

Human Resources Strategy for Researchers

Internal Gap Analysis and Action Plan

The Institute of Molecular Physics

Polish Academy of Sciences

Poznań 2016



Table of Contents

I. Introduction	3
II. Methodology.....	5
II.1. Working Group.....	5
II.2. Documents and legislation	5
II.3. Online questionnaire.....	6
II.4. Respondents.....	6
III. Survey results	7
III.1. Answers to the online questionnaire	9
IV. Internal gap analysis	11
IV.1. The European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers.....	11
V. Action plan	35
VI. Summary.....	43
VI.1. HR mission and vision	43
VI.2. Implementation.....	43
VI.3. Responsibility.....	46
VII. Acceptance.....	48



I. Introduction

The beginning of the Institute dates back to 1950s and 1960s, when first laboratories in Poznań were established as a branch of the Institute of Physics Polish Academy of Sciences in Warsaw. In 1975, the Institute of Molecular Physics Polish Academy of Sciences (IMP PAS) was founded as an independent unit.

The IMP PAS conducts research into condensed matter physics. The present scientific activity focuses on: theoretical and experimental physics of magnetics (thin films, amorphous magnetics, electronic structure), physics of ferroics (ferroelectrics, superprotonic conductors, electrets, piezopolymers), liquid crystals (ferro- and anti-ferroelectric materials), crystalline molecular conductors and fullerenes, spintronics, meso- and nanoscopic systems, superconductivity and low-temperature physics, electron paramagnetic resonance (EPR), magnetic resonance micro-imaging (MRI) and computer simulations (auxetics, colloids).

The Institute is organized into 14 departments, which are grouped into 3 divisions, and employs about 120 people, with almost 70 of them as a scientific staff and about 20 doctoral students.

Our researchers participate in diverse scientific projects. For instance, the joint research project PSPB-045/2010 Nanoscale spin torque devices for spin electronics – NANOSPIN, that is supported by a grant from Switzerland. The Institute is the leader in the project the National Centre for Research and Development – PIHe3, which focuses on obtaining the isotope ^3He from a liquid helium.

The IMP PAS was affiliated with the Centre of Excellence for Magnetic and Molecular Materials for Future Electronics (MMMFE) of the European Union. The main goal of this Centre was to orientate the research activity towards physics of magnetic and molecular (dielectric) nanostructured materials for European research centres. Moreover, the Institute coordinated the scientific network: New Materials for Magneto-electronics (MAG-EL-MAT) which is related to the new field of science and technology, called spintronics.

The Institute is a member of various scientific organizations, for example the Consortium of High Magnetic Fields Users – CMFU, the Wielkopolska Center for Advanced Technologies, ILL-PL Consortium (the Institute Laue-Langevine in Grenoble), the IMP PAS Odolanów – Polish Oil and Gas Company – Wrocław University Consortium, Research Center for Advanced Materials and Smart Structures, and National Center of Nanophysics and Spintronics, SPINLAB.

A close cooperation exists between the Institute and Adam Mickiewicz University in Poznań and Poznan University of Technology. The Nanobiomedical Center of Adam Mickiewicz University and the IMP PAS are co-leaders of the Interdisciplinary Doctoral Studies in Nanotechnology-Electronics and Photovoltaics.

One of the main goals of the Institute is to educate and guide early-stage researchers. Candidates can choose from the International Doctoral Studies and the Interdisciplinary Doctoral Studies in Nanotechnology-Electronics and Photovoltaics. The latter (POKL.04.03.00-00-015/12) is funded by the



European Union. As a part of this program, doctoral students are required to complete a six-month internship abroad. What is more, every year a number of students from Adam Mickiewicz University in Poznań and Poznan University of Technology write their dissertations under the patronage of the Institute's researchers.

The Institute of Molecular Physics PAS puts a great emphasis on a promotion of science among society, especially secondary and high school students. Annually, the Department of the Low Temperature Physics organizes workshops called 'Summer with Helium' addressed to high school students interested in physics. For a one week participants are allowed to conduct research and its results are presented during final seminar. Since 2009, researchers from the Department of the Low Temperature Physics have led an extracurricular science club for secondary school pupils. After each year, the results are presented in a form of interactive exhibition, which is seen by about thousand visitors.

The Institute's researchers participate in and coordinate numerous international and local conferences. The one with the longest tradition is now-called 'The European Conference Physics of Magnetism'. The Conference has been co-organized, every three years since 1975, with the Faculty of Physics Adam Mickiewicz University in Poznań. During this conference young researchers are awarded a prize for the best poster presentation of their scientific results.

Other regularly occurring conferences are Polish-Czech Seminar on Structural and Ferroelectric Phase Transition, and Auxetics and Related Systems.

II. Methodology

II.1. Working Group

To start with a Working Group was established. In order to obtain a possibly broad viewpoint and expertise, the team consisted of representatives from various divisions of the Institute and was balanced in terms of gender, discipline and career stage. The members were:

- Prof. dr hab. Bogdan Idzikowski – Coordinator and Director of the IMP PAS,
- Prof. dr hab. Roman Świetlik – Vice-Director of Scientific Affairs, Head of the Department of Molecular Crystals,
- Prof. dr hab. Jadwiga Tritt-Goc – Member of the Scientific Council, Head of the Doctoral Studies,
- Dr Grzegorz Michałek – Assistant Professor,
- Mgr inż. Natalia Pierunek – Doctoral Student,
- Mgr Agata Tomaszewska – Administration Department,
- Mgr Monika Bartosińska-Kasierska – Librarian, Representative of a Trade Union,
- Mgr Hanna Frąckowiak – Human Resources Specialist,
- Mgr Sławomir Grodziski – Legal Consul,
- Elżbieta Seredyńska – Scientific and Organizational Department.

Each member of the Working Group had a specified area of responsibilities, that were talked through and commented on during regular group meetings. The basis of the process was a familiarization with the *European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers*.

II.2. Documents and legislation

The main goal was to compare principles of the Charter and Code with existing rules and principles of the IMP PAS as well as the Polish law. The comparison was based on an analysis of following documents:

- *Statute of the Institute of Molecular Physics Polish Academy of Sciences,*
- *Act on Polish Academy of Sciences,*
- *Code of Conduct for Scientific Employee,*
- *International Doctoral Studies Regulations,*
- *Employment Conditions for the Institute of Molecular Physics PAS,*
- *Information on a Fair Treatment in an Employment,*
- *Management of Copyright and Related Rights, Industrial Property Rights and the Principles of Commercialization of the Results of Research and Development at the Institute of Molecular Physics Polish Academy of Sciences,*

- *Regulations for an evaluation of the scientific employees at the Institute of Molecular Physics PAS,*
- *Regulations on an Employment in Positions of a Professor, an Associate Professor and a Visiting Professor at the Institute of Molecular Physics PAS,*
- *Regulations on an Employment in Positions of a Research Assistant and an Assistant Professor at the Institute of Molecular Physics PAS,*
- *Regulations on uploading the Institute of Molecular Physics's website,*
- *Remuneration Rules for Employees of the Institute of Molecular Physics.*

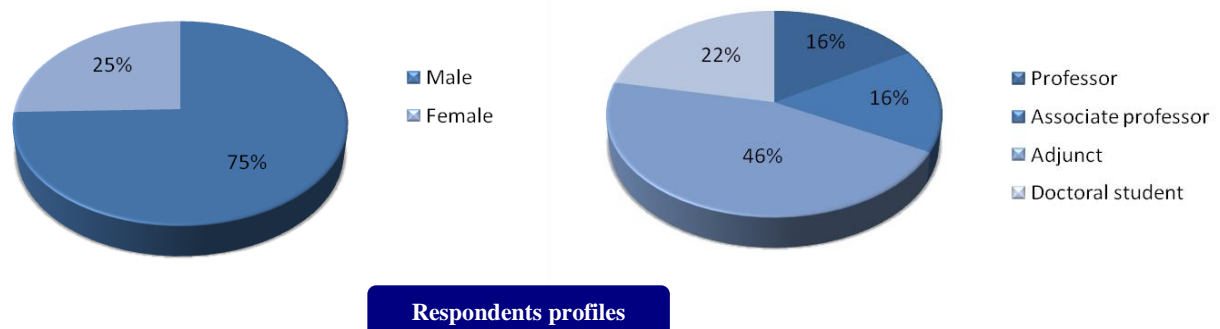
II.3. Online questionnaire

The process of gathering information started with creating an online survey. The survey consisted of 50 mandatory questions grouped into 4 categories (ethical and professional aspects, recruitment, working conditions, and social security and training). Questions were created in form of declarative sentences, based on the materials from an exemplary standard template provided by Euraxess on its website. For each question 5 answer options were given: *I strongly agree, I agree, I disagree, I strongly disagree and I don't have an opinion.* Each category ended with a section for an additional commentary. Moreover, a category *demographics*, consisting of two questions regarding gender and scientific title/position was placed at the end of the survey. Information about the survey was distributed among all researchers twice via email. The survey was prepared in English, while Polish versions of the Charter and the Code were attached.

The results were gathered and presented to the Working Group. Each member took his/her time to analyze and reflect on the results. On the basis of the Working Group's conclusion a gap analysis and an **Action plan** were prepared.

II.4. Respondents

A total number of 55 (almost 60% of all) scientific employees of the IMP PAS submitted their answered questionnaires. Diagrams below present a breakdown of respondents' demographics.



III. Survey results

The internal survey was a key factor for creating an **Action plan** for the Charter and Code implementation. It reflects researchers' attitude, opinions and feelings toward policies and practices in the IMP PAS.

The results were analyzed by the Working Group. Answers were categorized into strengths and challenges of the Institute. Classification into strengths and challenges was made on the basis of the obtained positive answers. Questions with 47 and more positive answers were considered as strengths, while questions with less than 39 positive responses were perceived as challenges. The challenges are classified to two main groups – with negative (*I disagree* and *I strongly disagree*) answers prevalence and with the neutral *I don't have an opinion* answers prevalence. The first group requires measures mentioned in the **Action plan**, the second group was examined individually for each question. Depending on a question and number of such responses it was found that either question does not apply to certain respondents or the result is due to a lack of information. In the latter case, the answer *I don't have an opinion* was also considered a challenge. Conclusions for this type of answer were based on a subject of questions, a number of opinion-lacking responses and their correlation to other answer options. After an in-depth analysis of each question and its answers the Working Group concluded that those are a result of variations in experience, career stage, seniority and general situation of our researchers. As a corrective action an information campaign is proposed.

Additionally, the members of the Working Group gathered suggestions of improvement of the various principles through individual discussions with researchers at all career stages. The survey analysis and results of discussions helped to determine the Institute's strengths and challenges.

Strengths:

- Research freedom,
- Recognition of ethical principles,
- Professional responsibility,
- Professional attitude,
- Accountability,
- Recruitment – regarding clearness of criteria for and admission and job description,
- Recruitment (code),
- Selection (code),
- Research environment – regarding a stimulating research environment and awareness of health and safety regulations,
- Working conditions – regarding possibility to combine family and career
- Supervision and managerial duties,

- Continuing professional development

Challenges:

- Contractual and legal obligations,
- Good practice in research,
- Evaluation/appraisal system,
- Recruitment – access for researchers returning to a research career,
- Selection (code) – regarding selection committee and wide range of selection,
- Transparency (Code) regarding information about the strengths and weaknesses of application after the selection process,
- Judging merit (Code) – regarding wider range of evaluation criteria; teaching, supervision, teamwork, et cetera,
- Variations in the chronological order of CVs (Code),
- Recognition of mobility experience (Code),
- Funding and salaries,
- Gender balance,
- Access to career advice,
- Co-authorship (some aspects),
- Complains/appeals,
- Participation in decision-making bodies,
- Working conditions (regarding disabled researchers),

Below there are presented challenges that emerged from a large number of *I don't have an opinion* answers, not included in “Challenges” because of a big amount of positive answers:

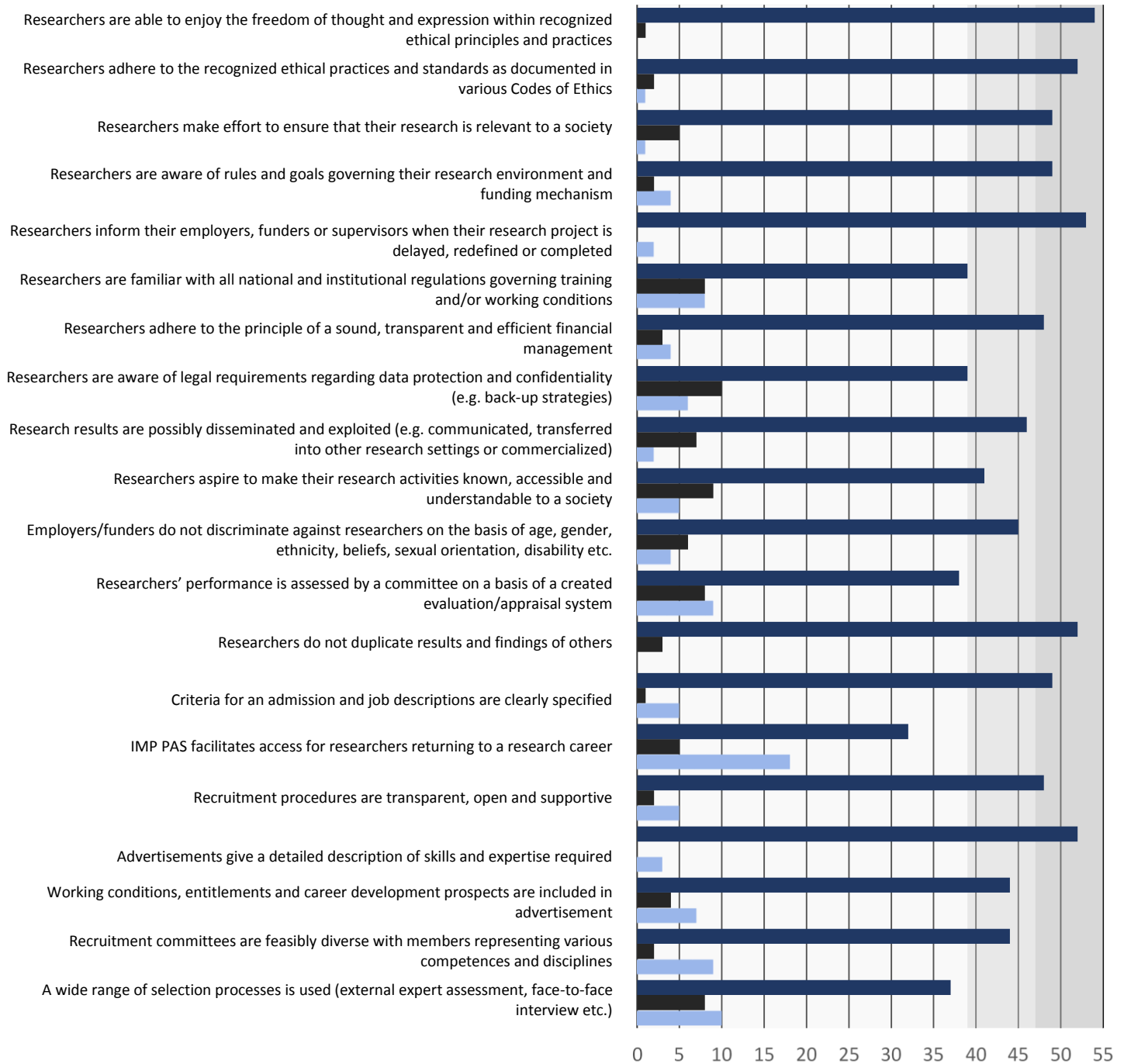
- Transparency (Code) – regarding information about recruitment process,
- Seniority (Code),
- Postdoctoral appointments (Code),
- Career development,
- Value of mobility,

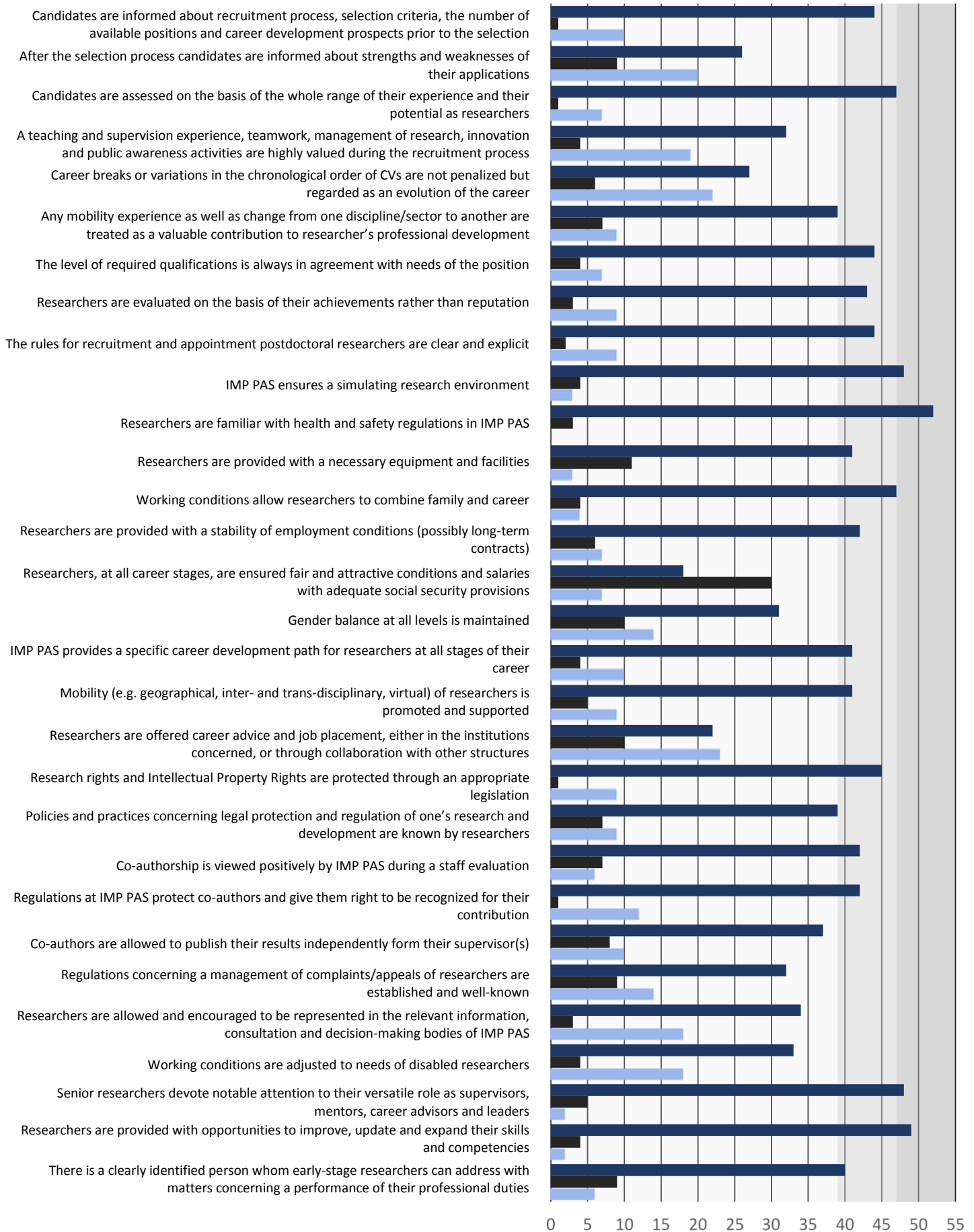
The open commentaries did not provide any significant answers, therefore they have not been taken into account during the final analysis.

III.1. Answers to the online questionnaire

Legend:

- total number of positive answers: "I strongly agree" and "I agree"
- total number of negative answers: "I disagree" and "I strongly disagree"
- number of answers: "I don't have an opinion"





IV. Internal gap analysis

The Working Group has taken into account both the existing institutional rules and the results of the survey. In order to obtain a possibly broad viewpoint and expertise the Group members have been chosen from the experienced staff of the IMP PAS. In addition, the members have obtained information about the real perception of the interviewed staff during formal and informal meetings/discussions with other researchers.

IV.1. The European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers

Ethical and professional aspects

1. Research freedom

Researchers should focus their research for the good of mankind and for expanding the frontiers of scientific knowledge, while enjoying the freedom of thought and expression, and the freedom to identify methods by which problems are solved, according to recognised ethical principles and practices. Researchers should, however, recognise the limitations to this freedom that could arise as a result of particular research circumstances (including supervision/guidance/management) or operational constraints, e.g. for budgetary or infrastructural reasons or, especially in the industrial sector, for reasons of intellectual property protection. Such limitations should not, however, contravene recognised ethical principles and practices, to which researchers have to adhere.

Existing Institutional rules and/or practices:

In conducting scientific research the staff and doctoral students of the IMP PAS focus on research for the good of mankind and for expanding the frontiers of scientific knowledge. Scientists enjoy the freedom of thought and expression, and the freedom to identify methods by which problems are solved, according to recognized ethical principles and practices. Researchers are encouraged to conduct their own research which shall be compatible with the research programme, internal regulations and financial capabilities of the scientific unit at which they are employed. The staff and doctoral students of the IMP PAS are guided by *The Code of Conduct for Scientific Employee*, which is based on *The European Code of Conduct for Research Integrity*. Also, in their research, scientists are guided by the internal regulations included in contracts conditions and the *Intellectual Property Rights Regulations* introduced in the IMP PAS in April 2015.

Action required:

None.

2. Ethical principles

Researchers should adhere to the recognised ethical practices and fundamental ethical principles appropriate to their discipline(s) as well as to ethical standards as documented in the different national, sectoral or institutional Codes of Ethics.

Existing Institutional rules and/or practices:

95% of the researchers in the survey answered that they are aware of the ethical standards. Researchers at the IMP PAS are obliged to follow *The Code of Conduct for Scientific Employee*, (based on *The European Code of Conduct for Research Integrity*), published by the Scientific Ethics Committee in 2012. In order to prevent scientific dishonesty and solecism, under the art. 39 of the *Act on the Polish Academy of Sciences*, the Committee for the Ethics in Science for years 2015-2018 was established.

Action required:

Uploading *The Code of Conduct for Scientific Employee* to the Institute's website.

3. Professional responsibility

Researchers should make every effort to ensure that their research is relevant to society and does not duplicate research previously carried out elsewhere.

They must avoid plagiarism of any kind and abide by the principle of intellectual property and joint data ownership in the case of research carried out in collaboration with a supervisor(s) and/or other researchers. The need to validate new observations by showing that experiments are reproducible should not be interpreted as plagiarism, provided that the data to be confirmed are explicitly quoted.

Researchers should ensure, if any aspect of their work is delegated, that the person to whom it is delegated has the competence to carry it out.

Existing Institutional rules and/or practices:

The staff and doctoral students in the IMP PAS make effort to ensure that their research is relevant to society. Scientists do not duplicate results and findings of others and respect the rules concerning the protection of intellectual property.

Action required:

None.

4. Professional attitude

Researchers should be familiar with the strategic goals governing their research environment and funding mechanisms, and should seek all necessary approvals before starting their research or accessing the resources provided.

They should inform their employers, funders or supervisor when their research project is delayed, redefined or completed, or give notice if it is to be terminated earlier or suspended for whatever reason.

Existing Institutional rules and/or practices:

Researchers are aware of rules and goals governing their research environment and funding mechanism. At the Institute there are people responsible for searching for information on the funding of research projects. Information is then disseminated among the researchers via email.

Researchers inform their employers, funders or supervisors when their research project is delayed, redefined or completed. To prevent irregularities the researchers (especially those at the beginning of their careers) in the IMP PAS are obliged to show their results on the internal seminars or workshops. Once a year, during a reporting meeting, all scientific teams have to present progress in their research projects.

Action required:

None.

5. Contractual and legal obligations

Researchers at all levels must be familiar with the national, sectoral or institutional regulations governing training and/or working conditions. This includes Intellectual Property Rights regulations, and the requirements and conditions of any sponsor or funders, independently of the nature of their contract. Researchers should adhere to such regulations by delivering the required results (e.g. thesis, publications, patents, reports, new products development, etc) as set out in the terms and conditions of the contract or equivalent document.

Existing Institutional rules and/or practices:

According to the survey most of the Institute's researchers are familiar with the national, sectoral or institutional regulations governing training and/or working conditions. The IMP PAS rules require that each newly hired employee confirms with the signature, on the appropriate document, that he or she has been informed by the HR unit about the rights and responsibilities before the contract is signed. The appropriate documents are placed on the IMP PAS internal web page. In the Institute, there is a person who delivers for researchers information concerning obtaining the structural and other external funds. To support the researchers activity, on 19.01.2016 the IMP PAS has organized the meeting with prof. dr hab. Michał Karoński, the Chairman of the National Science Centre.

Action required:

Organizing meetings with representatives of The National Science Centre and The National Centre for Research and Development and other funders institutions representatives.

Encouraging researchers to share knowledge from meetings, seminars and workshops organized by the EU Framework Programmers Regional Contact Point in Poznań.

Dissemination (by e-mail) of the information about intellectual property rights and regulations referring to training and working conditions.

6. Accountability

Researchers need to be aware that they are accountable towards their employers, funders or other related public or private bodies as well as, on more ethical grounds, towards society as a whole. In particular, researchers funded by public funds are also accountable for the efficient use of taxpayers' money. Consequently, they should adhere to the principles of sound, transparent and efficient financial management and cooperate with any authorised audits of their research, whether undertaken by their employers/funders or by ethics committees.

Methods of collection and analysis, the outputs and, where applicable, details of the data should be open to internal and external scrutiny, whenever necessary and as requested by the appropriate authorities.

Existing Institutional rules and/or practices:

Researchers are aware that they are accountable towards the IMP PAS, funders, and society as a whole and that they are responsible for the efficient use of taxpayers' money.

The IMP PAS as a part of the Polish Academy of Sciences is obliged to adhere to the principles of sound, transparent and efficient financial management and cooperate with any authorized audits of their research, whether undertaken by their employers/funders or by ethics committees.

Methods of collection and analysis, the outputs and details of the data are open to internal and external scrutiny.

Action required:

None.

7. Good practice in research

Researchers should at all times adopt safe working practices, in line with national legislation, including taking the necessary precautions for health and safety and for recovery from information technology disasters, e.g. by preparing proper back-up strategies. They should also be familiar with the current

national legal requirements regarding data protection and confidentiality protection requirements, and undertake the necessary steps to fulfil them at all times.

Existing Institutional rules and/or practices:

In the IMP PAS each of newly hired employees are informed about health and safety regulations at their workplaces. There are organized periodic trainings on health and safety conditions, and fire drills. The Scientific Computing Laboratory is responsible for a recovery of information after network failures in the administrative units of the IMP PAS. Moreover, The SCL has also prepared proper back-up strategies for electronic communication (e.g. e-mails) and data protection on the IMP PAS servers and computing clusters.

Action required:

Workshop about data protection and management.

Preparing proper back-up strategies for researchers.

Placing the information about data protections and back-ups strategies on the IMP PAS website.

8. Dissemination, exploitation of results

All researchers should ensure, in compliance with their contractual arrangements, that the results of their research are disseminated and exploited, e.g. communicated, transferred into other research settings or, if appropriate, commercialised. Senior researchers, in particular, are expected to take a lead in ensuring that research is fruitful and that results are either exploited commercially or made accessible to the public (or both) whenever the opportunity arises.

Existing Institutional rules and/or practices:

Results of the IMP PAS researchers are published in international journals, books and presented at conferences and seminars. Researchers participate also in the educational tasks undertaken by the IMP PAS, e.g. lectures for students of Technical University in Poznań and the International Doctoral Studies at the IMP PAS. As the beneficiary of measure 2.2 of the Operational Programme Innovative Economy several our employees participated in years 2013-2015 in training courses organized by the National Centre for Research and Development Science in the project Science Infrastructure Management Support (SIMS). The SIMS project was established to provide Polish science institutions with knowledge, tools and active support required for the effective management of research infrastructure. In April 2015 the IMP PAS has introduced detailed commercialization regulations included in the Intellectual Property Rights Regulations.

The IMP PAS Department in Odolanów is a leader in the scientific consortium with the Polish Oil and Gas Company Warsaw branch Odolanów (the sole producer of liquid helium in Europe) and Wrocław University of Technology. In this project, an attempt was made to enrich the mixture ^4He - ^3He in isotope ^3He (currently almost unavailable on the market which generates a continuous increase in its price).

On the Institute's web page following information are disseminated:

1. research highlights,
2. current and former research projects organized or co-organized by the IMP PAS,
3. research programme and list of publications of each department,
4. information about conferences, symposia and colloquies,
5. announcements about seminars and other educational tasks,
6. if possible (commercial) offer of tests and measurements.

Action required:

Updating the website.

9. Public engagement

Researchers should ensure that their research activities are made known to society at large in such a way that they can be understood by non-specialists, thereby improving the public's understanding of science. Direct engagement with the public will help researchers to better understand public interest in priorities for science and technology and also the public's concerns.

Existing Institutional rules and/or practices:

The IMP PAS is engaged in various educational activities. Researchers of the IMP PAS contribute to public events popularizing science, e.g. the annual Poznań Festival of Arts and Sciences. They also take part in lectures popularizing physics organized by the Polish Physical Society - branch in Poznań. In 2015 researchers from the IMP PAS participated in the event PANorama 2015 POZnań, which presents the activities and the latest scientific achievements of the PAS institutes from the region of Poznań.

The Institute collaborates with Poznan University of Technology and Adam Mickiewicz University in Poznań in organizing general and specialized lectures on physics; physical, specialized and diploma laboratories; MSc workshops.

Since 1985 the Department of the Low Temperature Physics in Odolanów organizes workshop Summer with Helium aimed mainly to capable high school students. The seminars are announced on the Institute's web page, and are widely open for the society.

Action required:

Encouraging scientists to become more involved in annual public events popularizing science, in particular the Poznań Festival of Arts and Sciences, and Researchers' Night in Poznań.

Open lectures promoting research, both in and outside the Institute.

10. Non discrimination

Employers and/or funders of researchers will not discriminate against researchers in any way on the basis of gender, age, ethnic, national or social origin, religion or belief, sexual orientation, language, disability, political opinion, social or economic condition.

Existing Institutional rules and/or practices:

The IMP PAS does not discriminate against researchers in any way on the basis of gender, age, ethnic, national or social origin, religion or belief, sexual orientation, language, disability, political opinion, social or economic condition, etc.

Action required:

None.

11. Evaluation/appraisal system

Employers and/or funders should introduce for all researchers, including senior researchers, evaluation/appraisal systems for assessing their professional performance on a regular basis and in a transparent manner by an independent (and, in the case of senior researchers, preferably international) committee.

Existing Institutional rules and/or practices:

According to the *Act on the Polish Academy of Sciences* the scientific staff in the IMP PAS undergoes a periodic evaluation by the scientific board, which covers the results of their work. Scientific Council constitutes two Evaluation Committees - for professors, and for adjuncts and assistants.

Assistants and adjuncts undergo an evaluation, at least, every two years, and professors undergo evaluation, at least, every four years. The detailed procedure of an evaluation is set in the document *Regulations for an evaluation of the scientific employees at the Institute of Molecular Physics PAS*.

The scientific staff of the Academy have the right to appeal against evaluation results - an appeal shall be lodged with the Vice-President of the Academy, who supervises the work of the relevant division. Unfortunately, the results of the survey show the gap in knowledge about the evaluation process and regulations.

Action required:

Continuation of the regular evaluation in accordance with applicable regulations.

Dissemination of information about the evaluation system and appeals procedure: updating website, mailing.

Recruitment

12. Recruitment

Employers and/or funders should ensure that the entry and admission standards for researchers, particularly at the beginning of their careers, are clearly specified and should also facilitate access for disadvantaged groups or for researchers returning to a research career, including teachers (of any level) returning to a research career.

Employers and/or funders of researchers should adhere to the principles set out in the Code of Conduct for the Recruitment of Researchers when appointing or recruiting researchers.

Existing Institutional rules and/or practices:

Admission standards at the Institute adhere to the national labor law and regulation of the Polish Academy of Sciences. Criteria for admission, for researchers at all career stages, are clearly specified in the Institute's regulations, such as:

- *Regulations on an Employment in Positions of a Professor, an Associate Professor and a Visiting Professor at the Institute of Molecular Physics PAS,*
- *Regulations on an Employment in Positions of a Research Assistant and an Assistant Professor at the Institute of Molecular Physics PAS,*
- *International Doctoral Studies Regulations.*

Action required:

Dissemination of the information about facilitations of returning to scientific career – discussions, promotion measures.

13. Recruitment (Code)

Employers and/or funders should establish recruitment procedures which are open, efficient, transparent, supportive and internationally comparable, as well as tailored to the type of positions advertised. Advertisements should give a broad description of knowledge and competencies required, and should not be so specialised as to discourage suitable applicants. Employers should include a description of the working conditions and entitlements, including career development prospects. Moreover, the time allowed between the advertisement of the vacancy or the call for applications and the deadline for reply should be realistic.

Existing Institutional rules and/or practices:

Job advertisements at the IMP PAS give an extensive description of required knowledge and competencies. The requirements are always in agreement with needs of a position. Information about scientific research



that an applicant will be participating in is provided. What is more, a new, updated version of the Institute's *Staff Regulations* is being prepared.

Action required:

Adding to the job advertisement the information about working conditions and career development prospects.

Finishing the new *Staff Regulations*.

Improving the recruitment procedures in accordance with the Code.

Providing an English version of job advertisements and publishing them on Euraxess website.

14. Selection (Code)

Selection committees should bring together diverse expertise and competences and should have an adequate gender balance and, where appropriate and feasible, include members from different sectors (public and private) and disciplines, including from other countries and with relevant experience to assess the candidate. Whenever possible, a wide range of selection practices should be used, such as external expert assessment and face-to-face interviews. Members of selection panels should be adequately trained.

Existing Institutional rules and/or practices:

All candidates are evaluated on the basis of submitted documents. Required documents give candidates an opportunity to present their research interests, achievements and future plans. Face-to-face interviews are also frequently used, especially when employing doctoral students. Other practices at the IMP PAS include inviting candidates to present a seminar covering their research performance.

Selection committees are diverse, with researchers representing different expertise areas. Particular attention is paid to maintaining a gender balance. For example, despite the fact of a large gender disproportion in the group of senior researchers, the gender balance of the Selection Committee for assistants and adjuncts (for the years 2014-2018) is maintained: currently, among five members elected by the Scientific Council of the IMP PAS is one woman.

Action required:

Promotion of the gender balance at all levels of the Institute.

Developing an ordinance of good practice.

Training of the committee members regarding the elements and criteria for selection of candidates.

The commitment to the implementation of the rules that the Selection Committee for assistants and adjuncts (if possible) must consist of both male and female representatives.



15. Transparency (Code)

Candidates should be informed, prior to the selection, about the recruitment process and the selection criteria, the number of available positions and the career development prospects. They should also be informed after the selection process about the strengths and weaknesses of their applications.

Existing Institutional rules and/or practices:

Advertisements at the IFM PAS give detailed description of a job itself and its requirements. Also, career development prospects are mentioned briefly in an advertisement.

Action required:

Adding to job advertisements the information about the number of available positions.

Making a post-interview feedback a regular practice at the Institute.

Creation and adaptation of an employment policy compatible with the Code.

Uploading to the Institute's website the information about the recruitment process and selection criteria.

16. Judging merit (Code)

The selection process should take into consideration the whole range of experience of the candidates. While focusing on their overall potential as researchers, their creativity and level of independence should also be considered.

This means that merit should be judged qualitatively as well as quantitatively, focusing on outstanding results within a diversified career path and not only on the number of publications. Consequently, the importance of bibliometric indices should be properly balanced within a wider range of evaluation criteria, such as teaching, supervision, teamwork, knowledge transfer, management of research and innovation and public awareness activities. For candidates from an industrial background, particular attention should be paid to any contributions to patents, development or inventions.

Existing Institutional rules and/or practices:

The Institute always tries to select the most appropriate candidate. To do so, all professional accomplishments of a candidate are taken into consideration. Experience in teaching, mentoring, supervising as well as organizational experience, mobility and cooperation with researchers at the international level are also highly valued.

Action required:

Improving an employment policy in accordance with the Code.



17. Variations in the chronological order of CVs (Code)

Career breaks or variations in the chronological order of CVs should not be penalised, but regarded as an evolution of a career, and consequently, as a potentially valuable contribution to the professional development of researchers towards a multidimensional career track. Candidates should therefore be allowed to submit evidence-based CVs, reflecting a representative array of achievements and qualifications appropriate to the post for which application is being made.

Existing Institutional rules and/or practices:

The IMP PAS does not have specific regulations concerning career breaks or chronological order of CVs. However, a wide variety of documents submitted by candidate during a selection process gives a chance to explain any variations in career chronology and present (if any) all achievements completed in that time. Those achievements are carefully analyzed and always taken into account. Unfortunately, the survey results (a lot of *I don't have an opinion* answers) shows a lack of information regarding this questions.

Action required:

Dissemination of the information about the value of multidimensional career track.

18. Recognition of mobility experience (Code)

Any mobility experience, e.g. a stay in another country/region or in another research setting (public or private) or a change from one discipline or sector to another, whether as part of the initial research training or at a later stage of the research career, or virtual mobility experience, should be considered as a valuable contribution to the professional development of a researcher.

Existing Institutional rules and/or practices:

The Institute's researchers are strongly encouraged and supported to experience mobility. All professional trips are highly valued during the regular researchers' performance assessments. Visits of researchers from other institutions are always desirable and appreciated. The IMP PAS always tries to help visitors with organization of their travel, stay, and accommodation.

Action required:

Improving the employment in accordance with the Code.

Promotion of a mobility as a part of scientific career.

Encouraging young scientists (with PhD) to complete research internships (postdoc) outside the IMP PAS.

19. Recognition of qualifications (Code)

Employers and/or funders should provide for appropriate assessment and evaluation of the academic and professional qualifications, including non-formal qualifications, of all researchers, in particular within the context of international and professional mobility. They should inform themselves and gain a full understanding of rules, procedures and standards governing the recognition of such qualifications and, consequently, explore existing national law, conventions and specific rules on the recognition of these qualifications through all available channels.

Existing Institutional rules and/or practices:

*Act on Polish Academy of Sciences obliges the IMP PAS to carry out regular assessments of the research staff. A detailed scheme for assessment is proposed and voted over by the Institute's Scientific Council, and then accepted by the assigned Vice-President of the Polish Academy of Sciences. Other assessment regulations include *Law on Academic Degrees and Title and Degrees and Title in the Arts and Regulation of the Minister of Science and Higher Education on criteria for assessing the achievement of the person applying for postdoctoral appointment.**

The Institute uses good practices while evaluating academic and professional qualifications of researchers.

Action required:

None.

20. Seniority (Code)

The levels of qualifications required should be in line with the needs of the position and not be set as a barrier to entry. Recognition and evaluation of qualifications should focus on judging the achievements of the person rather than his/her circumstances or the reputation of the institution where the qualifications were gained. As professional qualifications may be gained at an early stage of a long career, the pattern of lifelong professional development should also be recognised.

Existing Institutional rules and/or practices:

At the Institute required qualifications are never overly specified. They are always in agreement with needs of a position. During a recruitment process candidates are assessed on the basis of their professional achievements not their reputation or a reputation of the institutions they have had connection with.

Action required:

None.

21. Postdoctoral appointments (Code)

Clear rules and explicit guidelines for the recruitment and appointment of postdoctoral researchers, including the maximum duration and the objectives of such appointments, should be established by the institutions appointing postdoctoral researchers. Such guidelines should take into account time spent in prior postdoctoral appointments at other institutions and take into consideration that the postdoctoral status should be transitional, with the primary purpose of providing additional professional development opportunities for a research career in the context of long-term career prospects.

Existing Institutional rules and/or practices:

The conditions of postdoctoral appointments are regulated by Polish law in documents such as:

- *Act on Polish Academy of Sciences,*
- *Act on Academic Degrees and Academic Title, and on Degrees and Title in Arts,*
- *Regulation of the Minister of Science and Higher Education on criteria for assessing the achievements of the person applying for postdoctoral appointment.*

The IMP PAS strictly follows mentioned documents while appointing postdoctoral researchers.

Action required:

None.

Working conditions and social security

22. Recognition of the profession

All researchers engaged in a research career should be recognized as professionals and be treated accordingly. This should commence at the beginning of their careers, namely at postgraduate level, and should include all levels, regardless of their classification at national level (e.g. employee, postgraduate student, doctoral candidate, postdoctoral fellow, civil servants).

Existing Institutional rules and/or practices:

A status of scientific researchers in the IMP PAS is defined by:

- external – Polish law regulations: *Act on Academic Degrees and Academic Title, and on Degrees and Title in Art, Act of Polish Academy of Science, Polish Academy of Sciences Code of Ethics.*
- internal – the IMP PAS regulations, such as *Statute of the Institute of Molecular Physics Polish Academy of Sciences, International Doctoral Studies Regulations, Remuneration Rules for Employees of the Institute of Molecular Physics.*

Scientific staff is employed in the following posts:

- full professor – 19,
- associate professor – 13,
- assistant professor (adjunct) – 35,
- research assistant – 6,
- scientific technical worker – 4.

There are also 19 doctoral candidates.

All researchers in the IMP PAS, including doctoral candidates, are recognized as professionals and treated accordingly.

Action required:

None.

23. Research environment

Employers and/or funders of researchers should ensure that the most stimulating research or research training environment is created which offers appropriate equipment, facilities and opportunities, including for remote collaboration over research networks, and that the national or sectoral regulations concerning health and safety in research are observed. Funders should ensure that adequate resources are provided in support of the agreed work programme.

Existing Institutional rules and/or practices:

The Institute attaches a great importance to creating a friendly and stimulating research environment, including a remote collaboration over research networks. Also, a large emphasis is put on complying with national or sectoral regulations concerning health and safety of work.

However, in the questionnaire some researchers expressed the opinion that they are not sufficiently provided with the necessary testing equipment and facilities.

Any shortcomings in the supply of equipment and materials are due to the unsatisfactory financial situation. For many years, the research institutes in Poland have been struggling with underfunding; moreover, from year to year the amount of money awarded within basic scientific grants has been decreasing.

The solution to the above situation would be to search for new, promising research subjects and to increase employees' knowledge about the possibilities of acquiring national and international research grants.

Action required:

Finding new research areas.

Early checking of possible funding opportunities, continuing information campaign on grant programs, developing a system of information on open calls for proposals, grants and new scientific networks. Planned tasks: mailing, updating website, promotion of external training, organization of trainings on European grants at the Institute.

Planning applications for future grants, intensify national and international cooperation and networking.

24. Working conditions

Employers and/or funders should ensure that the working conditions for researchers, including for disabled researchers, provide where appropriate the flexibility deemed essential for successful research performance in accordance with existing national legislation and with national or sectoral collective-bargaining agreements. They should aim to provide working conditions which allow both women and men researchers to combine family and work, children and career. Particular attention should be paid, inter alia, to flexible working hours, part-time working, tele-working and sabbatical leave, as well as to the necessary financial and administrative provisions governing such arrangements.

Existing Institutional rules and/or practices:

Working conditions are regulated by two main documents: *The Labour law*, and *Employment Conditions for the Institute of Molecular Physics PAS*.

The IMP PAS building is adapted to suit the requirements of disabled people.

The IMP PAS provides working conditions that allow both women and men researchers to combine family and work, children and professional career.

The following rules are used:

- tele-working,
- flexible working hours,
- part-time working.

Action required:

Amending the regulations concerning tele-working and flexible working hours in *Employment Conditions for the Institute of Molecular Physics PAS*.

25. Stability and permanence of employment

Employers and/or funders should ensure that the performance of researchers is not undermined by instability of employment contracts, and should therefore commit themselves as far as possible to improving the stability of employment conditions for researchers, thus implementing and abiding by the principles and terms laid down in the EU Directive on Fixed-Term Work.

Existing Institutional rules and/or practices:

The IMP PAS offers work contracts in compliance with national regulations (*Act on Academic Degrees and Academic Title, Act on Polish Academy of Sciences.*)

Action required:

None.

26. Funding and salaries

Employers and/or funders of researchers should ensure that researchers enjoy fair and attractive conditions of funding and/or salaries with adequate and equitable social security provisions (including sickness and parental benefits, pension rights and unemployment benefits) in accordance with existing national legislation and with national or sectoral collective bargaining agreements. This must include researchers at all career stages including early-stage researchers, commensurate with their legal status, performance and level of qualifications and/or responsibilities.

Existing Institutional rules and/or practices:

The IMP PAS provides scientists with social security provisions, including sickness and parental benefits, pension rights and unemployment benefits in accordance with existing national legislation (*Labour law and Act on Polish Academy of Science*). The salary system in the IMP PAS is regulated also by internal regulations, such as *Remuneration Rules for Employees of the Institute of Molecular Physics*. However, many researchers expressed in the questionnaire the opinion that they are not enjoying attractive conditions of funding and salaries. The reason is the unsatisfactory financial situation. For many years, the research institutes in Poland have been struggling with underfunding. Moreover, from year to year the amount of money awarded within basic scientific grants has been decreasing.

The way out of that situation would be to search for new, promising research subjects and to increase employees' knowledge about new possibilities of acquiring national and international research grants.

Action required:

Finding new research areas.

Early checking of possible funding opportunities, continuing information campaign on grant programs, developing a system of information on open calls for proposals, grants and new scientific networks. Planned tasks: mailing, updating website, promotion of external training, organization of trainings on European grants at the Institute.

27. Gender balance

Employers and/or funders should aim for a representative gender balance at all levels of staff, including at supervisory and managerial level. This should be achieved on the basis of an equal opportunity policy at recruitment and at the subsequent career stages without, however, taking precedence over quality and competence criteria. To ensure equal treatment, selection and evaluation committees should have an adequate gender balance.

Existing Institutional rules and/or practices:

Polish law regulates this problem (*Labour law*), there is also an internal IMP PAS's document concerning this case – *Information on a Fair Treatment in an Employment*. The problem of gender balance is not sufficiently solved in our Institute. The analysis of gender structure confirms lack of a representative gender balance at almost all levels of staff.

Gender breakdown of IMP PAS employees				
	Women	Men	All	Women in %
Full Professor	1	18	19	5,26%
Associate Professor	2	11	13	15,38%
Adjuncts (Assistant Professor)	13	22	35	37,14%
Assistant	3	3	6	50%
Scientific Technical Worker	1	3	4	25%
Doctoral Students	6	14	20	30%
Total	26	71	97	26,80%

Action required:

Promoting a policy of equal opportunities at recruitment and working conditions for female and male researchers to achieve a better gender balance, without, however, taking a precedence over quality and competence criteria.

Strengthening a gender balance at selection and evaluation committees, as well as supervisory, managerial and decision-making bodies of the IMP PAS.

28. Career development

Employers and/or funders of researchers should draw up, preferably within the framework of their human resources management, a specific career development strategy for researchers at all stages of their career, regardless of their contractual situation, including for researchers on fixed-term contracts. It should include the availability of mentors involved in providing support and guidance for the personal and professional

development of researchers, thus motivating them and contributing to reducing any insecurity in their professional future. All researchers should be made familiar with such provisions and arrangements.

Existing Institutional rules and/or practices:

The Polish law specifies the formal conditions for a career development (scientific degrees gaining). Researchers are encouraged to participate in various forms of career development support activities, such as trainings organized by Foundation for Polish Science, the National Centre for Research and Development, Contact Point for Research Programmes of the EU and others institutions.

Action required:

Distributing the information about available trainings, workshops on career development, posts, and fellowships – mailing, updating website.

Organizing trainings on European grants at the Institute, calls and networks.

29. Value of mobility

Employers and/or funders must recognize the value of geographical, intersectorial, inter- and trans-disciplinary and virtual mobility as well as mobility between the public and private sector as an important means of enhancing scientific knowledge and professional development at any stage of a researcher's career. Consequently, they should build such options into the specific career development strategy and fully value and acknowledge any mobility experience within their career progression/appraisal system.

This also requires that the necessary administrative instruments be put in place to allow the portability of both grants and social security provisions, in accordance with national legislation.

Existing Institutional rules and/or practices:

Mobility is strongly encouraged at the IMP PAS in the context of human resources policy.

Action required:

Taking better account of mobility in terms of career and appraisal, and particularly inter-sectoral and interdisciplinary mobility.

Encouraging researchers to participate in national and international mobility.

Provision of conditions for mobility of foreign researchers in the IMP PAS.

30. Access to career advice

Employers and/or funders should ensure that career advice and job placement assistance, either in the institutions concerned, or through collaboration with other structures, is offered to researchers at all stages of their careers, regardless of their contractual situation.

Existing Institutional rules and/or practices:

The survey has shown that researchers of the IMP PAS lack career counselling. However, at the Institute there is only an informal mechanism of supporting a scientific and other types of career.

Action required:

Counselling services: links redirecting to web portals concerning meetings, twinings and opportunities, e.g. EURAXESS.

31. Intellectual Property Rights

Employers and/or funders should ensure that researchers at all career stages reap the benefits of the exploitation (if any) of their R&D results through legal protection and, in particular, through appropriate protection of Intellectual Property Rights, including copyrights.

Policies and practices should specify what rights belong to researchers and/or, where applicable, to their employers or other parties, including external commercial or industrial organisations, as possibly provided for under specific collaboration agreements or other types of agreement.

Existing Institutional rules and/or practices:

Rules on Intellectual Property Rights at the Institute, along with the existing national and European legislation, are gathered in *Management of Copyright and Related Rights*. As the regulations are relatively fresh, mentioned document could be further disseminated amongst researchers.

Action required:

Dissemination of the recently introduced document *Management of Copyright and Related Rights, Industrial Property Rights and the Principles of Commercialization of the Results of Research and Development at the Institute of Molecular Physics Polish Academy of Sciences* among scientific employees.

32. Co-authorship

Co-authorship should be viewed positively by institutions when evaluating staff, as evidence of a constructive approach to the conduct of research. Employers and/or funders should therefore develop strategies, practices and procedures to provide researchers, including those at the beginning of their research careers, with the necessary framework conditions so that they can enjoy the right to be recognised and listed and/or quoted, in the context of their actual contributions, as co-authors of papers, patents, etc, or to publish their own research results independently from their supervisor(s).

Existing Institutional rules and/or practices:

The Institute positively views co-authorship as evidence of a constructive approach to the conduct of research. Researchers publish their results with authorship based on their actual contribution. Some aspects of co-authorship rules are included in the document *Management of Copyright and Related Rights, Industrial Property Rights and the Principles of Commercialization of the Results of Research and Development at the Institute of Molecular Physics Polish Academy of Sciences*.

Action required:

Drawing attention of senior researchers on the importance and relevance of publications by young workers of their own research results independently from their supervisor.

33. Teaching

Teaching is an essential means for the structuring and dissemination of knowledge and should therefore be considered a valuable option within the researchers' career paths. However, teaching responsibilities should not be excessive and should not prevent researchers, particularly at the beginning of their careers, from carrying out their research activities.

Employers and/or funders should ensure that teaching duties are adequately remunerated and taken into account in the evaluation/appraisal systems, and that time devoted by senior members of staff to the training of early stage researchers should be counted as part of their teaching commitment. Suitable training should be provided for teaching and coaching activities as part of the professional development of researchers.

Existing Institutional rules and/or practices:

Although teaching is a very important part of researchers' duties, teaching responsibilities in the IMP PAS are not excessive and do not prevent researchers, especially those at the beginning of their careers, from carrying out their research activities. Teaching duties are adequately remunerated and included in the assessment system.

Action required:

None.

34. Complains/ appeals

Employers and/or funders of researchers should establish, in compliance with national rules and regulations, appropriate procedures, possibly in the form of an impartial (ombudsman-type) person to deal with complaints/appeals of researchers, including those concerning conflicts between supervisor(s) and early-stage researchers. Such procedures should provide all research staff with confidential and informal

assistance in resolving work-related conflicts, disputes and grievances, with the aim of promoting fair and equitable treatment within the institution and improving the overall quality of the working environment.

Existing Institutional rules and/or practices:

Unfortunately, the results of the survey show that currently in the IMP PAS there are no sufficient procedures to deal with complaints/appeals of researchers. At the moment, appeals are solved individually by the Director or a supervisor.

Action required:

Establishing a position of Ombudsperson (or an equivalent mechanism) to deal with complaints/appeals of researchers, including those concerning conflicts between supervisor(s) and early-stage researchers.

35. Participation in decision-making bodies

Employers and/or funders of researchers should recognize it as wholly legitimate, and indeed desirable, that researchers be represented in the relevant information, consultation and decision-making bodies of the institutions for which they work, so as to protect and promote their individual and collective interests as professionals and to actively contribute to the workings of the institution.

Existing Institutional rules and/or practices:

According to *The Statute of the Institute of Molecular Physics Polish Academy of Sciences*, the Institute has two main decision-making bodies: the Director and the Scientific Council. The Scientific Council consists of the 44 representatives of various groups: 4 members of the Polish Academy of Sciences; 20 independent researchers employed at the institute full-time; 14 scientists and interdisciplinary specialists, not employed full-time at the Institute; 1 doctoral student, the Director and the Scientific Director of the IMP PAS.

The results of the survey show the gap in knowledge about possibilities of a participation in decision-making bodies.

Action required:

Dissemination of the information about possibilities in participation in decision-making bodies.

Training

36. Relation with supervisors

Researchers in their training phase should establish a structured and regular relationship with their supervisor(s) and faculty/departmental representative(s) so as to take full advantage of their relationship with them.

This includes keeping records of all work progress and research findings, obtaining feedback by means of reports and seminars, applying such feedback and working in accordance with agreed schedules, milestones, deliverables and/or research outputs.

Existing Institutional rules and/or practices:

At the IMP PAS early-stage researchers and their supervisors establish a relationship based on a job specific and personal preferences. However, the role of a supervisor is briefly described in the *International Doctoral Studies Regulations*. Despite reaching individual scientific milestones decided with a supervisor, all doctoral students are obligated to prepare, at least, one seminar per year. Moreover, each semester doctoral students' performance and progress are evaluated and commented on by the Head of Doctoral Studies, on the basis of the *Doctoral student's evaluation report* prepared by students' supervisors.

Action required:

Encouraging early-stage researchers to keep and systemize records of all work progress and research findings.

Creating a list of milestones – proposed and discusses by a researcher and supervisor.

37. Supervision and managerial duties

Senior researchers should devote particular attention to their multi-faceted role as supervisors, mentors, career advisors, leaders, project coordinators, managers or science communicators. They should perform these tasks to the highest professional standards. With regard to their role as supervisors or mentors of researchers, senior researchers should build up a constructive and positive relationship with the early-stage researchers, in order to set the conditions for efficient transfer of knowledge and for the further successful development of the researchers' careers.

Existing Institutional rules and/or practices:

Senior researchers at the Institute are well aware of their mentor position. Thus, they are eager to transfer their knowledge and scientific experience to early-stage researchers by creating a relationship and an environment that facilitates learning and teaching.

Action required:

None.

38. Continuing Professional Development

Researchers at all career stages should seek to continually improve themselves by regularly updating and expanding their skills and competencies. This may be achieved by a variety of means including, but not restricted to, formal training, workshops, conferences and e-learning.

Existing Institutional rules and/or practices:

Our Institute highly supports a self-development. Researchers are encouraged to participate in national and international conferences, seminars and workshops. Categories concerning professional development (seminars, teaching experience, creation and development research environment, popularization and educational activities, co-operation, mobility experience) are key factors during the researchers' assessment held annually in the Institute.

Action required:

None.

39. Access to research training and continuous development

Employers and/or funders should ensure that all researchers at any stage of their career, regardless of their contractual situation, are given the opportunity for professional development and for improving their employability through access to measures for the continuing development of skills and competencies. Such measures should be regularly assessed for their accessibility, take up and effectiveness in improving competencies, skills and employability.

Existing Institutional rules and/or practices:

The Institute offers an equal development opportunities to all researchers, regardless of their professional stage and situation.

Action required:

Creating self-development opportunities – seminars and lectures.

40. Supervision

Employers and/or funders should ensure that a person is clearly identified to whom early-stage researchers can refer for the performance of their professional duties, and should inform the researchers accordingly. Such arrangements should clearly define that the proposed supervisors are sufficiently expert in supervising research, have the time, knowledge, experience, expertise and commitment to be able to offer the research trainee appropriate support and provide for the necessary progress and review procedures, as well as the necessary feedback mechanisms.



Existing Institutional rules and/or practices:

Early-stage researchers have an advisor in person of the Head of the Doctoral Studies. For the performance of their duties doctoral students and postdoctoral researchers can refer to their supervisors. Moreover, they are also encouraged to approach the Heads of their Department and/or Division, whenever need occurs.

Action required:

None.

V. Action plan

The carried analysis defined problematic areas of the Institute's HR management. The **Action plan** presents planned implementations to be introduced in following years.

C&C principle	Planned Action	Who	When
2. Ethical principles	Uploading <i>The Code of Conduct for Scientific Employee</i> to the Institute's website.	Scientific Computing Laboratory	May 2016
5. Contractual and legal obligations	Organizing meetings with representatives of the National Science Centre and the National Centre for Research and Development and other funders institutions representatives.	Director Scientific and Organizational Department	Since 2016 whenever possible
	Encouraging researchers to share knowledge from meetings, seminars, and workshops organized by the EU Framework Programmers Regional Contact Point in Poznań.		Start in May 2016 and permanent
	Dissemination (by e-mail) of the information about intellectual property rights and regulations referring to training and working conditions		Start in May 2016 and permanent
7. Good practice in research	Preparing proper back-up strategies for researchers.	Scientific Computing Laboratory Scientific and Organizational Department	December 2016
	Placing the information about data protections and back-ups strategy on the IMP PAS website.		January 2017 and in case of changes
	Workshop about data protection and management.		Since 2017 every two years

C&C principle	Planned Action	Who	When
8. Dissemination, exploitation of results	Updating the website.	Scientific Computing Laboratory	Accordingly to <i>Regulations on uploading the Institute of Molecular Physic's website – Annex no. 1.</i>
9. Public engagement	Encouraging scientists to become more involved in annual public events popularizing science, in particular the Poznań Festival of Arts and Sciences, and Researchers' Night in Poznań.	Vice-Director of Scientific Affairs Scientific and Organizational Department	Start in May 2016 and permanent
	Open lectures promoting research, both in and outside the Institute.		
11. Evaluation/appraisal systems	Continuation of the regular evaluation in accordance with applicable regulations.	Scientific Council Evaluation Committees	According to the legal regulations
	Dissemination of information about the evaluation system and appeals procedure: updating website, mailing.	Scientific and Organizational Department	Start in 2016 and permanent
12. Recruitment	Dissemination of the information about facilitations of returning to scientific career – discussions, promotion measures.	Director's Office Heads of Scientific Departments	Start in November 2016 and permanent
13. Recruitment (Code)	Adding to the job advertisement the information about working conditions and career development prospects.	Director Director's Office HR Office Legal team	March 2017
	Providing an English version of the job advertisements and publishing them on Euraxess website.		March 2017
	Finishing the new <i>Staff Regulations</i> .		March 2018
	Improving the recruitment procedures in accordance with the Code.		November 2019

C&C principle	Planned Action	Who	When
14. Selection (Code)	Promotion of the gender balance at all levels of the Institute.	Director's Office Scientific and Organizational Department	Start in 2016 and permanent
	Training of the committee members regarding the elements and criteria for selection of candidates.		March 2017 June 2019 (during and after new Scientific Council selection)
	Commitment to the implementation of the rules that the Selection Committee for assistants and adjuncts (if possible) must consist of both male and female representatives.	Scientific Council	June 2019 (during and after new Scientific Council selection)
	Developing an ordinance of good practice.	Director's Office Scientific Council	Start in 2016 and permanent
15. Transparency (Code)	Adding to job advertisements the information about number of available positions.	Director's Office HR Office	March 2017
	Uploading to the Institute's website the information about the recruitment process and selection criteria.	Scientific Computing Laboratory	November 2017
	Making a post-interview feedback a regular practice at the Institute.	Evaluation Committees	November 2018

C&C principle	Planned Action	Who	When
	Creation and adaptation of an employment policy compatible with the Code.	Director's Office Scientific and Organizational Department Scientific Council Legal team	November 2019
16. Judging merit (Code)	Improving an employment policy in accordance with the Code.	Director's Office Scientific and Organizational Department Scientific Council Legal team	November 2019
17. Variations in the chronological order of CVs (Code)	Dissemination of the information about the value of multidimensional career track	Heads of Scientific Departments Organizational Department Scientific Council	Start in 2016 and permanent
18. Recognition of mobility experience (Code)	Promotion of the mobility as a part of scientific career.	Director's Office Scientific and Organizational Department	Start in 2016 and permanent
	Encouraging young scientists (with PhD) to complete research internships (postdoc) outside the IMP PAS.	Scientific Council Heads of Scientific Departments	Start in 2016 and permanent
	Improving the employment in accordance with the Code.	Director's Office Scientific and Organizational Department Scientific Council Legal team	November 2019
23. Research environment	Finding new research areas.	Director's Office Vice-Director of Scientific Affairs Heads of Scientific Divisions	Start in 2016 and permanent

C&C principle	Planned Action	Who	When
	<p>Early checking of possible funding opportunities, continuing information campaign on grant programs, developing a system of information on open calls for proposals, grants and new scientific networks.</p> <p>Planned tasks: mailing, updating website, promoting external training, organization of trainings on European grants at the Institute.</p>	<p>Scientific and Organizational Department</p>	<p>Permanently – starting 2016</p>
	<p>Planning applications for future grants, intensifying national and international cooperation and networking.</p>	<p>Director's Office Heads of Scientific Departments</p>	<p>Permanently – starting 2016</p>
<p>24. Working conditions</p>	<p>Amending the regulations concerning tele-working and flexible working hours in the <i>Employment Conditions for the Institute of Molecular Physics PAS</i></p>	<p>Director Legal team</p>	<p>Creating initial project: December 2017 Implementation: December 2018</p>
<p>26. Funding and salaries</p>	<p>Finding new research areas.</p>	<p>Director's Office Scientific and Organizational Department Heads of Scientific Divisions</p>	<p>Permanently – starting 2016</p>

C&C principle	Planned Action	Who	When
	Early checking of possible funding opportunities, continuing information campaign on grant programs, developing a system of information on open calls for proposals, grants and new scientific networks. Planned tasks: mailing, updating website, promoting external training, organization of trainings on European grants at the Institute.	Scientific and Organizational Department	Permanently – starting 2016
27. Gender balance	Promoting a policy of equal opportunities at recruitment, and working conditions for female and male researchers to achieve a better gender balance, without, however, taking a precedence over quality and competence criteria.	Director's Office Scientific Council Scientific and Organizational Department Heads of Scientific Divisions	Permanently – starting 2016 especially before and during the selections to the supervisory, managerial and decision-making bodies
	Strengthening a gender balance at selection and evaluation committees, as well as supervisory, managerial and decision-making bodies of the IMP PAS.		
28. Career development	Distributing the information about available trainings, workshops on career development, posts, and fellowships – mailing, updating website.	Scientific and Organizational Department HR Office	Permanently since 2016
	Organizing trainings on European grants at the Institute, calls and networks.	Scientific and Organizational Department	April 2018

C&C principle	Planned Action	Who	When
29. Value of mobility	Taking better account of mobility in terms of career and appraisal, and particularly inter-sectoral and interdisciplinary mobility.	Director Vice-Director of Scientific Affairs	Permanently – starting in 2016
	Encouraging researchers to participate in national and international mobility.		
	Provision of conditions for mobility of foreign researchers in the IMP PAS.		
30. Access to career advice	Counselling services: links redirecting to web portals concerning meetings, twinnings and opportunities, e. g. EURAXESS.	Scientific and Organizational Department Heads of Departments	Permanently – starting in 2016
31. Intellectual Property Rights	Dissemination of the recently introduced document <i>Management of Copyright and Related Rights, Industrial Property Rights and the Principles of Commercialization of the Results of Research and Development at the Institute of Molecular Physics Polish Academy of Sciences</i> among scientific employees.	Scientific and Organizational Department	Permanently – starting in 2016
32. Co-authorship	Drawing attention of senior researchers on the importance and relevance of publications by young workers their own research results independently from their supervisor.	Vice-Director of Scientific Affairs Heads of Scientific Departments	Permanently – starting in 2016
34. Complains/appeals	Establishing a position of Ombudsperson (or an equivalent mechanism) to deal with complaints/appeals of researchers, including those concerning conflicts between supervisor(s) and early-stage researchers.	Director Vice-Director of Scientific Affairs	November 2017

C&C principle	Planned Action	Who	When
35. Participation in decision-making bodies	Dissemination of the information about possibilities of participation in decision-making bodies.	Vice-Director of Scientific Affairs	Permanently – starting in 2016
36. Relation with supervisors	Encouraging early-stage researchers to keep and systemize records of all work progress and research findings.	Head of the Doctoral Studies	Permanently – starting in 2016
	Creating a list of milestones – proposed and discusses by a researcher and supervisor.		January 2017
39. Access to research training and continuous development	Creating self-development opportunities – seminars and lectures.	Scientific and Organizational Department	Regularly – starting October 2016



VI. Summary

VI.1. HR mission and vision

The implementation of the four year **Action plan** outlined in this document are an ambitious set of initiatives that will require full commitment from all stakeholders in order to achieve success. Taken together however, they represent a wonderful opportunity for the IMP PAS to significantly advance its HR practice to realize its vision of individual and organizational excellence. We believe that our Human Resources Strategy for Researchers will help the IMP PAS to:

- adapt the HR policy of our Institute to the general European standards specified in the “Charter & Code”;
- offer a supportive and friendly working environment that promotes equal opportunities, the highest ethical standards and respect for work life balance;
- promote and enhance recruitment policies to attract top talent and train the next generation of scientists;
- situate IMP PAS in an optimal position to compete in European funding calls where a commitment to European standards and practices in HR is a factor in evaluation.

VI.2. Implementation

Some of the individual projects which have been identified are already in the process of development. The IMP PAS as Beneficiary of the European Union "*Operational Programme Innovative Economy*" (OPIE) has participated in a system project implemented under *the Operational Programmes Human Capital – Support of management of the research infrastructure of beneficiaries Measures 2.1 and 2.2 of OPIE* (the SIMS project). The SIMS project has been addressed to the most innovative Polish institutions of higher education and institutes conducting scientific research. During the years 2014-2015 several employees (scientists and administrative personnel) of the IMP PAS has joined internships and training (covered wide topics e.g. management of human resources in a research organization, protection of research results) offered to Beneficiaries under the SIMS project. In addition, the advisory services conducted by the Deloitte Advisory Sp. z o.o. in 2015 have been concerned on particular issues covering the system inconsistencies in research units, improvement of processes and regulations, establishment of internal platforms of communication between researchers and members of the administrative personnel. According to the results of the audit the website of the IMP PAS have been redesigned. In particular, on the internal webpage's the key documents and regulations have been placed, the Director of the IMP PAS has developed and implemented a system of publication of achievements on the Web. Although these changes have improved transparency and information policy of the institute, the results of the survey (a large number of responses *I have no opinion*) show that there is still a lack of information in some areas regarding



“Charter & Code”. That's why a lot of attention in the **Action plan** was put on the detailed information to researchers in these fields.

The implementation of the “Charter & Code” in the IMP PAS will concentrate on three key areas

I. Information

II. Regulation

III. Skills and promotion

Each of the above aspects require a set of specific action to achieve a new high quality HR management in the IMP PAS:

I. Information

1. Placing/updating on the IMP PAS web page:

- the *Code of Conduct for Scientific Employee*;
- the information about data protections and back-ups strategy;
- the information about recruitment process and selection criteria;
- the information about the evaluation system and appeals procedure;
- counselling services: links redirecting to web portals concerning meetings, twinings and opportunities, e.g. EURAXESS;
- the information about the recently introduced document *Management of Copyright and Related Rights, Industrial Property Rights and the Principles of Commercialization of the Results of Research and Development at the IMP PAS* among scientific employees.

2. Dissemination by e-mail:

- the information about intellectual property rights and regulations referring to training and working conditions;
- the information about open lectures promoting research, both in and outside the Institute;
- the information about the evaluation system and appeals procedure;
- the information about developing an ordinance of good practice;
- the information about the value of multidimensional career track;
- the information about available trainings, workshops on career development, posts, and fellowships;
- the information about the recently introduced document *Management of Copyright and Related Rights, Industrial Property Rights and the Principles of Commercialization of the Results of Research and Development at the IMP PAS* among scientific employees;
- informing researchers about the importance of independent publications when applying for grants;
- the information about possibilities of participation in decision-making bodies;



- the information promoting external training & organization of trainings on European grants at the Institute.

II. Regulation

1. Create more stable career advice mechanism.
2. Improve an employment in accordance with the Code.
3. Finish the new *Staff Regulations*.
4. Add to the job advertisement the information about working conditions and career development prospects.
5. Provide an English version of the job advertisements and publish them on Euraxess website.
6. Add to the job advertisements the information about a number of available positions.
7. Make a post-interview feedback a regular practice at the Institute.
8. Amend the regulations concerning the tele-working and flexible working hours in the Employment Conditions for the IMP PAS.
9. Improve the gender policy by:
 - the commitment to the implementation of the rules that the Selection Committee for assistants and adjuncts (if possible) must consist of both male and female representatives;
 - strengthening a gender balance at selection and evaluation committees, as well as supervisory, managerial and decision-making bodies of the IMP PAS;
 - promoting a policy of equal opportunities at recruitment, and working conditions for female and male researchers to achieve a better gender balance, without, however, taking a precedence over quality and competence criteria.
10. Establish a position of Ombudsperson (or an equivalent mechanism) to deal with complaints/appeals of researchers, including those concerning conflicts between supervisor(s) and early-stage researchers.
11. Provision of conditions for mobility of foreign researchers in the IMP PAS.
12. Take better account of mobility in terms of career and appraisal, and particularly intersectoral and interdisciplinary mobility.
13. Proper back-up strategies for researchers.

III. Skills and promotion

1. Organization:
 - meetings with representatives of the National Science Centre and the National Centre for Research and Development and other funders institutions representatives;
 - workshops about data protection and management;
 - trainings of the committee members regarding the elements and criteria for selection of candidates;



- trainings on European grants at the Institute, calls and networks;
- creating self-development opportunities – seminars and lectures;
- continuation of regular evaluation in accordance with applicable regulations;
- creating a list of milestones – proposed and discusses by a researcher and supervisor.

2. Encourage researchers to:

- share knowledge from meetings, seminars, and workshops organized by the EU Framework Programmers Regional Contact Point in Poznań;
- become more involved in annual public events popularizing science, in particular the Poznań Festival of Arts and Sciences, and the Researchers' Night in Poznań;
- complete research internships (postdoc) outside IMP PAS – young scientists (with PhD);
- find new research areas;
- early check of possible funding opportunities, continue information campaign on grant programs, develop a system of information on open calls for proposals, grants and new scientific networks;
- plan applications for future grants, intensifying national and international cooperation and networking;
- participate in national and international mobility;
- search for their own research topics and to publish their own research results independently from their supervisors (recommended for young scientists);
- keep and systemize records of all work progress and research findings – early-stage researchers;
- promote of mobility as a part of scientific career.

VI.3. Responsibility

From organizational point several groups/units have been involved for the implementation of the “Charter & Code” in the IMP PAS:

1. Director
2. Vice-Director of Scientific Affairs
3. Scientific Council
4. Evaluation Committees
5. Heads of Scientific Departments
6. Heads of Scientific Divisions
7. Head of the Doctoral Studies
8. Director's Office
9. Scientific and Organizational Department
10. HR Office



11. Legal team
12. Scientific Computing Laboratory

The whole process of implementation of the **Action plan** will be monitored through the members of the Working Group in connection/cooperation with the members of the responsible unit/group under the supervision of the Institute's Director Board. There are planned regular meetings (approximately every six months) to evaluate the level of implementation of the whole "Strategy" and to discuss the **Action plan** for the following period.

We intend to repeat the questionnaire among research staff approximately three months before the self-assessment and the external evaluation (after 21 and 45 months, respectively). Analysis of the results of the questionnaire will help us to measure the progress in implementation of the "Charter & Code" in the IMP PAS.

VII. Acceptance

The Institute of Molecular Physics Polish Academy of Sciences represented by Director Professor Bogdan Idzikowski accepts the Human Resources Strategy for Researchers.

Poznań, 18 July 2016.

Z-ca Dyrektora ds. Naukowych
Instytutu Fizyki Molekularnej PAN
R. Swietlik
prof. dr hab. Roman Swietlik