

Gender Equality Plan

for the Institute of Physical Chemistry,
Polish Academy of Sciences

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Abbreviations used in the text

GEP – Gender equality plan

IChF – the Institute of Physical Chemistry, Polish Academy of Sciences

1) INTRODUCTION

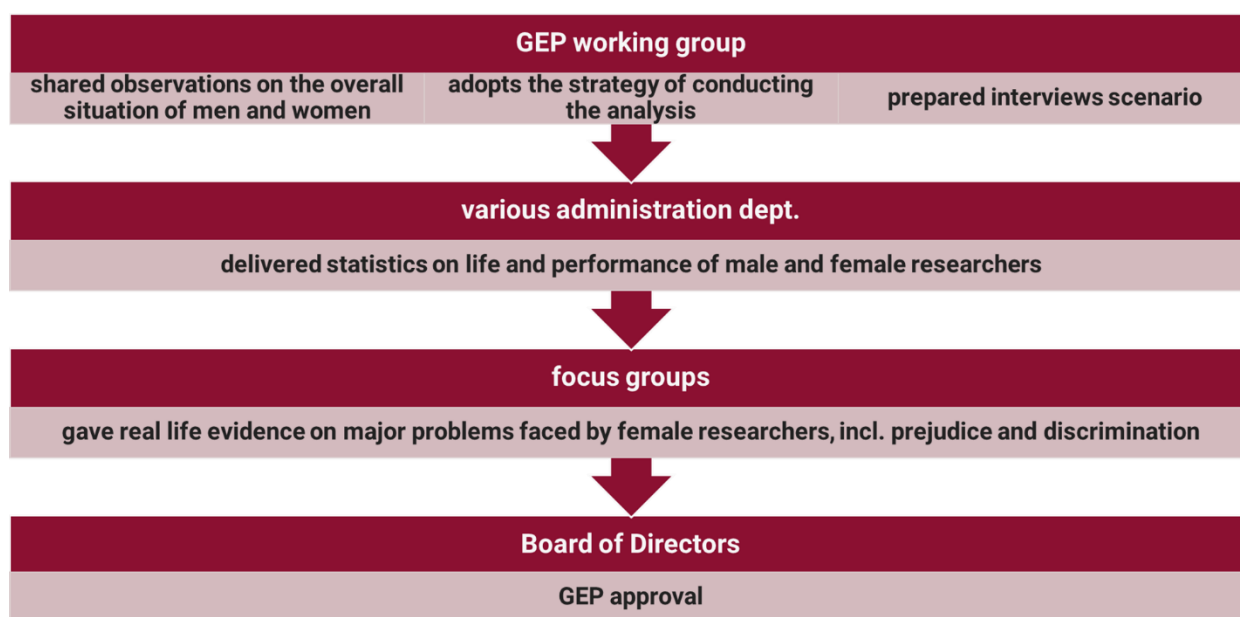
The Institute of Physical Chemistry, Polish Academy of Sciences, presents its first Gender equality plan. **The document aims to evidence the gender-related biases, practices and behaviours that disadvantage female researchers in their careers.** Simultaneously, **we propose the roadmap of tackling systemic problems and eliminating other barriers that deteriorate the working conditions and hamper advancement opportunities for females.**

The plan covers three consecutive years, i.e. 2022 – 2024.

The Gender equality plan was a collaborative work, inclusive for female researchers and involving permanent intermediating and management bodies (such as the Commissionaire for Researchers' Rights, the chairwoman of the working group for the implementation of the "HR Excellence in Research", the Self-government of PhD students and the Board of Directors).

The overall responsibility for the plan holds the Department of Large European Projects & Industry Collaboration and the GEP working group. The GEP working group consisted of female researchers at various career stages (R1 – R4) and administration representatives (the Departments responsible for grants & large European projects). The HR Department, the Grants Department and the Payroll Departments delivered the statistics to track gender-related biases in different processes of science and personnel management at IChF. We have also invited numerous actors to contribute to the works by joining the focus groups – namely the Self-government of PhD students, representatives of PhD candidates, junior and senior researchers with PhD and research group leaders.

The gathered material evidenced that female researchers experience a stereotypical approach and suffer from the manifestation of often unconscious behaviours that place them in a worse position than their male colleagues. Moreover, analysis of practices and policies in place confirmed that some of them follow the typical career of a male researcher and reward for executing tasks entrusted to men. As a result, the female researchers at IChF may not be able to benefit equally from existing opportunities for academic development.



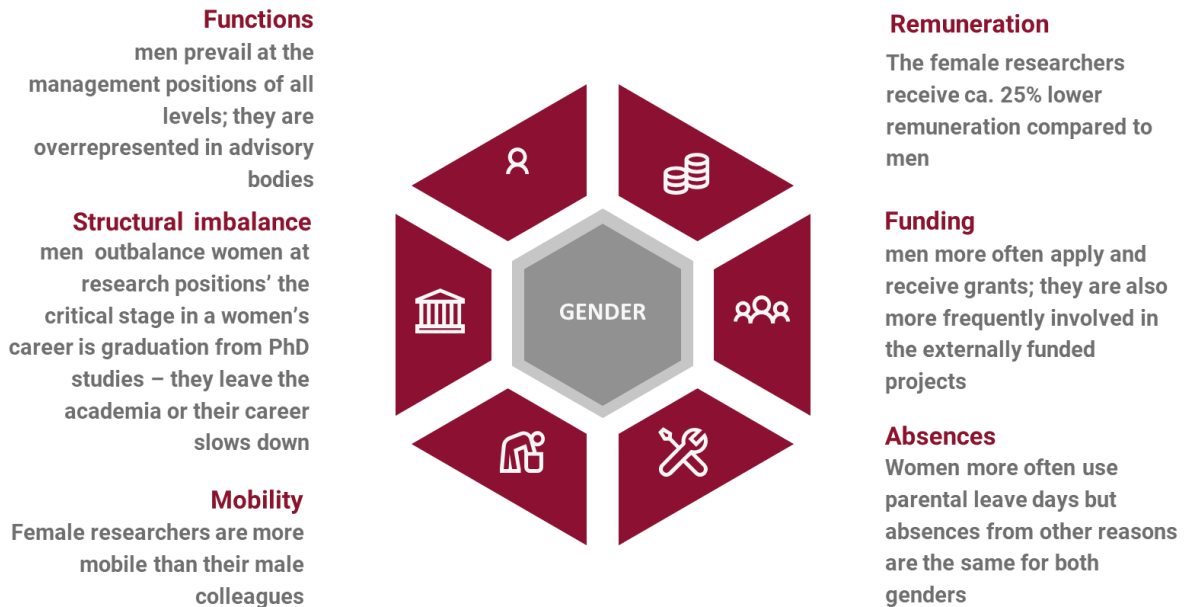
The overall process of GEP preparation

This led us to draft the true picture of the life and performance of female researchers at IChF and the problems they face in their careers that differ from the problems of their male colleagues. Consequently, we have prepared an Action Plan to remove prejudice and barriers that block development and reduce equal opportunities for men and women at IChF. Among the recommended actions is the appointment of the new working group responsible for the Action Plan implementation composed of representatives of both genders since we believe that gender equality will the whole IChF community.

2) ANALYSIS OF NUMERICAL DATA

1.1) Results in brief

The most significant findings of numerical analysis are presented in the picture below:



Major conclusions from numeric data analysis

The study of numerical data has shown that gender-related issues should be placed at the centre of IChF policies and become a significant concern of IChF society and its top management, in particular.

Gender inequality is noticeable in many areas of IChF activity, such as recruitment, career advancement, a remunerating system, promotion, access to grant funding, inclusion in advisory bodies. It all causes that career and advancement paths for female researchers at IChF are different than males.

Female researchers face barriers and experience obstacles that remain unnoticed by the rest of IChF society. Additionally, our current policies and practices fail to give proper significance to female careers. As a result, female researchers may not benefit equally from existing opportunities for academic development and more often drop out from academic careers, or their career slows down.

1.2) Analysis of partial data

Employment structure

- **IChF employees in general:**

In 2020, there were 335 employees at the Institute of Physical Chemistry, the Polish Academy of Sciences (IChF), compared to 344 in 2019. The quantity of male employees exceeds the number of female employees at all positions, excluding administration. Among research positions, the ratio of each gender is relatively stable (ca. 62% males vs 38% of females).

	2019		2020		
	females	males	females	males	
researchers	73	115	70	113	
full professors	2	10	2	11	relative imbalance
associate professors	2	16	2	16	
adjuncts	18	40	23	45	
assistants	51	49	43	41	relative balance
research & technical workers	25	38	26	40	
engineering & technical workers	11	21	8	15	
administrative employees & others	43	18	44	19	
TOTAL	152	192	148	187	

IChF employees broken into genders

The quantity advantage of males over females is the largest at the top research positions, such as an associate professor and a full professor. While there is a relative balance of male and female assistants (PhD candidate level), the disproportion increases as the career progresses.

The statistics indicate that **IChF lacks talented female researchers with PhD**. The number of male researchers with PhD offered a position is higher than women. **The diminishing number of females as the career progress may show that the paths for promotion and scientific careers are not the same for women and men.**

- **PhD students:**

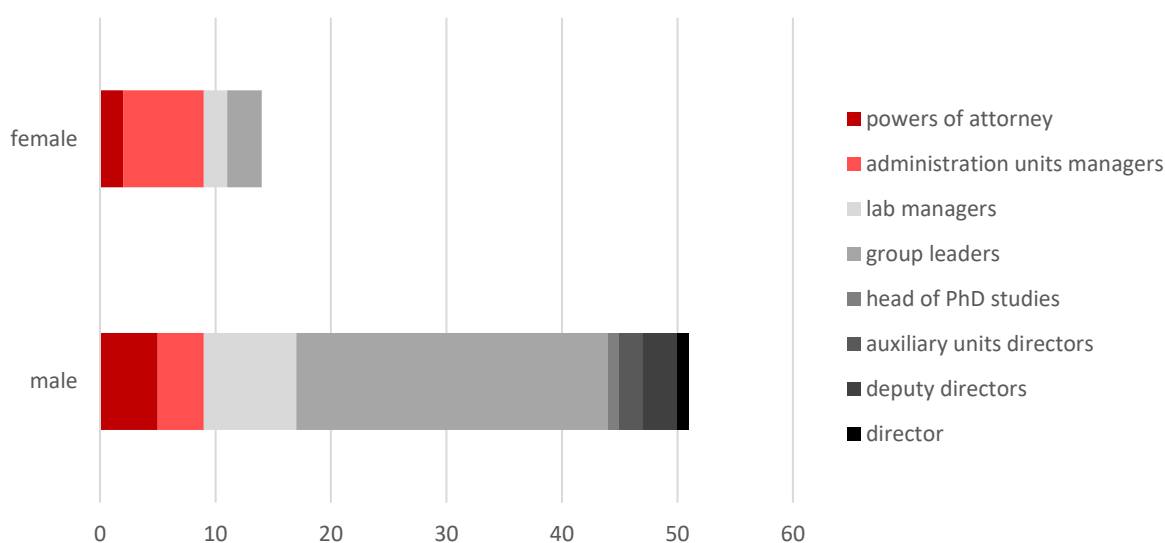
IChF has two types of PhD students – students employed to carry out the externally funded research project and regular PhD students, not being employees of IChF. This group of researchers is properly gender-balanced. We note a slight advantage in female researchers compared to males (58% to 42%).

This clearly shows that a critical stage in a women’s career is graduation from PhD studies. Women more often choose to stay outside of the academia or slow down their career.

- **The management positions:**

Gender imbalance persists in managerial positions. There is no female representative among the board of directors and directors of IChF auxiliary units, such as Chemipan R&D laboratories or the International Centre for Translational Eye Research. The women being heads of research groups and laboratories make up 12%.

Considering all managerial positions, women take up 22% of them while accounting for 44% of the IChF employees. **It proves that systemic factors somehow hamper the careers of female employees at IChF at all types of positions.** The research ecosystem at IChF could benefit from intelligent, inclusive policies allowing various researchers to develop and reach top management positions.



Managerial positions broken into genders

- **Advisory bodies:**

The main advisory body of IChF is the Research Council, composed of 43 researchers from IChF and outside the organisation, full professors or assistant professors. Only 12% of the Research Council members are females. That constitutes a significant imbalance and may result in managerial decisions not reflecting the different points of view and necessary gender sensitivity.

The course of the employment

- **Remunerating:**

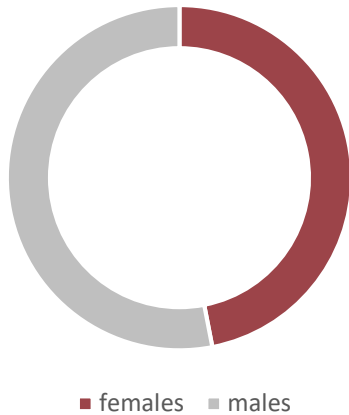
At IChF, a part of researchers remuneration is project-based. For this reason, the level of remuneration to a high extent depends on the researcher's success in external funding applications.

At IChF, fewer female researchers submit grant proposals than male researchers, and their success rate is lower (see a section "*Grant proposals submission*" for details). As a result, the average salary of a female researcher accounts for 75% of her male colleague. This disproportion deteriorates as the career advances – ranging from 80% at junior research positions to 71% at senior ones.

According to the Polish generally binding legal provisions and our local law, all employees have equal rights to perform the same duties and receive equal pay. However, **the actual differences in remuneration between men and women show that the IChF remunerating rules fail to address the**

needs of female researchers. IChF targets grant funding in its remunerating policy, simultaneously putting aside a wide variety of tasks. Those duties include many tasks stereotypically entrusted to women, who are not rewarded for performing them.

- **Mobility (training and travel):**



Travel days broken into genders

IChF has several programmes encouraging researchers to stay mobile at different career stages, offering allowance, funding travel and accommodation. We also take advantage of the external funding supporting mobility, such as ERASMUS+ and participate in various collaborative projects requiring travel. As a result, IChF employees travel a lot. The prevailing cause of the trips is attending a conference, a workshop, a summer school, visiting a partner’s laboratory to learn or work on the joint project, or giving a lecture or seminar.

There is no difference between the number of travel days and the length of visits between genders (ca. 12 days). However, considering the headcount, female researchers travel more eagerly¹. **It proves that IChF proposes mobility schemes supporting researchers and, in particular, underrepresented groups.**

- **Absences and parental leaves:**

The gender only slightly differentiates the number of work absent days due to holidays or sick leaves. Each female employee took almost 27 days of holidays a year (vs 29 in the case of men). The number of yearly women sick leaves days equals 6 and 2 days in the case of men. During the pandemic, the sick leave days dropped slightly for both genders. It means that introducing hybrid and remote work options helped minimise the risk of SARS-CoV2 infection, which also contributed to better handling work and care over more vulnerable family members.

Compared to men, women more often take parental leaves. 2020, 16 women and only 1 men took this kind of leave (2019: 20 women vs 5 men). This shows a place for improvement in terms of equal child care.

- **Leaving the organisation:**

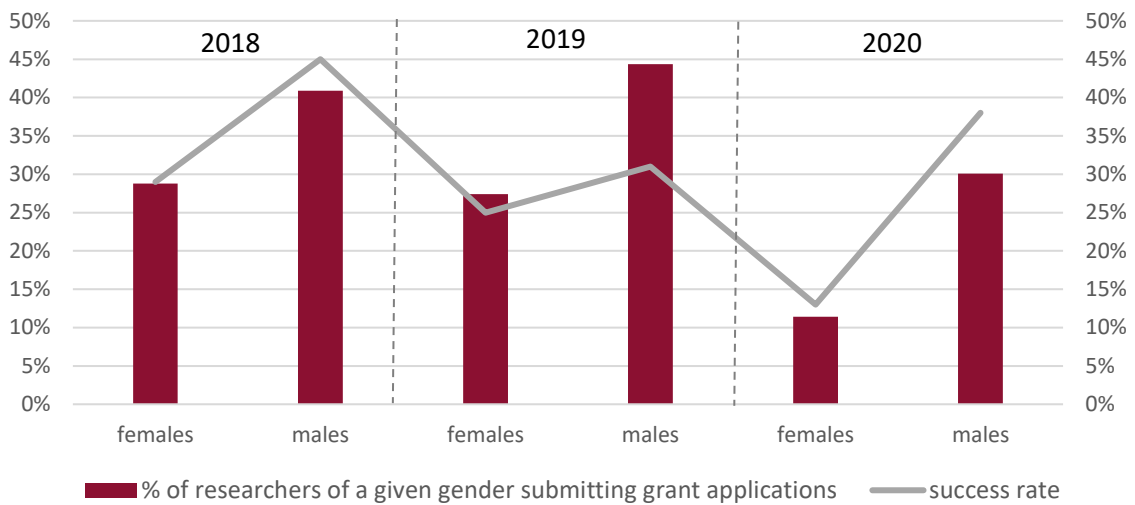
The institute does not register a high turnover of employees (i.e. preliminary termination of a contract concluded for a definite period or termination of a contract concluded for a definite period). 2020, 28 female and 23 male employees left the organisation (2019: 14 females vs 26 males). There is no regular pattern for dropouts, and the differences between genders in these terms are not apparent.

¹ Ca. 28% of researchers are women while travel days of female researchers account to 47%.

- **Grant proposals submissions:**

Notably, fewer female researchers submit grant proposals than male researchers. This difference between the researchers of different gender has increased over the years. Men also received grants more often. **The pandemic affected both genders in terms of the number of submitted proposals. However, it seems that it had a broader effect on women.** The men prepared fewer applications during the pandemic, but their success rate increased. In the case of the female researchers, the success rate dropped as well.

Other statistics show that participation of male and female researchers in the externally funded projects are similar. It leaves us with the conclusion that **female researchers receive less remuneration for their work on the projects.**



Grant proposals and the success rate

This indicates that some actions are required to find reasons for this drop in female grant applications and develop a gender-sensitive supporting system to facilitate all IChF employees.

3) ANALYSIS OF QUALITATIVE DATA

2.1) Quantitative results in brief

The quantitative analysis identified the following forms of gender-related discrimination or systemic factors underlying discriminatory behaviours at IChF:



Gender stereotypes exist at IChF

They cause that female researchers receive less ambitious tasks, are entrusted the care of junior staff and administrative work. They also get fewer opportunities and are not preferred for functions.



Possibly biased recruitment committees

For some senior researchers age of the candidate or their origin are essential factors that may influence their preferences.



Unsatisfactory visibility of women in science

It affects insufficient ratio of female candidates for research positions. Particularly, the female researchers are underrepresented at senior research positions and managing positions.



No programme supporting female researchers

IChF lacks a support system for female researchers encouraging them to come to IChF, progress, be promoted and have the same chances as males.

Major conclusions from quantitative data analysis

The majority of interviewed persons confirmed the existence of gender-related stereotypes at IChF. They usually manifest in a “soft” form – mainly jokes or occasional unwanted remarks on appearance or gender roles. However, this is a very top of the mountain since such stereotypes underlie gender-related discriminatory behaviours (e.g. ignoring females while solving technical dilemmas or talking about research apparatus, attributing administrative tasks or entrusting the care of junior researchers to female researchers). Usually, the regulations on remuneration do not acknowledge the execution of these tasks.

The low representation of females in the decisive or advisory bodies influences the management decisions at IChF, recognising the career path usually followed by male researchers. As a result, the problems that female researchers face are not addressed adequately.

The female researchers are also not as visible as their male colleagues, holding lower positions, fewer chances for promotion and thus, more infrequent occasions to be displayed at the institutional webpage or the social media. It results in the insufficient number of female researchers answering the call for positions convinced about their unsuitability for the job and less frequent promotions for higher positions.

2.2) Conclusions from the interviews

The methodology

To supplement data derived from different administration units, we have organised meetings with representatives of IChF employees. Firstly, we have scheduled an appointment with female researchers' representatives at various stages of their careers, ranging from a PhD candidate to a full professor. The discussions within the group helped map gender-related issues of concern at IChF and prepare a scenario for the subsequent meetings. This early interviewed group transformed into the Working Group, overseeing the whole process.

All sessions with groups of interest had the form of focused interviews. There were four focused groups interviewed (ca. 5-9 persons in each group):

- **PhD candidates** (R-1 researchers)
- **The self-government of PhD students**
- **R2-R3 researchers**
- **R4 researchers**

The scenario followed six modules related to equal treatment, fighting discrimination and providing equal career opportunities, such as:

- Module 1** Awareness and knowledge: discrimination, mobbing, aggression, sexual harassment
- Module 2** Recruitment
- Module 3** Supporting female scientists and tracking their careers
- Module 4** Individual / team assessment
- Module 5** Work-life balance
- Module 6** Ways to improve the gender balance at the Institute

The results of the quantitative analysis

Module 1 Awareness and knowledge: discrimination, mobbing, aggression, sexual harassment

- 1) **The researchers are aware of different forms of discrimination.** They define discrimination as unfair treatment due to financial status, political view, cultural background, sex, religion, age, experience, origin. They easily call stereotypical attribution of tasks to a person as discrimination.
- 2) **The researchers confirm that stereotypes exist at IChF.** In particular, it relates to the origin of a person and gender. They usually take the form of a joke or occasional unwanted remarks on the appearance. However, some persons reported observations on other forms of gender-related discriminatory behaviours such as:
 - ✓ disseminating and preserving stereotypes that a success of a female researcher is related to her beauty;
 - ✓ disregarding female colleagues because of the conviction about the lower position of females in the society;
 - ✓ females receiving less ambitious tasks: they are more often involved in the administration and handling of documents, while men receive more merit-based assignments, also in grant funding projects;
 - ✓ entrusting the tasks related to taking care of students to women;

- ✓ men tending to direct questions on research infrastructure to males;
- ✓ women getting fewer opportunities, men preferred for functions/positions;
- ✓ expecting females to organise the social life of a group (presents, meetings, parties etc.);

Many researchers claim that discrimination very often does not take the form of overt behaviour.

- 3) The majority of interviewed people claimed that the prevailing remedy used is ignorance and lack of reaction. The female researchers stated that they did not want to show they cared. Some employees reported the issue to the direct boss, who usually took some actions (with moderate efficiency).
- 4) **None of the researchers experienced or heard of somebody experiencing aggression.**
- 5) **Mobbing cases occasionally appear at IChF (not frequently).** The researchers claim that those cases are solved efficiently. However, the researchers are not aware of any mechanisms in place aiming to avoid or fight mobbing behaviours.

Module 2 Recruitment

The interviewed persons assume that the recruitment procedure is fair and does not give ground to any form of discrimination.

Some researchers think that the share of females in the selection committees should increase.

Others observed that for some senior researchers age of the candidate or their origin is an essential factor and may decide about the lack of success of a candidate.

Module 3 Supporting female scientists and tracking their careers

- 1) According to the interviewed researchers, the offer for PhD candidates and junior researchers is not attractive. PhD candidates do not receive job contracts what contradicts their family plans and make them worse clients for banks. After being granted a PhD, they face expectations to undertake an international postdoctoral appointment and experience a lack of financial stability. Because of that, female researchers quickly leave their careers in academia.
- 2) The PhD students also complain about paying regular private medical package fees. However, they value flexible working hours.

Module 4 Individual / team assessment

The interviewed researchers claim that there is no discrimination connected to any assessment at IChF. However, some of them complain that career breaks are not acknowledged in the individual and team assessments.

Module 5 Work-life balance

- 1) Some researchers observe difficulties in combining work and family life. In particular, they perceive that research apparatus occupation makes people work late, hampering work-life

balance. They also consider that increasing no. of places in students' houses could help balance life and work better.

- 2) The researchers value flexible working hours and hybrid and remote work options in better balancing their professional and family lives.
- 3) Compared to male colleagues, additional administration duties overload the female researchers.

Module 6 Ways to improve the gender balance at the Institute

- 1) The researchers claim that the visibility of women in science is not satisfactory. The male environment selects matching people. The researchers claim that lots of efforts aimed at better communication, promoting females and showing females at work are required.
- 2) They also think that IChF lacks a support system for female researchers encouraging them to come to IChF, develop, progress and be promoted.

2.3) Supplementary data

We have gathered the supporting evidence to research gender equality at IChF based on the explanations delivered by auxiliary bodies, i.e. the Commissionaire for Researchers' Rights and the Anti-mobbing Committee.

For a couple of years at IChF, we have had a Commissionaire for Researchers' Rights. The Commissionaire is responsible for solving disputes among researchers, mediations between conflicting sides and launching cases to the IChF Director, if requested by the sides. As a part of the analysis, the Commissionaire was asked to deliver anonymous collective data containing the number and kind of cases reported by the researchers.

According to the Commissionaire's report, 2018-2019, the researchers launched **four cases on co-authorship** (all cases reported by PhD candidates). In the half of cases, the reporting party was a female researcher. The second conflicting part was always a male researcher. The cases were closed by settlements (3) or withdrawal (1).

Also, the Commissionaire received **an official complaint on the IChF Director refusal to sign the grant agreement for the project approved for funding**. The person launching the protest was a female PhD candidate. The competent Department of the Polish Academy of Sciences (PAS), the Council of Curators of PAS and the Ombudsman of the National Representation of Doctoral Students conducted the proceedings. They decided to reject the complaint due to the violation of the IChF regulations and procedures by the person filing a complaint (i.a., requirement to get the Director's consent before submitting a proposal aimed at securing the interest of IChF).

There were also some consultations in cases unofficially reported to the Commissionaire. They referred to different fields of life at IChF, including the care over a PhD candidate whose supervisor died.

The Anti-mobbing Committee convened to examine a single mobbing case (launched by a male researcher). The IChF Director appointed the Committee members from among the IChF employees.

Nobody reported any sexual harassment or aggressive behaviours.

The auxiliary data have not delivered any information on the gender-related patterns underlying any conflicts or discriminatory cases at IChF.

4) ACTION PLAN

Based on data collected under hitherto analysis we propose the following Action Plan:

General measures	
Indicators:	Responsible party:
Director's ordinance appointing GEP Working Group	The IChF Director
detailed Action plan on how to improve gender equality at IChF, updated every 3 years	The Working Group
availability of yearly statistics on remunerating, grant applications and its results, employment structure, mobility, absences – broken into genders	heads of respective administration units
Proposed measures:	
<ul style="list-style-type: none"> • appointment of the Working Group to plan specific actions, entrust tasks and overview the Action Plan implementation • gather data to track the progress of IChF in the implementation of GEP 	

Module 1 Awareness and knowledge: discrimination, mobbing, aggression, sexual harassment	
Indicators:	Responsible party:
<ul style="list-style-type: none"> • no. of persons trained in recognizing, avoiding discrimination, mobbing, aggression, sexual harassment and supporting such persons • internal regulations aimed at managing discrimination, aggression, sexual harassment situations at IChF • no. of supported persons who experience any of above situations 	The HR Department
<ul style="list-style-type: none"> • appointment of an Ombudswoman to advice on shaping policies dealing with discrimination, mobbing, aggression, sexual harassment, and supporting persons experiencing any of these issues 	The IChF Director
Proposed measures:	
<ul style="list-style-type: none"> • obligatory talks for employees on discrimination, its manifestations, avoidance and fighting discrimination, social costs of discrimination (e.g. similar to training for ERC panellists, workshops in playing male / female roles; 	

- training on *savoir vivre* at work (what we can do and discuss and what should not be tackled, in particular in the international environment) – before being allowed to enter the lab;
- training for superiors on how to react to discrimination and unwanted behaviours;
- training in labour law;
- elaborate specific tools/procedures what to do + information campaign;
- appointing independent female ombudsman;
- soft-skills workout to strengthen researchers' self-esteem;
- supporting groups for female researchers

Module 2 Recruitment

Indicators:

- revamped employment regulations & policies
- no. of persons trained in fair recruitment

Responsible party:

The Working Group & the Deputy Director of Scientific Affairs

Proposed measures:

- training for selection committees to assess candidates objectively, identifying possible stereotypes that may influence their judgement (gender-, age-, origin, and social status-related);
- information in the job advertisement that photos in CV are not welcome and the information on family status should be avoided;
- using gender-neutral or both – male and female forms in the job advertisement;
- encouraging in particular female researchers to apply;
- information in job advert on the flexibility of work time and other factors facilitating parents (e.g. remote work after maternity / parental leave)

Module 3 Supporting female scientists and tracking their careers

Indicators:

- share of female researchers among tutors of doctoral schools and tutors of bachelor's and master's degrees
- no. of female researchers supported after career breaks
- memorandum of understanding with partner research organisations open to host postdoctoral fellows from IChF
- no. of programmes for female researchers facilitating grant proposal submission

Responsible party:

The Deputy Director of Scientific Affairs, the Working Group

The Working Group, the Grants Department, the Department of

	Large European Projects and Industry Collaboration
<ul style="list-style-type: none"> • internal permanent regulations on hybrid & remote work² • revamped regulation on remunerating IChF employees • document with objective criteria for promotion 	The Board of Directors
<ul style="list-style-type: none"> • no. of trained / informed persons 	The HR Department
Proposed measures:	
<ul style="list-style-type: none"> • promotion of national postdocs; • joint agreement of a network of scientific institutions open to host female researchers from IChF; • hybrid and remote work option for women in research; • systemic support for people returning from maternity and after other career breaks – e.g. small grants for women after maternity leaves and other career breaks, mentoring, mobility funding; • training on labour law – combining maternity and job; • funding remuneration and research of PhD/MSc/Bachelors from the budget of IChF supervised by women returning to their careers; • setting objective criteria for promotion; • widening the scope of tasks for which the employees are remunerated 	

Module 4 Individual / team assessment

Indicators:	Responsible party:
<ul style="list-style-type: none"> • no. of e-mails, info campaigns, guidelines on the IChF webpage etc. 	A specialist for social media & the Working Group
Proposed measures:	
<ul style="list-style-type: none"> • better communication of IChF policies towards researchers with career breaks 	

Module 5 Work-life balance

Indicators:	Responsible party:
<ul style="list-style-type: none"> • no. of trained persons 	The HR Department

² The current regulations are limited to the Covid-19 pandemic period.

<ul style="list-style-type: none"> no. of persons joining job shadowing programme no. of persons joining mentoring programme 	The Working Group
<ul style="list-style-type: none"> others – to be set 	To be decided

Proposed measures:

- training on how to plan better your work (schedules, prioritising and strategic thinking);
- training on international differences in life-work balance expectations and labour law;
- mentoring for researchers after career breaks – including on changes in current trends in academia;
- if possible – setting a position of lab manager supporting administration service;
- if possible – increase the number of places in the students’ houses or/and the introduction of a housing allowance (lump sum)

Module 6 Ways to improve the gender balance at the Institute

Indicators:	Responsible party:
<ul style="list-style-type: none"> document with objective criteria for promotion share of female members in various collaborative bodies 	The IChF Director
<ul style="list-style-type: none"> no. of persons joining job shadowing programme document on possible career paths at IChF no. of programmes stimulating cross-team cooperation and supporting female researchers 	The Working Group
<ul style="list-style-type: none"> no. of female researchers supported on proposal preparation/ informed about new granting schemes after career breaks 	The Grants Department & the Department of Large European Projects and Industry Collaboration
<ul style="list-style-type: none"> share of posts, articles on the profile and research conducted by female researchers 	A specialist for social media

Proposed measures:

- better communication activities – role modelling:** more women in the pictures at our www, open lectures delivered by female group leaders accessible, success stories of female researchers at our webpage, a regular campaign in the social media, press notes each about one female leader and her story, short videos about work in the lab – a specialist for social media required;
- job shadowing or staying deputy of PI for a definite period for a trial;

- clear career paths should be described;
- explicit criteria for becoming PI should be developed;
- an increase of the share of females among PIs and advising bodies (e.g. Research Council);
- increasing women's participation in committees and various bodies;
- programmes stimulating cross-team cooperation (offering openness and substantive support in the use of apparatus, specific thematic, fostering interdisciplinarity, leaving the comfort zone – “The next-door seminars” series)
- grant application support - formal, legal, introduction after breaks
- psychological support for women - support groups; talks with women about the possibility of holding higher positions

Among the most important measures is the appointment of the Working Group for GEP implementation and setting indicators to track the state of play. The Working Group will supplement some of the measures specified above or even replace some of them with other measures to better address the needs of the researchers.

The Working Group will focus on areas marked as sensitive for the gender equality at IChF, including but not limited to structural imbalance, differences in remuneration, mismatching needs of female researchers by internal policies, existing practice and procedures at IChF or lack of regulations and persons responsible for avoiding, fighting and tracking various form of discrimination.

The Action Plan will be regularly updated (every 3 years at least) and evaluated against its effectiveness. The IChF Director will overview the whole process.