IChF
Institute of Physical Chemistry PAS

Strategy for the Development of Research Staff

Career Models for Researchers

Agnieszka Tadrzak
Large European Projects and Business Collaboration Department

Individuals who contributed substantive input to the preparation of the guide and participated in its review, helping to shape the final version of the publication through their comments and suggestions:

- Patrycja Nitoń, PhD and Joanna Rutkowska, PhD – Large European Projects and Business Collaboration Department
- Prof. Marcin Drąg, Prof. Robert Hołyst, Prof. Robert Kołos, Emilia Witkowska-Nery, PhD – Career Development Advisors
- Roman Luboradzki, PhD, Prof. Joanna Niedziółka-Jönsson, Katarzyna Pawlak, M.Sc. – “HR Excellence in Research” Working Group
- Patrycja Kuźma, M.Sc. – Research Team Coordinator
- Marta Sosnowska, PhD – Chief Organisational and Economic Officer
- Dr hab. Adam Kubas, IChF Professor – Director of IChF.

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1. Purpose and Scope of the Document

The Strategy for the Development of Research Staff - Career Models for Researchers sets out the framework for the professional development of individuals involved in conducting, supporting, and organising research at the Institute of Physical Chemistry, Polish Academy of Sciences (IChF). The document is intended to provide strategic direction and support development. Its purpose is to structure available career paths, define expected competencies, and present best practices that support informed career planning.

The Strategy covers three main areas of career development at IChF:

- the research career path, covering successive stages of a research career – from doctoral researcher, through the positions of assistant professor and institute professor, to professor
- the research-technical/instrumentation career path, related to specialist support for research infrastructure, operation of advanced scientific equipment, and responsibility for the development and functioning of the technical facilities supporting research
- the research support career path, covering positions and roles that support research activities, project management, laboratory operations, and the commercialisation of research results.

The document describes the positions available within each career path, the minimum and recommended requirements, the scope of typical responsibilities, and guidance on development. The descriptions are not intended to provide an exhaustive list of all possible duties, but rather to indicate typical development directions, competencies, and expectations associated with a given role.

The career paths described should not be regarded as closed or entirely separate. In practice, many careers develop at the intersection of different areas, including research, project management, scientific instrumentation, laboratory support, technology transfer, and business collaboration. Moving between career paths, broadening the scope of responsibilities, or gaining experience in another team may be a natural part of professional development.

We encourage people at different stages of their careers to use this document, particularly when defining their next career goals and development stages, considering mobility opportunities, preparing project proposals, or exploring entirely new development opportunities.

This document was developed as part of the IChF Action Plan for 2023–2026, in line with the principles of the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers. It forms part of IChF's broader efforts to create equal, transparent and development-oriented working conditions and to support research careers. The European Commission has recognised the Institute's activities in this area by awarding the "HR Excellence in Research" distinction.

HR EXCELLENCE IN RESEARCH

*This document was developed to support the educational activities of the REMAP – IChF Ca**RE**er Develop**M**ent Pl**A**nning **P**rogramme, which supports IChF doctoral researchers and early-career researchers in making informed career plans and developing competencies needed both in research and beyond academia.*

2. Research Career Path

(Based on the Recommendations of the Scientific Council of IChF PAS of 17 June 2024)

2.1 Introduction

The Institute of Physical Chemistry PAS is a place where science meets a passion for discovery, commitment and social responsibility. Researcher development at IChF is based on the principles of transparency, equal treatment and support for research excellence.

This section provides practical information on research career paths at the Institute, taking into account recommended development criteria, the importance of mobility, experience in research projects, and the principles of equal opportunities, including support for women in science.

IChF aims to ensure that each stage of a research career represents not only formal advancement but also a genuine step towards greater independence, research leadership, responsibility for the development and use of advanced research infrastructure, and the building of internationally recognised research teams.

2.2 General Principles

Recruitment to research positions at IChF is carried out through open competitions announced by the Director of the Institute and conducted in accordance with the principles underpinning the "HR Excellence in Research" distinction. Competitions are open to both Institute employees and external candidates. Recruitment at IChF is based on the principle of equal treatment and provides equal access to employment and research career development regardless of gender, age, nationality, disability or career path, with particular consideration given to various types of career breaks.

Research positions available at IChF are defined in Article 88(1) of the Act on the Polish Academy of Sciences and include:

- **assistant**
- **adjunct/assistant professor**
- **institute professor and**
- **professor.**

In accordance with Article 88(2) of the Act on the Polish Academy of Sciences, research and technical positions include:

- **specialist** and
- **chief specialist for shared research instrumentation.**

A person employed in a research position may be promoted to a higher position if they meet the requirements specified for that position (described later in this document). The Director decides on promotion after obtaining the opinion of the IChF Scientific Council. However, if an employee is

not employed in a research position (e.g. is employed as a specialist), appointment to a research position is possible only through a successful open competition.

Working at the Institute in a research position requires active engagement in research aligned with the Institute's mission, openness to collaboration and mobility, and a commitment to maintaining high research standards, including high ethical standards.

2.3 Doctoral Researcher – The First Step in a Research Career

Note:

Under the current legal framework, there is no requirement for doctoral researchers to be employed under an employment contract. Nevertheless, to provide greater stability, facilitate the organisation of their work, and ensure better conditions for conducting research, the Institute employs doctoral researchers under employment contracts, at least on a part-time basis whenever possible. Doctoral researchers are employed in the assistant position only when a project formally requires a person to be employed in that position. In all other cases, individuals at this stage of their careers are employed as specialists.

The requirements, scope of responsibilities and development recommendations are the same regardless of whether the doctoral researcher is employed at IChF and, if so, in which position.

Holding doctoral researcher status marks the beginning of research work at IChF. Its main purpose is **to gain experience in conducting research under the supervision of an experienced researcher**, i.e. a researcher holding at least a habilitation degree, and to obtain a doctoral degree. The doctoral researcher is always supervised by the head of the research group in which they conduct their research and by their doctoral dissertation supervisor. A person holding a doctoral degree but not a habilitation may also serve as an auxiliary supervisor.

An assistant/specialist should be a doctoral researcher at the Warsaw Doctoral School of Natural and BioMedical Sciences (Warsaw-4-PhD), co-run by the Institute, or at another doctoral school. A doctoral researcher who is not employed at IChF is always enrolled at Warsaw-4-PhD.

In addition to conducting research within an individual research project that forms the basis of the doctoral dissertation, the doctoral researcher participates in doctoral school courses and the research group's activities. This applies in particular to group meetings, during which information and experience are exchanged, and group members' research progress is discussed.

In the final stage of the doctoral project, doctoral researchers are encouraged to seek a postdoctoral position at another research institution and, where their personal circumstances permit, preferably abroad. International postdoctoral experience is not an absolute requirement at the Institute when applying for the next higher position – assistant professor – but it is undoubtedly a valuable asset in the academic job market and may support further career progression.

Minimum requirements:

- **A Master's degree or an equivalent qualification.**

Recommended requirements:

- At least **six months of research experience**, e.g. through an internship, Master's thesis research or a research placement
- **English language proficiency** sufficient for active participation in the work of the research group and preparation of publications.

Guidance on development:

- Work effectively on your own research project, forming the basis of your doctoral dissertation – plan your activities so that you submit the dissertation on time
- Actively participate in group meetings and research projects
- Build expertise in a specific research field
- Establish collaborations and learn from researchers in other disciplines
- Develop methodological and analytical skills (experimental, computational and/or theoretical)
- Publish results as a co-author and build your research portfolio
- Apply for your first independent research grants
- Build a basic understanding of research ethics and the principles of research integrity.

Worth knowing: The period of preparing a doctoral dissertation is the best time to develop good research integrity habits and plan the next stages of your career.

2.4 Assistant Professor – Building Research Independence

Note:

At this stage of career development, the Institute may offer an equivalent specialist position. This applies in particular to new employees, researchers who are still developing their publication record, those exploring their own career path (e.g. research vs business), or those who need time to secure their own research grants. This arrangement provides greater employment stability (otherwise, the employee could remain dependent on fixed-term contracts linked to the schedules of externally funded projects) and allows time to build and strengthen research independence.

As the requirements, scope of responsibilities and development recommendations at this career stage remain the same regardless of the formal job title, the term "assistant professor/ specialist" is used throughout the remainder of this guide. This section, therefore, covers both postdoctoral researchers employed as assistant professors and those employed as specialists.

The position of **assistant professor/specialist** is intended for researchers who have completed their doctoral degree and are beginning to develop their own research direction and build research independence. This involves increased efforts to secure external research funding and establish collaborations with partners (other researchers, academic organisations and businesses).

An assistant professor/specialist participates in the activities of the research group of which they are a member, but should also be open to collaboration and contacts outside the Institute and to gaining international experience. These goals can be pursued through, among other things, conference travel, study visits/placements at other research institutions and companies, and international research stays (particularly where the person in this position has not previously completed a postdoctoral research stay abroad).

An assistant professor/specialist may engage in teaching activities and supervise early-career researchers, including as an auxiliary supervisor of doctoral researchers. An experienced assistant professor may also become the head of a research group.

Minimum requirements:

- **A doctoral degree.**

Recommended requirements:

- *For individuals who obtained their doctoral degree at IChF* – **at least 12 months of postdoctoral experience at an institution other than IChF** (inter-institutional mobility)
- **Experience in leading a research project** awarded through a competitive procedure within the last 5 years.

Flexibility and equal opportunities:

The period within which project leadership experience must be demonstrated **may be extended by the duration of breaks in research activity**, e.g.:

- Long-term sick leave or rehabilitation leave (over 90 days)
- Maternity, parental or childcare leave
- Other documented career breaks, e.g. periods of employment in industry or involvement in implementation activities.

For women, this period may be extended **by 18 months for each child born or adopted**, if this is more favourable to the candidate.

Guidance on development:

- Expand your publication record and secure research grants
- Build a national and international collaboration network
- Engage in international projects
- Develop leadership and organisational skills, e.g. by participating in IChF working and advisory groups
- Participate in science communication activities and mentor early-career researchers.

2.5 Institute Professor – Research Topic Leader

The position of **institute professor** is intended for researchers with an established and recognised track record who plan to build or already lead their own research group implementing a coherent research programme. Alternatively, an institute professor may lead a group of researchers focused on a specific research topic, operating as part of a larger research group or bringing together members of different groups.

An institute professor often serves as a key researcher or Principal Investigator (PI) in research projects, with responsibility for resource planning, risk identification and monitoring, and oversight of the achievement of key project objectives. Their responsibilities also include implementing appropriate research data management standards within the team and strategically planning its development. In addition, they may teach, supervise early-career researchers – including doctoral researchers – and serve on committees and collegial bodies at IChF and external institutions. An institute professor should regularly publish research results in highly ranked journals, engage in editorial and peer-review activities, and develop international collaboration within their area of expertise.

Minimum requirements:

- **A habilitation degree or the academic title of professor**, or, in the case of a person permanently residing abroad, at least a doctoral degree

Recommended requirements:

- At least two years of **research experience outside the Institute**
- **Experience in leading a competitively awarded research project** that is ongoing at the time of the announcement of the competition for the position of institute professor/decision on promotion, or that ended no earlier than one year before that date
- **Supervision of at least one person preparing a doctoral dissertation.**

Flexibility and equal opportunities:

The period within which project leadership experience must be demonstrated **may be extended by the duration of breaks in research activity**, e.g.:

- Long-term sick leave or rehabilitation leave (over 90 days)
- Maternity, parental or childcare leave
- Other documented career breaks.

For women, this period may be extended **by 18 months for each child born or adopted**, if this is more favourable to the candidate.

Role of an institute professor:

- Conduct research at the highest level – setting directions for the development of the discipline
- Publish research results in reputable journals
- Secure funding for research

- Lead a research group and mentor early-career staff, supervise doctoral researchers and early-career researchers, and support their scientific and professional development
- Contribute to institutional governance – serve on scientific councils, committees and advisory bodies, and contribute to shaping the Institute's research strategy
- Build the Institute's reputation, represent it nationally and internationally, and collaborate with academic and industrial partners.

Worth knowing: The role of an institute professor is not only scientific but also managerial and leadership-oriented – combining scientific vision with responsibility for developing people and fostering a culture of collaboration.

Guidance on development:

- Consistently develop your publication record in high-impact journals and initiate interdisciplinary team publications
- Secure and lead substantial research projects and build long-term strategic partnerships at the national and international level
- Actively contribute to international research consortia and engage in editorial and peer-review activities
- Develop leadership skills, shape the research direction of your team and support early-career researchers in achieving independence
- Represent the Institute in expert bodies, committees and collaborative networks, strengthening its scientific position.

2.6 Professor – Research Independence and Scientific Leadership

The position of **professor** at the Institute is intended for researchers of the highest scientific standing and with a widely recognised track record who lead their own research groups[1], set new research directions at national and/or international level, and make a strategic contribution to the development of the Institute.

A professor is responsible for leading ambitious research projects, often implemented within consortia, and actively participates in major scientific forums at both national and international levels. Owing to their recognised standing within the scientific community, professors play an important role in shaping research priorities and the direction of science policy at the institutional, national and European levels. They bring a strategic perspective to the development of both the discipline and the Institute, while also supporting early-career researchers in building their own career paths. Professors initiate and develop collaboration networks, perform advisory and consultative roles, and contribute to decisions of key importance to the Institute's activities.

Professors form the intellectual core of the Institute and are responsible for shaping its long-term research directions.

[1] A professor may also lead a group of researchers focused on a specific research topic, operating as part of a larger research group or bringing together members of different groups.

Minimum requirements:

- **Holding the academic title of professor.**

Recommended requirements:

- At least **five years of experience in leading a research group.**

Role of a professor:

- Represent the highest level of scientific achievement in their field
- Perform expert roles, including reviewing scientific achievements, research proposals, promotion procedures and recruitment competitions
- Contribute to shaping the development of the discipline through participation in various expert bodies
- Promote high standards of research quality and research ethics
- Support the development of early-career researchers through mentoring and knowledge sharing
- Contribute to institutional governance – serve on scientific councils, committees and advisory bodies, and contribute to shaping the Institute's research strategy
- Maintain an active international profile through participation in research networks, committees and evaluation panels.

Guidance on development:

- Focus your research activities on high-impact projects and publications, strengthening the international visibility of both your own research and that of your team
- Develop long-term scientific partnerships and engage in international initiatives that enable you to contribute to shaping research agendas and standards in your field
- Strengthen your mentoring role by supporting the development of future research group leaders and fostering a culture of scientific excellence
- Actively participate in expert bodies, editorial boards and evaluation panels, increasing your influence on the directions of scientific development and research policy.

2.7 Career Planning and Development Good Practices

Career planning for research positions at IChF should be based on several key principles:

- **Think strategically about your career path** – identify the directions in which you want to develop over the next few years, taking into account both scientific goals and competency development
- **Build and maintain a network of collaboration** – national and international collaboration strengthens research quality, increases visibility and opens up opportunities for new initiatives and projects
- **Focus on the quality of scientific achievements** – significant, well-established results are often more valuable than a large number of minor publications or activities with limited impact

- **Make use of opportunities to learn from others** – discussions with more experienced researchers, exchange of good practices and teamwork are important elements of development at every career stage
- **Be open to changing your research group or research topic** – internal mobility can support scientific development, broaden competencies and help align your career path more closely with your professional goals
- **Develop project-related competencies** – participation in calls, projects and research initiatives, regardless of career stage, helps improve skills in proposal writing, task management and teamwork
- **Develop your scientific communication and leadership skills** – effective communication, collaboration, delegation and work organisation become increasingly important as your career progresses, and it is worth developing these skills as early as possible

When planning your career, it is useful to consult strategic documents that outline standardised competency models for different stages of research career development. One such tool is the European Competence Framework for Researchers, adopted by the European Union.

*We encourage you to consult **Annex 1***, which presents the competency levels expected of individuals holding different research positions according to the above European framework.

3. Research-Technical / Instrumentation Career Path

3.1 General Principles

Employees following the research-technical career path play a key role in maintaining and developing the Institute's scientific instrumentation, supporting research groups in conducting measurements, and ensuring the safety and quality of laboratory processes. They are also responsible for training users and providing instrumentation services.

Researchers following the instrumentation career path may hold one of the following:

- **research positions**: assistant, assistant professor, institute professor, professor

  or
- **research-technical positions**: specialist or chief specialist for shared research instrumentation.

The main requirements for research positions are presented in Chapter 2 of this document. The requirements for research-technical positions within this career path are presented below. At the same time, individuals employed in research positions who follow this career path may also use the recommendations provided for research-technical positions.

3.2 Specialist / Chief Specialist for Shared Research Instrumentation – Technical Independence and Responsibility for Research Infrastructure

The positions of specialist and chief specialist for shared research instrumentation are intended for individuals with advanced technical expertise and experience operating advanced research infrastructure. Their main responsibilities include day-to-day supervision of instrumentation, responding to technical issues, and adapting instrument settings and measurement procedures to the needs of research projects. Specialists and chief specialists support users in the daily operation of equipment and coordinate servicing activities, update technical procedures, and are responsible for more complex equipment configurations. They may also participate in preparing laboratories for new projects, implementing solutions that improve instrument performance, and ensuring compliance with quality and safety requirements.

Individuals pursuing a career in the instrumentation path are involved in the operation of specialised IChF laboratories such as:

- Chromatographic Analysis Laboratory
- Specialised Analysis Laboratory of Chemipan Experimental Facility
- Molecular Layers Research Laboratory
- X-ray Structural Analysis Laboratory
- Specialised Microfabrication and Fluidics Laboratory
- Specialised Research Instrumentation Support Laboratory
- Surface Analysis Laboratory
- Soft Matter Structure Research Laboratory

- Mechanical Laboratory
- Scanning Electron Microscopy Laboratory
- NMR Spectroscopy Laboratory.

Employees of these laboratories form the so-called Engineering Corps – a common professional group responsible for maintaining and developing the Institute's research infrastructure.

Minimum requirements:

- **A doctoral degree, a Master's degree or equivalent qualification**

Recommended requirements:

- **Experience in working with scientific instrumentation**
- **Ability to operate, maintain and troubleshoot instrumentation** and to perform measurements in accordance with quality standards.

Role of specialists and chief specialists for instrumentation[2]

- Operate and maintain key IChF research infrastructure in a state of research readiness, including monitoring its technical condition
- Cooperate with external service providers to ensure the continuous and reliable operation of instrumentation
- Participate in preparing and updating user instructions and technical and safety procedures
- Support instrumentation users and provide training and instruction
- Perform measurements for the Institute's research groups
- Participate in planning laboratory development, recommending purchases and contributing to IChF's infrastructure strategy
- Provide instrumentation services to external entities within the "IChF for Companies" framework.

Guidance on development:

- Develop technical competencies through training offered by instrumentation manufacturers and certified courses
- Broaden your knowledge of new measurement technologies and trends in research infrastructure development
- Build a network of contacts with service providers, manufacturers and other instrumentation centres
- Engage in instrumentation projects (purchases, upgrades, audits) and research projects
- Make use of available funding for training and mobility
- Develop training and instructional skills to support users effectively
- Strengthen organisational and management competencies in planning instrument use, measurement schedules and service logistics.

[2] These responsibilities are also carried out by individuals holding research positions who follow the instrumentation career path.

3.3 Career Planning and Development Good Practices

Career development in the area of research instrumentation operation and supervision at IChF should be based on the following principles:

- **Develop technical competencies** – expand your knowledge of instrumentation operation, new measurement technologies and software supporting laboratory work
- **Build experience with different instruments** – the broader the range of technologies you can operate, the greater your independence and flexibility at work
- **Maintain a strong understanding of quality and safety standards** – proficiency in standards, procedures and audits is essential in this role
- **Develop diagnostic and servicing skills** – the ability to troubleshoot technical problems increases your value in the role
- **Stay up to date with the instrumentation market** – following new technologies, manufacturers and solutions facilitates participation in planning purchases and laboratory upgrades
- **Build relationships with users and research groups** – effective communication helps to better adapt instrumentation use to project needs.

4. Research Support Career Path

4.1 General Principles

The Research Support Career Path covers positions related to the professional management of research processes, projects, intellectual property and knowledge commercialisation. Individuals following this path support research activities at the operational, administrative, and strategic levels, thereby increasing the effectiveness of funding acquisition, the commercialisation of research results, and the organisational efficiency of research teams.

This path is intended both for individuals with research experience and for those without such experience who develop competencies in the areas of:

- Research project management (national and international)
- Research administration and strategic research support
- Technology transfer and intellectual property protection

Individuals developing their careers in this area may hold positions such as:

- Research Project Specialist (research manager/project manager)
- Lab manager
- Technology Transfer Specialist

Depending on their competencies and educational background, this career path may be combined with employment in a research position and with performing research support functions within the research career path (e.g. Data Officer, Career Advisor). In such cases, however, the individual formally remains employed in a research position, as these responsibilities are supplementary to the core duties associated with that position.

4.2 Specialist / Research Manager – Research Project Management

These positions are intended for individuals responsible for preparing project proposals or providing comprehensive support throughout the application, implementation and reporting processes for research projects. At the Institute, such staff work in the Grants Department or the Large European Projects and Business Collaboration Department.

The scope of responsibilities may include:

- Preparing project proposals (developing the project concept and main assumptions, defining implementation stages and planned results, preparing dissemination and long-term impact plans, drafting the complete proposal)
- Supporting researchers in preparing project proposals (analysing calls, preparing budgets, verifying formal and substantive compliance with call documentation)
- Implementing and coordinating projects (dividing work, delegating and coordinating tasks, monitoring project progress against the schedule, milestones and budget assumptions)

- Supporting project implementation (formal and administrative support – preparing amendment requests, reporting, archiving documentation, providing information and advice on project implementation rules)
- Scientific reporting (including CST2021, POL-on)
- Maintaining communication with funding bodies, consortium partners and the Institute's administration
- Reporting and overseeing scientific and financial reporting
- Supporting project audits and inspections
- Advising on cost eligibility rules and compliance with funders' regulations, as well as reviewing and processing project amendments.

Minimum requirements:

- Higher education degree
- Very good command of English.

Recommended requirements:

- Experience in projects funded from national or international sources (e.g. EC, NCN, NCBR)
- Knowledge of research funding rules and grant regulations
- Ability to work in a team and manage project budgets and schedules
- Knowledge of project management methodologies and tools.

Guidance on development:

- Develop project management competencies (methodologies, certifications)
- Deepen your knowledge of research funding rules in the EU and Poland
- Build strong relationships with researchers and administrative staff
- Develop analytical and negotiation skills
- Participate in international networks of research managers and administrators.

4.3 Lab Manager – Laboratory Operations Management

The lab manager position focuses on the organisational and operational support of a research group.

The scope of responsibilities includes:

- Coordinating the day-to-day operation of the laboratory
- Overseeing procurement, materials management (including inventory of stock and monitoring of ongoing consumption) and the operational budget
- Implementing and monitoring quality and safety procedures and supporting the process of obtaining required certifications and permits, e.g. permits for work with GMMs/GMOs in laboratories conducting biological research
- Organising technical inspections, servicing and repairs of research infrastructure
- Supporting the onboarding of new employees, doctoral researchers and interns
- Working closely with the administration and research support departments

Minimum requirements:

- Higher education degree, preferably in natural sciences, chemistry or a related field
- Very good command of English

Recommended requirements:

- Laboratory experience
- Knowledge of occupational health and safety rules and quality standards, e.g. GLP/5S methodology
- Organisational and management competencies
- Ability to work in an international and interdisciplinary research team

Guidance on development:

- Develop competencies in teamwork and team management
- Build knowledge of quality systems and modern methods for improving laboratory operations
- Learn how to plan an operational budget
- Familiarise yourself with project management methodologies and tools
- Develop communication and mediation skills
- Cooperate with colleagues holding the same position within your organisation and in partner and collaborating institutions to exchange experience
- Participate in laboratory trade fairs, specialist training courses and presentations organised by research equipment distributors, manufacturers and research funding organisations to keep your professional knowledge up to date, while maintaining impartiality, transparency, loyalty to the employer and equal treatment of potential suppliers and bidders.

4.4 Technology Transfer Specialist – Commercialisation of Research Results and IP Protection

This career path covers activities related to intellectual property (IP) protection, identification of the commercial potential of research results, their commercialisation, and collaboration between science and business.

The scope of responsibilities may include:

- Analysing the commercial potential of research results and identifying solutions with commercialisation potential
- Supporting patent application processes, know-how protection and IP management
- Collaborating with researchers, patent attorneys, business partners and institutions supporting innovation
- Participating in the preparation and negotiation of licence agreements, confidentiality agreements (*non-disclosure agreement – NDA*), material transfer agreements (MTA) and similar arrangements
- Supporting the creation of spin-off companies and academic start-ups

- Identifying partners interested in acquiring, licensing or otherwise using knowledge and technologies developed at the research institution
- Administering documentation related to IP protection, commercialisation and collaboration with external partners
- Monitoring project obligations related to IP, exploitation, commercialisation and the sustainability of research results
- Reporting indicators related to technology transfer, such as patent applications, licence agreements concluded, spin-off companies established, industry partnerships or commercialisation revenues
- Educating research teams on IP protection, invention disclosure, confidentiality, licensing and opportunities for commercialising research results.

Minimum requirements:

- Higher education degree, preferably in natural sciences, engineering, innovation management, law, economics or a related field
- Knowledge of intellectual property protection, commercialisation of research results and collaboration between science and business.

Recommended requirements:

- Experience in research and development projects, publicly funded projects or research commercialisation processes
- Ability to conduct market analysis, assess the implementation potential of technologies and model commercialisation pathways
- Experience in preparing, reviewing or negotiating NDAs, MTAs, licence agreements or other agreements related to technology transfer
- Ability to work with project documentation, IP documentation and document management systems
- Highly developed interpersonal and communication skills, including the ability to collaborate with researchers, business partners, patent attorneys and innovation support institutions
- Very good command of English.

Guidance on development:

- Develop your knowledge of patent law, know-how protection, R&D agreements, NDAs, MTAs and licence agreements
- Build an active network of contacts within the research community, as well as with industry, investors, incubators, accelerators and business partners, and develop the ability to turn contacts into long-term professional relationships
- Develop the ability to view scientific issues from the perspective of the needs of society, industry and end users
- Learn to translate research results and scientific language into messages that are understandable to businesses, investors and other potential technology users, taking into account their needs, constraints and expectations
- Assess research results not only in terms of their scientific value, but also in terms of the problem they address, user needs, implementation potential and the value they may bring to society, the economy or specific end users

- Develop the ability to assess the technological maturity of solutions and identify the steps needed to move from a research result to a solution ready for implementation or commercialisation
- Develop negotiation, analytical, communication and strategic skills.

4.5 Career Planning and Development Good Practices

Career development in research support should be based on the following principles:

- **Develop systemic competencies** – understand the entire life cycle of a research project, from concept to commercialisation
- **Build communication competencies** – work in this area requires collaboration with researchers, administration and external partners
- **Maintain up-to-date knowledge of regulations** – both national and international
- **Develop organisational and management skills**
- **Maintain up-to-date knowledge of research funding instruments**
- **Strengthen strategic competencies** – understand the Institute's position within the national and international research and innovation ecosystem
- **Develop a strong focus on the needs of internal users** – support researchers and research teams professionally, responsively and with an understanding of the specific nature of research work
- **Build knowledge of the market, technologies and institutional environment** – make use of training, industry events and meetings with funding agencies, suppliers, industrial partners, incubators and accelerators
- **Maintain professional ethics and avoid conflicts of interest** – particularly in dealings with suppliers, contractors, business partners and entities interested in access to research results, infrastructure or knowledge developed at the Institute.

5. Equal Opportunities and Support for Women

IChF applies the principle of **equal treatment of all employees**, regardless of gender, age, nationality or family situation. In the context of career development, particular importance is attached to **accounting for career breaks related to parenthood and to promoting a working culture that supports work–life balance**.

Accordingly, the Institute recognises that **international mobility**, while in itself a valuable asset in the academic job market and potentially beneficial for further career progression, **is not a prerequisite for further career development at IChF**. To support the reconciliation of professional and family life, the Institute accepts national/inter-institutional mobility as sufficient for promotion between positions.

*In 2024, the Director of IChF established the "**IChF Returns**" programme (Orders No. 57.2024 and No. 85.2024). The programme aims to facilitate the return of Institute employees to research work after leave or career breaks related to having a child or following a prolonged period of sick leave.*

Applications are accepted once a year through a competitive procedure. Funding is provided in the form of a grant. The funds may be used, among other things, for salaries, research activities, the purchase of materials, and participation in conferences and training courses.

Good practices:

- A flexible approach to time-related requirements when assessing research achievements
- Recognition of experience gained through research stays and employment at national research institutions, without treating international mobility as a prerequisite for career development
- Equal treatment of women and men in recruitment and promotion processes
- Promoting gender diversity in leadership and expert roles
- Providing support for returning to work after breaks related to caring for other family members, including through the dedicated "IChF Returns" programme, which facilitates a return to intensive research activity.

Worth knowing: Taking career breaks into account is not a privilege, but an element of equal treatment – it enables assessment of a researcher's actual potential rather than merely the formal continuity of their career.

6. Professional Development Support

The Institute values staff mobility, recognising it as an important element of professional development, competency enhancement and the building of international collaboration networks.

The Institute participates in the **ERASMUS+** programme, which funds staff mobility for training and professional development, including short training periods, observation, job shadowing, and similar forms of gaining professional experience abroad, as well as teaching mobility for academic staff (e.g., delivering classes) – all within the framework of staff mobility.

In addition, to support employees in planning mobility, the Institute has developed the **"Mobility Programmes – Guide for Researchers and PhD Students"**, which presents external funding opportunities and is **addressed to both researchers and employees following the research-technical career path, taking into account the** instruments available to both groups.

Research groups may also finance training and mobility from awarded grants and their own funds. Specific training needs requiring additional funding may be agreed upon at the Institute management level.

Annex 1. Minimum Competency Levels Expected for Individual Research Positions in Accordance with the „The European Competence Framework for Researchers"

1. Assistant

DOING RESEARCH – Intermediate
Independently carries out planned research tasks (experiments, calculations, analyses) under the general supervision of a more experienced researcher.

MANAGING RESEARCH – Foundational
Supports project implementation (keeping records, reporting progress, basic work organisation) but is not responsible for overall research planning.

MAKING AN IMPACT – Foundational
Co-authors publications and conference presentations, and undertakes basic dissemination activities (e.g. preparing presentation materials).

MANAGING RESEARCH TOOLS – Foundational
Uses research tools, databases, software and basic data management practices in accordance with the team's instructions.

WORKING WITH OTHERS – Foundational
Works effectively as part of a team and follows established communication and information-sharing practices in the research group.

SELF-MANAGEMENT & COGNITIVE ABILITIES – Foundational
Is able to organise their own work over a short time horizon and accepts feedback, using it to support further development.

2. Adjunct/Assistant Professor

DOING RESEARCH – Advanced
Independently formulates research questions, plans and conducts research, and contributes to the development of project concepts within a selected research area.

MANAGING RESEARCH – Intermediate
Leads or co-leads smaller research projects, manages tasks within the team, and ensures adherence to schedules and management of basic risks.

MAKING AN IMPACT – Intermediate
Regularly publishes as an author or co-author in scientific journals, presents research results at conferences, and engages in teaching or training activities.

MANAGING RESEARCH TOOLS – Intermediate
Independently manages data in their projects (e.g. data management plans, reproducibility), and understands the basics of open science and intellectual property protection.

WORKING WITH OTHERS – Intermediate
Collaborates in national and international teams and begins to act as a supervisor/mentor for more junior team members (e.g. doctoral researchers).

SELF-MANAGEMENT & COGNITIVE ABILITIES – Intermediate
Plans their own research development (publications, research stays, grants), is able to prioritise tasks and solve typical research problems.

3. Institute Professor

DOING RESEARCH – Advanced
Sets research directions within their area of specialisation, initiates new projects and is responsible for their scientific quality at the level of the research group or unit.

MANAGING RESEARCH – Advanced
Independently manages research projects, including international projects, as well as a research team, plans resources, identifies risks and oversees the achievement of objectives.

MAKING AN IMPACT – Advanced
Regularly publishes in highly ranked journals, performs editorial or peer-review roles, and contributes to the development of teaching programmes and specialist training.

MANAGING RESEARCH TOOLS – Advanced
Shapes standards for managing research data and results within their team/unit, taking into account open science requirements, IP protection and security.

WORKING WITH OTHERS – Advanced
Mentors and supports the development of early-career researchers, builds and maintains scientific collaboration networks, and participates in committees and collegial bodies.

SELF-MANAGEMENT & COGNITIVE ABILITIES – Advanced
Consciously plans the long-term development of their research group, makes strategic decisions, and integrates diverse scientific perspectives.

4. Professor

DOING RESEARCH – Expert
Is a recognised authority in their field, sets research directions at national and/or international level, and inspires new areas of research.

MANAGING RESEARCH – Expert
Leads complex, often multi-institutional projects or consortia and helps shape research agendas and science policies at a broader level.

MAKING AN IMPACT – Expert
Has an established and widely recognised track record and participates in expert bodies, editorial boards and evaluation panels of international significance.

MANAGING RESEARCH TOOLS – Advanced or Expert
Contributes to developing or reviewing institutional/regional principles for the management of data, infrastructure and intellectual property, promoting good practices in these areas.

WORKING WITH OTHERS – Expert
Builds and leads scientific collaboration networks, mentors research group leaders and plays a key role in major decision-making bodies.

SELF-MANAGEMENT & COGNITIVE ABILITIES – Expert
Shapes the vision for the development of their discipline and institution and supports the design of career paths for the next generation of researchers.