



Institute of Organic Chemistry
Polish Academy of Sciences

 MATERIALIZE 

MSCA COFUND FELLOWSHIP PROGRAMME

Guide for Applicants

Methodology and Synthesis Advancement to Empower
Researchers in Advanced Optoelectronic Materials

CALL OPENS

15 September 2026

APPLICATION DEADLINE

15 January 2027, 23:59 CET
(UTC+01:00)



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01 Introduction

Aim of this Guide

The aim of this guide is to help the persons interested in applying for research positions within the MATERIALIZE programme. It outlines the necessary steps to smoothly go through the recruitment process.

The programme

MATERIALIZE – Methodology and Synthesis Advancement to Empower Researchers in Advanced Optoelectronic Materials – is an international postdoctoral research and training programme coordinated by the Institute of Organic Chemistry of the Polish Academy of Sciences (IOC PAS) in Warsaw.

During the programme the postdoctoral fellows will carry out their individual research project and attend a dedicated training programme tailored to their specific needs.

Each individual project shall last 36 months - for this period the fellows will be hired by IOC PAS.

The research undertaken within MATERIALIZE shall fall in the broadly defined fields of organic synthesis and synthetic methodology, including selected aspects of materials chemistry. The new synthetic routes, methods, and molecular systems developed within these projects may also contribute to advances in areas such as optoelectronics, OLEDs, NIR-II bioimaging, and molecular sensing.

MATERIALIZE also gives the opportunity to build on the experience of Associated Partners - now the list contains 15 academic and industry institutions from 12 countries.

The main two parts, which shall be complementary, are the individual research projects and a training programme.

The training programme

The training programme will be based on individual Career Development Plans (CDP). The CDPs will be prepared by the postdoctoral fellows in close collaboration with their Supervisors at the IOC PAS.

MATERIALIZE also foresees Core Training Events, available and obligatory for each fellow and which will provide them with advanced scientific content with targeted transferable skills. These events will include three 4-day workshops held in Warsaw, one 2-day industrial workshop in Kraków and a final scientific conference in Warsaw. MATERIALIZE also gives the opportunity for the fellows to enhance their scientific, technical and transferable skills through the supplementary training activities including:

- Scientific lectures at IOC PAS - at least twice a month, these seminars feature leading researchers from across the globe, including both academic and industrial scientists, offering exposure to diverse approaches in chemistry and enhancing the international and intersectoral dimension of the programme.

- Team-based research meetings (1-2 per month). These sessions provide a platform to present ongoing work, discuss experimental challenges, receive feedback from peers and supervisors, and develop scientific communication skills in a collaborative setting.
- Monthly MATERIALIZE fellows' seminars: a dedicated seminar series, organised by the fellows themselves, will be held monthly. Every quarter, two fellows will take on the role of coordinators.
- Individual external training: Fellows will also have the opportunity to attend additional training events – such as external workshops, courses, or conferences – of their own choosing, in line with their CDP, within the limits of their dedicated individual research budget.

Individual research projects

Implementation of a research project proposed by each fellow is at the heart of the MATERIALIZE programme. These projects are expected to be interdisciplinary, typically combining elements of synthetic organic chemistry, photophysical studies, and computational chemistry. They will be evaluated by the International Review Experts against clear and transparent criteria. The chosen projects will be carried out at IOC PAS under the guidance of an assigned Principal Investigator. The researchers will also choose co-supervisors from the Associated Partners list to support the organisation of their secondments.

Secondments and research visits

Each MATERIALIZE fellow shall undertake at least one secondment (typically lasting 3–6 months) during their fellowship.

Secondments are expected to be described in the CDP either at the start of the fellowship or during its first review. During the secondment, fellows will carry out specific research activities linked to their individual research project and are encouraged to establish long-term scientific collaborations. Multiple secondments or short-term research visits are also possible, provided they are scientifically justified and contribute meaningfully to the fellow's objectives.

The organisation of the secondments will be supported by the IOC PAS administration.

Host institution

The Institute of Organic Chemistry, Polish Academy of Sciences (IOC PAS) is a leading research institute based in Warsaw, Poland. Established in 1964, it conducts fundamental and applied research in organic chemistry and related fields, while training researchers at doctoral and postdoctoral level.

Since 2017, IOC PAS has held the "HR Excellence in Research" award and follows Open, Transparent and Merit-based Recruitment principles.

The Institute currently employs around 135 researchers, approximately 30% of whom come from abroad.

Five IOC PAS researchers have received the Foundation for Polish Science Prize, widely regarded as Poland's most prestigious scientific distinction: Mieczysław Mąkosza, Karol Grela, Daniel Gryko, Bartosz Grzybowski and Dorota Gryko.

The Institute hosts a prestigious ERC Advanced Grant.

The Institute runs a four-year PhD study program within the “Warsaw PhD School in Natural and Biomedical Sciences” (Warsaw-4-PhD), a joint initiative of 9 leading scientific institutes.

MATERIALIZE fellows will have access to modern laboratories and specialist research infrastructure supporting the full research process – from molecular design and synthesis to structural, photophysical and computational analysis.

Research infrastructure

The infrastructure available at IOC PAS includes:

- NMR spectroscopy;
- high-resolution mass spectrometry and chromatography;
- single-crystal X-ray diffraction;
- UV-Vis-NIR absorption and fluorescence spectroscopy;
- circular dichroism and circularly polarised luminescence spectroscopy;
- equipment for electrosynthesis and electroanalysis (potentiostats IKA, Biologic);
- photochemical and mechanochemical equipment;
- gloveboxes and systems for reactions under controlled conditions;
- high-performance computational resources.

The Institute’s central analytical facilities and specialised equipment available within individual research groups allow fellows to combine multiple methods within a single interdisciplinary project.

As the host institution and coordinator of MATERIALIZE, IOC PAS will provide fellows with the scientific environment, state-of-the-art infrastructure, supervision and professional support needed to develop ambitious, independent research projects.

02 Application process

Eligibility criteria



PhD Degree in chemistry, physics, biology or related field. Candidates must hold the degree by the call deadline.



Mobility rule: during the last 36 months prior to the call deadline candidates must have not resided or carried out their main activity in Poland for more than 12 months¹.



Not being currently employed by the IOC PAS



Submitting a complete application with all requested documents in the requested form.



Mobility rule - clarification

Compulsory national service, short stays such as holidays, and time spent as part of a procedure for obtaining refugee status under the Geneva Convention are not taken into account.

Required application documents

- PhD diploma scan (or an official document confirming the defence of your doctoral thesis²),
- CV,
- individual research project Proposal submitted on template form available at the project website (materialize.edu.pl),
- Statement by the chosen PI from the IOC PAS, template available on the project website³,

¹ Compulsory national service, short stays such as holidays and time spent by the researcher as part of a procedure for obtaining refugee status under the Geneva Convention are not taken into account. Before signing the work contract the IOC PAS can require additional documents which can prove the meeting of mobility rule requirements.

² The successful defence must be unconditional, without further requirements or corrections and take place before the call deadline.

³ Before applying, consult your future potential supervisor. They need to sign this statement in which they confirm that they will act as your future mentor.

- consent to the processing of the Candidate's personal data for the purposes of the competition (the form can be downloaded from: <https://www.icho.edu.pl/wp-content/uploads/2021/06/daneosoboweklauzulaeng.docx>).

The proposed Individual Research Projects shall not be longer than 36 months. Please remember that proposals must fall within MATERIALIZE research domains. If in doubt consult on the issue PI from the IOC PAS or contact Programme Manager before submitting the application.

Application timeline of the first call

● 15 Sep 2026	Publication of the first call
● 15 Jan 2027 · 23:59 CET	Application deadline
● 31 Jan 2027	Eligibility check
● 7 Feb 2027	Documentation completion
● 7 Apr 2027	Stage I - Proposals & Candidates evaluation ends
● 7 May 2027	Stage II - Interviews end
● June 2027	Appointment of selected candidates
● 1 Aug 2027	Projects start / employment begins

If some positions remain unfilled after the first round of recruitment the second call will follow starting in July 2027 and employment after the second call shall start around April 2028 (exact dates yet to be announced).

The employment period of all the postdoctoral fellows will last for 36 months, therefore the Individual Research Projects must fit within this time limit.

How to proceed

1

Visit MATERIALIZE website (materialize.edu.pl), familiarise yourself with its scientific scope. Choose a research group of your interest. Identify your potential PI. Download all the necessary templates ("MATERIALIZE Proposal template" and "Statement by the PI from IOC PAS") from this website.

2

Check available equipment database at the IOC PAS - <https://www.icho.edu.pl/en/equipment-database/>. Make sure the essential equipment for your project is available on-site. If necessary, some equipment may be accessed at Associated Partner premises, and minor equipment may be purchased during the project. Please note that the research budget is limited to EUR 1,200 per person per month.

3

Contact your potential PI from IOC PAS. Get the "Statement by the PI from IOC PAS" signed by them.

4

Fill in the "MATERIALIZE Proposal template". Remember to follow all the formal rules: Use 11-point Times New Roman font and single line spacing. The required page size is A4, and all margins (top, bottom, left, right) should be at least 15 mm. Do not exceed the requested maximum limits: 1,000 characters including spaces for abstract, 4 pages for main body of the proposal. Don't forget to fill in the "Ethical self-assessment section" (Comprehensive guidelines for ethical self-assessment can be found in the EU document "[How to Complete Your Ethics Self-assessment](#)"). If you identify any ethical issues, explain them briefly below the table. Sign (use electronic signature if you have one or scan the hand signature and insert it to the document in the appropriate place) the mobility declaration within this document and convert it to pdf format before submitting.

5

Prepare your up-to-date academic CV which shall include: contact details, career history, countries of residence and professional activities, publications, patents, projects, international experience and an explanation of any gaps in your career, should you wish to include them in the evaluation process.

Name your file in the following convention: [YourInitials_MATERIALIZE_CV.pdf]

6

Send all the necessary documents to the e-mail address: **materialize@icho.edu.pl**:

- PhD diploma copy (scan).
- Scientific CV (including contact details, career history, countries of residence and activities, publications, patents, grants, international experience, and an explanation of any gaps in your career, should you wish to include them).
- Individual research project Proposal (containing a signed mobility declaration).
- Statement by the chosen PI from the IOC PAS.
- Motivation letter (indicating the chosen PI from the IOC PAS, the connection of the proposal with your career plans, and its influence on your upcoming scientific career developments).

Formatting and submission rules: Please do not send open formats: use only PDF format (or alternatively JPG in the case of the diploma scan). You can also send letters of recommendation from previous supervisors, but this is optional.

All documents together must not exceed a total file size of 25 MB. You can use popular archive formats to limit the file size, but you must follow the naming conventions specified below for files inside the archive:

- **Project proposal:** YourProjectTitle_MATERIALIZE_Proposal.pdf
- **CV:** YourInitials_MATERIALIZE_CV.pdf
- **PhD diploma:** YourInitials_PhDDegree.pdf
- **Motivation letter:** YourInitials_MotivationLetter.pdf
- **Other documents:** YourInitials_[DocumentName].pdf

**Deadline reminder**

15 January 2027, 23:59 CET (UTC+01:00)

03 Evaluation process



Three-step procedure

1) Eligibility check → 2) Stage I: proposal & candidate evaluation → 3) Stage II: interview

Eligibility check

After document submission, candidates' applications are evaluated against the eligibility criteria by the Recruitment Office. This will check following criteria:

- Does the candidate have a PhD from an appropriate scientific discipline? (Yes*/No)
- Does the candidate meet the mobility criterion? (Yes*/No)
- Is the candidate currently employed by the IOC PAS? (Yes/No*)
- Are there all requested documents? (Yes*/No)
- Are the requested documents sent in the requested form? (Yes*/No)

Only candidates who meet all the formal requirements (the proper answers are marked with * above) will have their applications checked in the second step: I Stage - Proposals & Candidates evaluation.

Stage I: Proposals & Candidates evaluation

At this stage, the scientific merit of the proposal and the applicant's professional experience will be assessed. This task will be performed by International Review Experts. Evaluations will be based on clearly defined and consistent criteria (see Table 1. below).

Each application will be evaluated independently by 3 IREs - with gender balance in mind. After the evaluation the Experts will convene for a consensus meeting (videoconference), during which the final score for each application will be determined collaboratively. In cases where the reviewers are unable to reach a consensus or the individual scores are significantly divergent, the reviewers may request an additional evaluation.

Following this stage, the PM will compile a ranking list of candidates.

Evaluation criteria - Stage I

Criterion	Points	Scoring guide
Proposal evaluation (70%) - 70 points		
Excellence (0-35 pts)		
Quality, originality, and breakthrough potential	0-20	0-10 pts: Limited originality or incremental research; 11-15 pts: Solid scientific concept with innovative elements; 16-20 pts: Highly original, innovative proposal with strong potential for breakthrough discoveries and advancing the state of the art.

Criterion	Points	Scoring guide
Alignment with MATERIALIZE priorities and contribution to the field	0-10	0-4 pts: Weak or unclear relevance to MATERIALIZE goals; 5-7 pts: Good alignment with the programme's scientific priorities and potential for meaningful contribution; 8-10 pts: Strong alignment with MATERIALIZE thematic areas and clear potential for major impact in the field.
Ethical considerations and responsible research practices	0-5	0-2 pts: Ethical aspects poorly addressed or unclear, insufficient risk awareness; 3-4 pts: Ethical issues identified and addressed with reasonable clarity; 5 pts: Ethical considerations thoroughly integrated into the proposal, demonstrating awareness of risks and responsible research practices.
Impact (0-20 pts)		
Scientific, societal, or economic impact	0-10	0-4 pts: Impact beyond academia is unclear or minimal; 5-7 pts: Proposal demonstrates solid potential to advance science and contribute to societal or economic development; 8-10 pts: Project is likely to deliver significant breakthroughs with broad societal relevance or economic value.
Potential for innovation and real-world application	0-10	0-4 pts: Limited prospects for practical implementation or technological relevance; 5-7 pts: Demonstrates a feasible pathway to application, innovation, or addressing concrete global issues; 8-10 pts: High potential for tangible outcomes, such as new technologies, marketable solutions, or transformative applications.
Implementation (0-15 pts)		
Clarity and feasibility of the research plan	0-7	0-3 pts: Vague, unrealistic, or poorly structured research plan; 4-5 pts: Feasible and generally well-structured plan, though with some gaps; 6-7 pts: Clear, coherent, and realistic plan with well-defined objectives and methodology.
Availability and justification of necessary resources	0-5	0-2 pts: Key resources missing or insufficiently justified; 3-4 pts: Most necessary resources are in place and reasonably justified; 5 pts: All critical resources are well identified and strongly justified in the context of the proposed research.
Potential for long-term collaboration and sustainability	0-3	0-1 pts: Weak or no indication of continued research or collaboration; 2 pts: Some potential for follow-up research or partnerships; 3 pts: Strong potential for long-term collaboration, capacity building, or future research development.
Candidate's professional experience and competencies (30%) - 30 points		
Scientific record (0-15 pts)		
Quality of publications, patents, and involvement in research grants	0-15	0-5 pts: Limited publication record or low impact; minimal involvement in funded projects; 6-10 pts: Solid publication record, including papers in recognized journals; some involvement in grants or collaborative projects; 11-15 pts: Strong track record with high-quality publications, patents, and active participation or leadership in competitive research grants.
Mobility and international experience (0-5 pts)		
International experience, scientific exchanges, change of professional profile	0-5	0-1 pts: No international mobility or scientific exchanges; 2-3 pts: Moderate international experience (e.g., short research stays, participation in international collaborations or conferences);

Criterion	Points	Scoring guide
		4-5 pts: Extensive international experience, including long-term fellowships, research stays, or work in diverse scientific environments.
Professional competencies (0-10 pts)		
Knowledge of techniques necessary to implement the project, management skills	0-10	0-3 pts: Basic knowledge of relevant methods and limited transferable skills; 4-6 pts: Adequate technical competence and some experience in project implementation or teamwork; 7-10 pts: Excellent command of relevant techniques and strong professional skills (e.g., leadership, mentoring, project coordination).

Ethical review

Ethical issues related to the proposal will be assessed by IREs as part of the scientific evaluation process, based on the mandatory self-assessment questionnaire completed by candidates within their application. Any ethics requirements identified during this assessment will be explicitly recorded in the evaluation report of the proposal. These requirements will be communicated to applicants together with their evaluation results, ensuring that each candidate receives a clear list of ethics obligations linked to their project. The communication will specify when each requirement must be fulfilled, including the obligation to obtain any necessary institutional or national ethics approvals before the relevant research activities can begin.



Threshold to proceed

Applicants who achieve at least 70% of the total score - and no more than three candidates per available position - proceed to Stage II.

Stage II: Interview

Interviews will be conducted by a Panel composed of three IREs who assessed the application during Stage I and two Independent Panel Members (IPMs) (one male, one female) who will participate in all interviews to ensure consistency and comparability across evaluations.

The assessment criteria are also clearly defined (see Table 1 above).

The interview will last for 30 minutes each and its structure will be identical for all candidates to ensure fairness and consistency. It will consist of a knowledge assessment section, during which each panel member will ask one question related to organic chemistry and the scientific area of the project (15 minutes), followed by a 5-minute presentation by the candidate and a 10-minute discussion focusing on the presentation and the research idea. For proposals in which ethics issues have been identified during Stage I, the interview will also include questions addressing the ethics aspects of the proposed research, to ensure that any ethical concerns are adequately explored and verified. After the interviews, the panel will jointly agree on the final score awarded to each candidate. In case of any disagreement regarding the evaluation, the final decision will rest with the Chairperson.

This stage concludes with the PM preparing the final ranking list and, if applicable, a reserve list. Candidates who do not reach the threshold of 70% of the total score will be rejected.

Evaluation criteria - Stage II

Criterion	Points	Scoring guide
Interview evaluation (100%) - 100 points		
Scientific knowledge - depth of knowledge in organic chemistry and understanding of the proposed research area	0-50	0-14 pts: Limited understanding; major gaps in core concepts. 15-24 pts: Basic knowledge; some relevant points but lacks depth. 25-34 pts: Good understanding; generally accurate with minor weaknesses. 35-44 pts: Very good knowledge; solid grasp of the topic and context. 45-50 pts: Excellent, in-depth understanding; strong scientific insight and clarity.
Presentation skills - clarity, structure, innovation, and scientific relevance of the presentation	0-30	0-9 pts: Unclear or poorly organized, weak articulation of goals; 10-19 pts: Well-structured but may lack clarity or depth in some areas; 20-30 pts: Clear, logical, and engaging presentation with high innovation and relevance.
Communication & interaction - ability to answer questions, communicate ideas, and demonstrate critical thinking	0-20	0-4 pts: Difficulty addressing questions; low engagement; 5-9 pts: Good interaction with the panel; some challenges in articulation or reasoning; 10-20 pts: Excellent communication skills, active engagement, and well-reasoned answers reflecting deep understanding.

04 Appeal procedure

Each candidate has the right to submit an appeal at any stage of the recruitment process. Each appeal will be handled by an independent Appeal Committee. None of its members will have participated in any other stage of the recruitment process. It will consist of two IREs (one male, one female) and a recruitment specialist from an institution outside the partnership.

An appeal shall be submitted to the IOC PAS director, **within the 7 days from the receiving of a decision** by electronic means to the following e-mail address: rekrutacja@icho.edu.pl.

The director directs the appeal to the Appeal Committee which examines the validity of the allegations, the completeness of the documentation, the principle of equal treatment, the correct application of the assessment criteria, and the impact of any breach on the outcome. It then submits a written recommendation to the Director, together with a statement of reasons.

The Director, having considered the Committee's recommendation, takes the final decision on whether to uphold, amend or revoke the contested decision. The decision, together with the reasons for it, is sent to the candidate by email.

The Director's decision concludes the internal appeal procedure.

! Appeal deadline



An appeal must be submitted to the IOC PAS Director within 7 days of receiving the decision electronically.

05 Employment conditions

36 months Employment contract	40 hours / week Working time
36 days Annual holiday leave, fully paid maternity leave and shared parental leave	3-6 months Typical secondment
~ EUR 4,350 gross / month Basic salary	~ EUR 420 gross / month Mobility Allowance
~ EUR 330 gross / month Family Allowance	Up to EUR 1,200 / month Research Budget

All successful candidates will be employed for 36 months on full-time contracts by the Institute of Organic Chemistry, Polish Academy of Sciences. The fellowships also include a 3-6 month secondment with international and/or industrial partners.

MATERIALIZE fellows employed full-time are expected to work 40 hours per week (5 days, approx. 8 hours per day). The working time includes participation in the training programme and business trips.

All researchers are entitled to 36 days of annual holiday leave, fully paid maternity leave and shared parental leave.

The basic salary for each postdoctoral fellow is approximately EUR 4,350* gross per month.

Each fellow is entitled to a Mobility Allowance of approximately EUR 420 gross per month.

Fellows with a spouse and/or dependent children are entitled to a Family Allowance of approximately EUR 330 gross per month.

The remuneration package also covers obligatory pension, disability, sickness and accident insurance contributions.

MATERIALIZE fellows and their spouses and children will be included in the public healthcare system and an additional private healthcare package. They may also benefit from the IOC PAS social fund.

Salaries are transferred to the fellow's bank account monthly in arrears.

Each fellow will have access to an Individual Research Budget of up to EUR 1,200 per month, to be spent in accordance with IOC PAS internal rules.

Institutional support and benefits

- Private medical care, offered free of charge to all employees. This includes access to general practitioners and specialists – an important advantage given the often extended wait times in the public healthcare system.
- On-site guesthouse accommodation, available for incoming researchers, particularly useful during the initial phase of their stay in Poland.
- Co-financed sports card programmes, encouraging a healthy work-life balance and supporting physical and mental well-being.

Salary note



The exact basic amount of EUR 5,200 per month includes taxes and social security contributions on the employer's side. The salary will be sent to a bank account in Polish zloty at the exchange rate specified by the MSCA COFUND rules.

Medical examination



Before starting a job all persons must undergo obligatory medical examinations confirming their fitness to work in a laboratory (or at a computer, for computational chemistry).

According to Polish law during the sick leave salary amounts to 80% of a basic salary.

06 Fellow's main duties during MATERIALIZE programme

Individual Research Projects

The researcher's main duty within the MATERIALIZE programme will be to implement a research project proposed by them in the recruitment phase. They will be embedded within one of IChO PAN's research groups and receive guidance from an assigned PI. Additional support will come from senior team members and peers within the group. While collaborative exchange is encouraged, the programme places strong emphasis on scientific independence: **fellows are expected to take the lead in designing, planning, and executing** their research, as well as in **making key methodological decisions**.

Career Development Plans (CDP)

Each postdoctoral fellow shall prepare a personalised CDP **within the first two months** of their appointment, in close consultation with their PI.

The CDP will serve as a dynamic roadmap for the fellow's scientific and professional growth and will be **reviewed and updated annually**. The CDP will include:

- scientific objectives to be achieved during the fellowship;
- a publication plan outlining expected research outputs;
- a skills development section, identifying technical and transferable skills to be acquired;
- a detailed training plan, covering both internal training activities (offered within the MATERIALIZE programme) and external training opportunities individually selected by the fellow;
- a list of planned dissemination, exploitation, and communication (DEC) activities, tailored to the fellow's research and public engagement strategy;
- an ethics self-assessment, ensuring that the fellow reflects on the ethical implications of their project and complies with relevant research integrity guidelines.

Secondments (and research visits)

Each MATERIALIZE fellow will undertake at least one secondment⁴ (typically 3–6 months) during their 36-month fellowship. The secondments shall be tailored to their research objectives and designed to enhance intersectoral and international exposure. Fellows are encouraged to select a host from the pool of Associated Partners based on scientific fit and career needs, or propose an alternative institution if it aligns with their CDP and the host confirms its availability.

⁴ In the case of secondments or research activities conducted outside the EU, particularly in the UK or the USA, any ethics issues arising from such activities will be assessed in advance. IOC PAS will ensure and formally confirm that any research planned outside the EU is legal in at least one EU Member State before the secondment can proceed.

Core Training Events

The three Warsaw-based workshops and the final conference will be organised, coordinated, and delivered by IChO PAN, while the industrial workshop will be hosted and led by two associated partners – Photo HiTech and SyVento – at their company sites in Kraków. All training events are mandatory for all fellows.

Supplementary Training Opportunities

In addition to the structured annual workshops provided under the core training programme, MATERIALIZE fellows will benefit from a broad range of supplementary training activities. However these events are not mandatory, it is strongly advised to use that opportunity to enhance fellows academic, technical, and transferable skills.

Scientific lectures at IChO PAN:

Fellows will have access to high-level scientific lectures held at IChO PAN at least twice a month.

Team-based research meetings

As active members of individual research groups, all fellows will participate in team meetings (1-2 per month). These sessions provide a platform to present ongoing work, discuss experimental challenges, receive feedback from peers and supervisors, and develop scientific communication skills in a collaborative setting.

Monthly MATERIALIZE fellows' seminars

A dedicated seminar series, organised by the fellows themselves, will be held monthly. Every quarter, two fellows will take on the role of coordinators. During each session, two postdocs will present their latest results related to the MATERIALIZE research themes.

Individual external training

Fellows will also have the opportunity to attend additional training events – such as external workshops, courses, or conferences – of their own choosing, in line with their CDP. Funding for such activities is foreseen within the fellowship budget.

Semi-annual progress reports

Fellows will submit semi-annual progress reports (on the progress of their Individual Research Project), first reviewed by the PI and then assessed by the Steering Committee.

Conference and symposia participation

The Researchers are expected to present their work at major international events such as *RSC Symposia*, *European Chemical Society Conferences* (EuCheMS), *Gordon Research Conferences* (GRC), and *Materials Research Society* (MRS) *Meetings*. Each Fellow shall attend at least 2 international and 1 national conference and is expected to actively contribute by delivering an oral presentation or presenting a scientific poster, depending on the format and selection process of the event.

Scientific Publications

All Fellows shall publish their scientific results in peer-reviewed, high-impact, open-access journals (e.g. *Journal of the American Chemical Society* (JACS), *Angewandte Chemie International Edition*, *Organic Letters*, *Chem*, *Advanced Materials*, *Nature*, *Science*, *Nature Synthesis*, *Nature Materials*, *Nature Communications*). Each PD is expected to publish at least 2 articles during their fellowship and is required **to include a publication plan as part of their CDP**, outlining the target journals and expected timelines. Publications will follow either Gold or Green **Open Access** routes to ensure maximum visibility and accessibility.

Early research results shall be shared via preprint servers such as *ChemRxiv* or *arXiv*, while underlying datasets, protocols, and supplementary materials will be deposited in open-access repositories such as *Zenodo*, in full alignment with FAIR data principles.

Communications activities and public engagement

As part of the MATERIALIZE dissemination activities IOC PAS expects that Fellows will engage themselves in different public engagement and communication activities.

Mentoring of students during their internships, Science festivals etc

IOC PAS collaborates with selected high schools in Warsaw, offering research internships for students. It is expected that these students will be supervised and mentored directly by the MATERIALIZE Fellows. In addition, the project will cooperate with a foundation supporting gifted youth, providing opportunities for students to gain early exposure to research in chemistry and materials science.

The Researchers will also take part in public science events such as the *Warsaw Festival of Science* and the *Science Picnic* organised by the Copernicus Science Centre, where they will deliver interactive presentations and explain their research to general audiences in an accessible and engaging way.

Video series “My Research, My Impact”

Toward the end of the project, each postdoctoral fellow shall prepare (with the help of Social Media Officer of MATERIALIZE) a short video summarising their research journey, highlighting their main achievements, key results, and the broader impact of their work.

The videos will be featured on the project website and shared through digital platforms such as YouTube and social media.

Data Management Plans

The MATERIALIZE programme requires the preparation of two versions of Data Management Plans (DMP). This document will define responsibilities and procedures for data collection, curation, sharing (making it open), preservation, and quality control. However the document will be prepared and then updated by the IOC PAS Plenipotentiary of the Director of IChO PAN for Open Access to Scientific Publications and Research Data, but **strong input from fellows** is required.

07 Important dates

- | | |
|--------------------------------------|--|
| • 15 Sep 2026 | MATERIALIZE call opening |
| • 15 Jan 2027 ·
23:59 CET | Application deadline |
| • 31 Jan 2027 | Documents eligibility check |
| • 7 Feb 2027 | Documentation completion |
| • 7 Apr 2027 | Stage I - Proposals & Candidates evaluation ends |
| • 7 May 2027 | Stage II - Interviews end |
| • June 2027 | Appointment of selected candidates |
| • 1 Aug 2027 | Projects start / employment begins |

Planning note



If positions remain unfilled after the first recruitment round, a second call is expected to start in July 2027, with employment around April 2028. Exact dates are to be announced.

08 Contact information

For additional information, please contact the MATERIALIZE Team:

@ EMAIL

materialize@icho.edu.pl

↗ WEBSITE

materialize.edu.pl

Programme coordination

Institute of Organic Chemistry, Polish Academy of Sciences · Warsaw, Poland