jan. – Febr., 2020
Skype interviews – other substantive criteria <i>(External Experts)</i>	March 2020
Results of the selection (incl. appeal proceedings)	end of April 2020
Start of the fellowships	May – Dec. 2020





7. Contact details

For additional information please contact **PD2PI Project Support Office**: pd2pi@ichf.edu.pl.

