Human Resources Excellence in Research

Internal Gap Analysis and Action Plan for

Jerzy Haber Institute of Catalysis and Surface Chemistry

of Polish Academy of Sciences (ICSC PAS)

May 2016

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I. Internal Gap analysis

1. Methodology

In April 2015, ICSC PAS signed the Declaration of endorsement for "The European Charter for Researchers" and "The Code of Conduct for the Recruitment of Researchers". This fact was announced verbally on Institute's seminar and also on the web-page of the ICSC PAS. As a second step in preparation to apply for the HR Excellence in Human Resources logo, at the beginning of July 2015 a working group (WG) was established with the purpose to perform a gap analysis and prepare an action plan. The working group consists of:

- Prof. dr hab. Małgorzata Witko – Director of ICSC PAS
- Dr hab. Renata Tokarz-Sobieraj – Chair of the PhD Studies Commission of ICSC PAS Scientific Council, Deputy Director of ICSC PAS
- Dr hab. Tomasz Borowski - Deputy Director for Research of ICSC PAS
- Prof. dr hab. Piotr Warszyński - Chair of the Scientific Assessment Commission of ICSC PAS Scientific Council
- Prof. dr hab. Zbigniew Adamczyk - Chair of the Stipend and Award Commission of ICSC PAS Scientific Council
- Dr hab. Anna Micek-Ilnicka – Head of PhD Studies
- mgr Joanna Olszówka – representative of PhD students
- Magdalena Wieciech-Figura, Aleksandra Niedzielska – representatives of the administrative staff.

Up to now, the working group prepared two anonymous surveys in which researchers evaluated the level of fulfilment at ICSC PAS of the rules included in the Charter and the Code. Results of these surveys were critically analysed by the WG, as well as they were presented and discussed on the forum of the Institute during two separate seminars. The participation rate in these surveys was high - 72 and 69 %, respectively, and hence their results are considered to be very representative.

Following the broad public discussion of the issues that were identified in the surveys as challenges for ICSC PAS, the WG settled an action plan, which is being implemented at ICSC PAS and is presented herein.

2. Survey #1

A survey on issues described in the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers was prepared with the use of the SurveyMonkey internet service. The survey consisted of 39 closed and 1 open question, the former with four plausible answers (in parenthesis numerical value ascribed to a given answer which was used in results analysis):

- Totally agree (4)
- Agree (3)

- Disagree (2)
- Totally disagree (1)

The full list of questions used in the survey (in Polish) can be found in an appendix to this document. In addition, each closed question was accompanied by an auxiliary question asking for the judgment on the importance of a given issue for the research work environment of ICSC PAS and here the four possible answers were as follows (in parenthesis numerical value ascribed to a given answer):

- Definitively important (4)
- Important (3)
- Unimportant (2)
- Definitively unimportant (1)

An invitation to take part in the survey was sent on 17 July 2015 via e-mail to all researchers of ICSC PAS – 131 persons including employees and PhD students. Participation in the survey was made anonymous with no information on identity of the responder or IP of its computer collected. Reminder messages were sent four times: on 11, 18, 26 August and 1 September, and the survey was closed on 4 September. 95 responses (72.5 % of invited) were collected (81 complete and 14 partial).

1. Characteristics of survey respondents

Position	Total number for ICSC PAS	Number of Responders	% of the total
PhD student	37	19	51
Technician	18	7	39
Assistant	19	13	68
Specialist	17	11	65
Associate professor (Adjunct)	21	17	81
Professor of ICSC PAS	9	7	78
Professor	10	7	70
Unspecified (unanswered question on the position)	-	14	15 (of all who took part in the survey)

Each group of researchers was adequately represented in the survey, a balance between different groups of employees and PhD students was preserved and the response rate was relatively high (72 %). Taking these all together, it is assumed that the results of the survey are representative and binding.

Survey results

Numerical values were ascribed to each possible answer of a closed question, and these were used to calculate average values. Average value of 3.0 was interpreted as a borderline between **agree** and **disagree** or **important** and **unimportant**.

All but four closed questions had a form of positive statements, and hence, the higher value of an average answer to the primary question, the better judgement of respondents of a given aspect of research environment of ICSC PAS. The exceptions were the questions: "Postdoctoral appointments (Code)", "Career development", "Value of mobility" and "Access to career advice", which asked for a judgment of a need for new regulations of a specific issue, and here a high score means a high demand for such regulations.

Average values of answers for individual questions are presented in the four tables below, each for a given thematic group of questions. Values lower than 3.0 for the primary question formulated as positive statements are marked in yellow, questions about the need of new regulations that scored above 3.0 are marked in green.

Ethical and professional principles

Question	Average value of answers to the primary question	Average importance
Intellectual freedom	3.12	3.04
Ethical standards	3.08	2.98
Professional responsibility	3.07	3.06
Professional attitude	3.08	2.78
Contractual and legal obligations	3.10	2.88
Accountability	3.10	2.91
Good practice in research	3.02	2.92
Dissemination and exploitation of results	3.32	3.11
Public engagement	3.16	2.91
Non-discrimination	3.32	2.70
Evaluation system	3.19	2.93

Recruitment

Question	Average value of answers to the primary question	Average importance
Recruitment	2.91	2.99
Recruitment (Code)	2.90	2.96
Selection (Code)	3.13	2.82
Transparency (Code)	2.78	2.92
Judging merit (Code)	2.82	3.00
Variations in the chronological order of CVs (Code)	2.82	2.75
Recognition of mobility experience (Code)	3.11	2.86
Recognition of qualifications (Code)	3.04	2.85

Seniority (Code)	3.10	2.91
Postdoctoral appointments (Code)	3.27	2.94

Working conditions and social security

Question	Average value of answers to the primary question	Average importance
Recognition of the profession	2.52	3.20
Research environment	2.95	3.18
Working conditions	2.62	3.23
Stability of employment	2.39	3.11
Funding and salaries	2.11	3.52
Gender balance	3.01	2.31
Career development	3.25	3.03
Value of mobility	3.10	2.77
Access to career advice	3.00	2.73
Intellectual property rights	2.71	2.88
Co-authorship	2.87	3.22
Teaching	2.33	3.16
Complaints / appeals	2.42	3.19
Participation in decision-making bodies	2.89	2.88

Training

Question	Average value of answers to the primary question	Average importance
Relations with supervisors	3.09	3.08
Supervision and managerial duties	2.94	3.03
Access to research training and continuous development	3.08	3.10
Supervision	3.00	3.07

There were five answers given to an open question „Other comments and opinions connected with the procedure of implementation in ICSC PAS The European Charter for Researchers and The Code of Conduct for the Recruitment of Researchers". The answers concerned: a) doubts if the survey was anonymous (it was launched collectively by three members of the WG and it was indeed made anonymous), b) the working conditions in the Institute – exceptionally high temperature in the summer, c) employment of professors emeritus and its added value, d) salaries, which should be at the European level, and e) improvement of relationships between researchers and administrative staff.

2. Survey #2

Analysis of the results of the first survey indicated that for some issues an additional survey should be conducted. Such a short (4 questions) anonymous survey was prepared with the help of SurveyMonkey server, and e-mail invitations to take part in it were sent on 6th January 2016 to 139 researchers working in ICSC PAS (including PhD students). Responses were collected till 19th January 2016, 96 responses (69 %) were received, which is very close to the response ratio obtained in the first survey (72 %). Below we present the questions of the survey and answers received.

Survey results

Question	Answers
In your opinion the following qualities of candidates for employment in ICSC PAS are valued in the recruitment process (select any number of answers)	Creativity – 25.6% Degree of independence – 16.7% Scientific achievements – 76.7% Scientific potential – 58.9% Other – 17.8%
In your opinion in the process of evaluating candidates for employment in the ICSC PAS following facts are seen as a potentially valuable contributions to the professional development (Select any number of answers)	Career breaks – 22.6% Exceptions to the chronological order of CVs – 29% Other – 56.5%
In your opinion in ICSC PAS researchers are treated as professionals in the following relationships (Select any number of answers)	researcher - the immediate supervisor – 77.1% researcher - administration employee – 22.9% researcher – directors – 27.7% Other – 18.1 %
In your opinion in ICSC PAS researchers at later stages of their careers properly fulfill their responsibilities as (in this question we ask for response only the younger researchers, please choose any number of answers)	Supervisors – 50.0% Mentors – 40.4% Leaders – 28.8% Advisors – 36.5% Project coordinators – 65.4% Managers – 9.6% Propagator of science – 26.9% Other – 7.7%

3. Identified challenges for ICSC PAS

Analysis of the results of both surveys revealed a number of challenges in the area of HR in ICSC PAS. The working group has decided to focus on these issues that scored below 3.0 for questions in the form of positive statements or above 3.0 for questions on the need of new regulations from survey #1. Results of survey #2 revealed that: 1) quality of interpersonal contacts should be improved, so that the researchers are more often treated as professionals, and 2) researchers at later stages of their careers should pay more attention to their roles as mentors, leaders and advisors. The identified challenges are presented below together with the discussion of the present state of the affairs.

Recruitment - **Recruitment**

<u>Objectives:</u> ICSC PAS as an employer should ensure that the entry and admission standards for researchers, particularly at the beginning at 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.

<u>Current status:</u> Rules of the selection procedure in case of employing to the academic position at ICSC PAS were set by Research Council of ICSC PAS. These rules guarantee the requirements for candidates are clearly specified, however, there are currently no rules that facilitate access for disadvantaged groups or for researchers returning to a research career.

Recruitment - **Recruitment (Code)**

<u>Objectives:</u> ICSC PAS should establish recruitment procedures which are open, efficient, transparent, supportive and internationally comparable, as well as tailored to the type of positions advertised.

<u>Current status:</u> ICSC PAS recruits to the academic positions exclusively via open competitions with calls posted on the Internet page of the Institute, Euraxess portal, and the page of the Ministry of Science and Higher Education. The WG judged the recruitment procedures of ICSC PAS as open, transparent, internationally comparable and tailored to the type of position advertised. However, the procedure was not supportive as so far the applicants did not receive any feedback with information on strong and weak points of their applications.

Recruitment - **Transparency (Code)**

<u>Objectives:</u> 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.

<u>Current status:</u> Candidates were not informed about the recruitment process.

Recruitment - **Judging merit (Code)**

<u>Objectives:</u> 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.

<u>Current status:</u> Candidates are required to include, in their application, inter alia, a CV and a research plan, which are evaluated in the selection process. As the results of survey #2 revealed that most of researchers are not aware of what factors are taken into consideration

by the commission evaluating the job applications, these were presented at the seminar dedicated to the survey #2, and the information on the recruitment procedure and regulations applying to it are now posted on the web-page of the Institute.

Recruitment - **Variations in the chronological order of CVs (Code)**

Objectives: 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.

Current status: The selection commission evaluates CVs of all applicants and indeed takes into account potentially positive aspects of activities resulting in career breaks and/or chronological order of CVs. Similarly, Scientific Assessment Commission takes into account breaks and longer leaves when preparing a yearly assessment of employees.

The results of survey #2 revealed that many researchers had problems with understanding the issue of variations in the chronological order of CVs and were not aware of the fact that this factor is also taken into consideration by the commission evaluating the job applications. Therefore, these issues were presented and discussed at the seminar dedicated to the survey #2, and the information on the recruitment procedure and regulations applying to it are now posted on the web-page of the Institute.

Recruitment - **Postdoctoral appointments (Code)**

Objectives: 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.

Current status: post-docs are employed exclusively in open competitions, typically for 2-3 years on the adjunct type of position and Research Council gives an opinion on their employment. Maximal duration of employment of adjunct, in accordance with the Polish law, is eight years.

Working conditions and social security - **Recognition of the profession**

Objectives: All researchers engaged in a research career should be recognized as professionals and be treated accordingly.

Current status: According to the results of the survey #1, some researchers of ICSC PAS did not feel recognized and/or treated as professionals. Results of the survey #2 revealed that the

researcher-administration employee and researcher-directors contacts should acquire more professional character.

***Working conditions and social security* - Research environment**

Objectives: ICSC PAS 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.

Current status: policies of ICSC PAS encourage internal and external scientific collaborations, researchers have on-line access to the major scientific journals in the disciplines represented in research topics covered by ICSC PAS. Researchers of ICSC PAS have wide scientific contacts with research institutions over the world (both formal and informal), and both senior and younger researchers reap the benefits from them, e.g. via scientific visits. ICSC PAS is a part of the ERASMUS+ network, which provides researchers with additional educational and networking opportunities. Since 2014, 4 PhD students and 6 researchers from ICSC PAS have taken advantage of it and visited 8 different research institutions from other European countries. ICSC PAS subsidizes employees' participation in multiple sports activities, i.e. the fee of tennis court and also individual "Multisport" cards, which allow access to a wide range of sports facilities. Additionally, each year a social event called Institute's picnic is organized and it is accompanied by a volleyball match and/or table tennis competition for a trophy of the ICSC PAS Director.

***Working conditions and social security* - Working conditions**

Objectives: ICSC PAS 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.

Current status: a 40 hour working week applies in the Institute. Working hours of employees and PhD students are registered by signatures at the attendance list, however, there are no strict rules on the exact hours when the researchers must be present in the Institute – research group leaders are eligible to approve individual working time sheets.

***Working conditions and social security* - Stability of employment**

Objectives: ICSC PAS should ensure that the performance of researchers is not undermined by instability of employment contracts.

Current status: it is customary in ICSC PAS, that the first contract signed between an employee and ICSC PAS is for three years; the decision if the second contract should be signed with a given employee is based on the assessment of the given researcher. In accordance with the law, the second contract signed between an employee and ICSC PAS is a permanent one. Instability (temporary position) of the employment situation of adjuncts stems for the law regulations, yet it should be stressed that in case an adjunct fails to get habilitation on time, she/he is not fired but degraded to a specialist post.

Working conditions and social security **– Funding and salaries**

Objectives: ICSC PAS 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.

Current status: According to the results of the survey, some researchers of ICSC PAS do not feel they enjoy fair and attractive conditions of funding and/or salaries. However, as one respondent wrote in her/his answer to the open question of the survey #1, this is a general situation in the research institutions in the whole country, which are not adequately founded.

Working conditions and social security **- Career development**

Objectives: ICSC PAS 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.

Current status: The WG decided this area of HR activities should not be formalized, but instead the supervising activities of mentors should be enhanced, promoted and their quality should be monitored on a regular basis.

Working conditions and social security **- Value of mobility**

Objectives: ICSC PAS must recognize the value of geographical, interpectoral, 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, ICSC PAS 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.

Current status: In internal policies of ICSC PAS all forms of mobility are promoted, i.e. it is a generally applicable policy that after graduating ex-PhD students are encouraged to gather experience as post-doctoral fellows in other research institutions. Moreover, as stated above, research visits and internships in other scientific institutions are encouraged and facilitated, also within the ERASMUS+ framework.

Working conditions and social security - **Intellectual property rights**

Objectives: ICSC PAS 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.

Current status: Regulations on management of Intellectual Property Rights has been worked out and recommended by the Scientific Council of ICSC PAS and introduced by the appropriate ordinance of the Director of ICSC PAS relatively recently (March 2015). Patent Attorney provides services to all interested researchers of ICSC PAS. The WG is of the opinion that these regulations are adequate and guarantee that researchers at all career stages can reap the benefits of the exploitation of their R&D results.

Working conditions and social security - **Co-authorship**

Objectives: ICSC PAS should 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).

Current status: Co-authorships of publications with authors from different groups of ICSC PAS is additionally appreciated in the annual evaluation of research activities. All researchers of ICSC PAS are obliged to adhere to ethical rules and standards gathered in *Code of ethics for researchers*, which is posted on the web-page of the Institute. Knowledge of the Code and the commitment to follow it is attested by the signature.

Working conditions and social security - **Teaching**

Objectives: ICSC PAS 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.

Current status: Lecturing a course for PhD students and supervisor duties are taken into account in the appraisal system, i.e. in the annual evaluation of research staff involvement in lecturing activities is appropriately recognized. Moreover, lecturing is remunerated since October 2015.

Working conditions and social security - Complaints / appeals

Objectives: ICSC PAS 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.

Current status: In accordance with regulations applicable to the Polish Academy of Sciences, Research Council of ICSC PAS elects Disciplinary Intercessor, who monitors adherence to ethical and good practice standards. The working hours of the Disciplinary Intercessor has recently been settled and made known to all employees.

Working conditions and social security - Participation in decision-making bodies

Objectives: ICSC PAS 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.

Current status: In ICSC PAS there are two collective bodies: Research Council and Collegium. In accordance with the status of ICSC PAS, all groups of researchers have their representatives in Research Council. Recently group leaders and independent researchers, i.e. habilitated doctors and full professors are members of the Collegium, which is an advisory body meant to support the Director.

Training - Supervision and managerial duties

Objectives: 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.

Current status: (Senior) researchers are evaluated each year on the basis of their scientific activity, yet their commitment to the role as supervisors or mentors is not assessed. Results

of the survey #2 revealed that there is a need for improvement and long-term monitoring of this aspect of HR activities.

II. Action Plan

Taking into account the results of the gap analysis the Working Group identified the HR areas that require improvements at ICSC PAS. For each issue the WG proposed actions to be implemented, appointed the responsible person and set timeframe for these improvements. The recommended action plan is presented in the table below.

Charter & Code recommendations	Actions at the institutional level
***Recruitment* - Recruitment** ICSC PAS as an employer should ensure that the entry and admission standards for researchers, particularly at the beginning at 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.	<u>Improvements implemented</u>: Research Council of ICSC PAS approved updated regulations concerning the selection procedure in case of employing for the academic position at ICSC PAS, and one of the rules (§3 p.3) states that the evaluation commission prepares the ranking list taking into account the recommendations of *Code of Conduct for the Recruitment of Researchers*. These new regulation were introduced with an ordinance of the Director of ICSC PAS (September 2015). The recruitment procedure is described in an information leaflet available now on the web-page of the Institute (January 2016). Moreover, to ensure transparency of the whole procedure, all regulations applicable to the recruitment procedure are available on the web page of ICSC PAS. <u>Improvements planned</u>: Regulations on the recruitment procedure will be augmented (upon approval by ICSC PAS Research Council) with the rule of non-discrimination of researchers returning to a research career. <u>Who</u>: Head of the evaluation commission <u>When</u>: IIQ 2016 The job advertisement will include: a) request to submit a full CV, with information on parental leaves,

	leaves related to voluntary activities and all forms of mobility experience. b) information on adaptation of the institute to the needs of disabled people. Who: Deputy Director When: since IIQ 2016
Recruitment - Recruitment (Code) Objectives: ICSC PAS should establish recruitment procedures which are open, efficient, transparent, supportive and internationally comparable, as well as tailored to the type of positions advertised.	Improvements implemented: The recruitment procedure is described in an information leaflet available now on the web-page of the Institute (January 2016). The regulation on the recruitment procedure was translated to English and is now posted on the web-page of ICSC PAS. The selection commission provides feedback information to all applicants for the academic position in ICSC PAS, whereby each applicant receives a detailed report on their individual assessment with identified strong and weak points of their application. Improvements planned: each recruitment will be followed by a short anonymous survey sent to all applicants, in which they will be asked to which degree they agree with the following statements: 1. time frame of the competition was adequate 2. the feedback information from ICSC PAS was useful Possible answers: definitely disagree, disagree, hard to say, agree, definitely agree Who: Deputy Director When: from IIQ 2016, for each competition for an academic position. Evaluation of the survey results with amendments of identified issues IQ in years 2017 - 2020.
Recruitment - Transparency (Code) Objectives: 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	Improvements implemented: The recruitment procedure is described in an information leaflet available now on the web-page of the Institute (January 2016). The selection commission provides feedback information to all applicants for the academic position in ICSC PAS whereby each applicant receives a detailed report on their

the strengths and weaknesses of their applications.	individual assessment with identified strong and weak points of their application. The regulation on the recruitment procedure was translated to English and is now posted on the web-page of ICSC PAS. Improvements planned: see the survey and evaluation of its results described above.
***Working conditions and social security -* Recognition of the profession** *Objectives:* All researchers engaged in a research career should be recognized as professionals and be treated accordingly.	Improvements planned: an anonymous survey monitoring this aspect of HR will be organised on an annual basis (as part of the survey monitoring progress of ICSC PAS in HR matters). Each time the survey is completed its results will be presented and discussed on the Collegium meeting. The Collegium will work out amendments for subsequent implementation. Who: Deputy Director When: annually, IQ, since 2017
***Working conditions and social security -* Research environment** *Objectives:* ICSC PAS 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.	*Improvements implemented:* The Director set and introduced procedures easing access of researchers to the equipment available in the Institute. Moreover, information campaign was conducted with the purpose to spread information on available research facilities and how to access them (November 2015). Participation in ERASMUS+ and other (inter)national networks, both formal and informal (e.g. COST, SPINLAB, SOLARIS – the Polish national synchrotron), broadens the researchers' opportunities to establish international collaborations. *Improvements planned*: devices for tele-conference and remote collaboration are planned to be purchased within the IT facilities grant that has already been submitted. Workshops, led by external experts, on various issues of research (e.g. using scientific publications databases, using tools for efficient cooperation via internet) will be organized in the Institute. The Institute will continue to invite representatives of joint laboratories and other research institutions to give seminars and lectures, with the aim to foster

	collaboration. _Who:_ Director's proxy for IT issues, Deputy Director _When:_ 2016-2020
Working conditions and social security - **Working conditions** _Objectives:_ ICSC PAS 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.	_Improvements implemented:_ All researchers were re-informed on the possibility to adjust their working hours, particularly to allow both women and men researchers to combine family and work, children and career. (Director, October 2015) _Improvements planned_: The working hours can be adjusted after consultation with the group leader. _Who:_ Research group leaders _When:_ permanently, since February 2016
Working conditions and social security - **Career development** _Objectives:_ ICSC PAS 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.	_Improvements implemented_: a dedicated training led by an external expert was organized for mentors and team leaders with the purpose to enhance their skills and engagement in mentoring activities (17 participants, Director, December 2015). All regulations and acts of law pertinent to career development and its stages have been placed on the internet page of the Institute (April 2016). Three (senior) scientists attended a certified mentoring course (February 2016 – March 2016). The content of the course contained among other things the elements of the mentoring and how to organize the mentoring process in an organization. They are thus qualified to formally introduce mentoring in the Institute when need arises. _Improvements planned_: A 3 days-long integration Summer Camp for the PhD Students will be held in June 2016. The main

	aim of this camp is fostering integration and career development. For example, for the purpose of integration, a session entitled "My non-scientific hobby" is planned, whereas the scientific part of the camp will comprise lectures covering research methodology. After the camp, its participants will be asked to fill in an anonymous questionnaire on the strengths and weaknesses of this event. If the camp turns out to be successful and positively evaluated by its participants, it will be organized regularly.
	Who: Head of PhD Studies *When:* IIQ 2016, and possibly the following years.
	Links to a wide variety of websites with job opportunities and devoted to career in science will be placed on the Institute web-page.
	Who: Head of PhD Studies When: IIQ 2016
	Optional courses on communication, preparing resumes and cover letters will be organized.
	Who: Head of PhD Studies When: IIQ 2017, 2019
	Whenever the law on scientific degrees changes a dedicated seminar covering this issue will be organized.
	Who: Deputy director When: 2016 – 2020
Working conditions and social security - Value of mobility *Objectives:* ICSC PAS 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	*Improvements planned:* all forms of mobility, inter alia ERASMUS+ visits, COST short scientific missions, bilateral exchange programs, etc. will be taken into account in the annual evaluation of research workers. *Who:* Head of the evaluation commission

professional development at any stage of a researcher's career. Consequently, ICSC PAS 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.	*When:* each year when preparing an evaluation, since 2016. Researchers (3-10 per year) will be encouraged to do research internships in renowned Polish and foreign research institutions. Who: Director When: 2016-2020
Working conditions and social security - Intellectual property rights *Objectives:* ICSC PAS 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.	*Improvements implemented:* the Institute provides the researchers (staff and PhD students) with access to legal aid, Patent attorney is available for all researchers of ICSC PAS (Director, October 2015). *Improvements planned:* Workshop and/or lecture on the patent law. Who: Director's proxy for property rights When: IIIQ 2017
Working conditions and social security - Co-authorship *Objectives:* ICSC PAS should 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).	*Improvements implemented:* researchers are encouraged to take advantage of the presence of Disciplinary Intercessor, who can take active part in solving conflicts concerning Co-authorship, and who has now set working hours for meeting with interested parties. Code of ethics have been placed on the web-page of the Institute, on a subpage dedicated to ethical issues in science (Deputy Director, September 2015). *Improvements planned:* anonymous survey will be conducted annually (as part of the survey monitoring progress of ICSC PAS in HR matters) with the purpose to monitor adherence to this rule in each research group separately. *Who:* Deputy Director *When:* annually, IQ, since 2017 Rules on co-authorship by operators of research equipment will be written down and made publically available.

	Who: Deputy Directors *When:* IIIQ 2016 with updates whenever new equipment is acquired. Training on ethics in research for newly admitted PhD students. Who: Head of PhD studies When: IIIQ each year
Working conditions and social security - **Teaching** *Objectives:* ICSC PAS 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.	*Improvements implemented:* lecturing PhD students of ICSC PAS is remunerated since October 2015 (Director).
Working conditions and social security - **Complaints / appeals** *Objectives:* ICSC PAS 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.	*Improvements implemented:* The Disciplinary Intercessor and the scope of issues he is eligible to deal with were introduced to all researchers of ICSC PAS (Director, October 2015). Office hours of the Disciplinary Intercessor have been set and made known (Disciplinary Intercessor, October 2015). It was arranged so that the researchers can present their cases to the Disciplinary Intercessor without the presence of third parties (Director, October 2015). Chairman of PhD students of ICSC PAS is their spokesman and representative in all cases collectively concerning this group of researchers.
Working conditions and social security - **Participation in decision-making bodies** *Objectives:* ICSC PAS 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.	*Improvements implemented:* Composition of the collective bodies of ICSC PAS and scopes of their duties was reminded to all researchers of ICSC PAS during a seminar dedicated to HR issues (Director, October 2015). *Improvements planned:* Collegium will be extended to include representatives of PhD students, assistants and adjuncts, i.e. the

	groups so far without representation in this body. *Who:* Director *When:* IIQ 2016
Training - **Supervision and managerial duties** *Objectives:* 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.	*Improvements planned:* a survey will be conducted annually (as part of the survey monitoring progress of ICSC PAS in HR matters) whereby the early-stage researchers will evaluate the performance of senior researchers with respect of their role as supervisors, mentors, career advisors and leaders. The results will be presented in an anonymous form at the Collegium meeting, and personally to each mentor. *Who:* Deputy Director *When:* IQ, annually 2017-2020.

The results of the surveys done as part of gap analysis allowed us to identify key HR challenges for ICSC PAS, e.g. those that were connected with questions that scored lowest and/or were considered by respondents as important for the Institute. The working group selected following eight issues for monitoring and focus of its action:

1. *Ethical and professional principles* – Dissemination and exploitation of results
2. *Recruitment* – Transparency (Code)
3. *Working conditions and social security* – Recognition of the profession
4. *Working conditions and social security* – Research environment
5. *Working conditions and social security* – Working conditions
6. *Working conditions and social security* – Co-authorship
7. *Working conditions and social security* – Complaints / appeals
8. *Training* – Supervision and managerial duties

These will be used to monitor, in an annual anonymous survey, the progress made by ICSC PAS in the matter of HRS4R (when: IQ each year, who: Deputy Director). The results of the survey will be the basis for amendments of the action plan. Our aim is to markedly improve our assessment in these selected key aspects till the end of 2017.

The working group will analyze the results of all the surveys, monitor implementation of the action plan and audit fulfillment of regulations of the Charter and Code in ICSC PAS. Such an evaluation will be conducted annually and a report from it, possibly with further recommendations, will be placed on the web-page of the Institute.

Who: the whole working group
When: annually in IQ, since 2017.

III. Timeline for implementation of Human Resources Strategy for Researchers in ICSC PAS

Continuous actions:

- Survey following a recruitment campaign (Deputy Director)
- Workshops, led by external experts, on various issues of research (Director's proxy for IT, Deputy Director)
- Seminars by representatives of joint laboratories and other research institutions (Deputy Director)
- Adjustment of the working hours (Group leaders)
- Seminar on the law on scientific degrees (Deputy Director)
- Research internships (Director)
- Mobility recognized in the annual evaluation of employees (Head of the evaluation commission)

Repetitive and one-time actions:

Action planned	Who	When
• **Update of regulations on the recruitment procedure**	**Head of the evaluation commission**	**IIQ 2016**
• **The job advertisement – update**	**Deputy Director; HR WG**	
• **Integration Summer Camp for the PhD Students**	**Head of PhD Studies**	
• **Webpage on career development**		
• **Extending collegium**	**Director**	
• **Rules on co-authorship by operators**	**Deputy Directors**	**IIIQ 2016**
• **Training on ethics in research**	**Head of PhD Studies**	
• **Annual survey on key HR aspects with possible adjustments of actions; report published on the web page**	**Deputy Director; HR WG**	**IQ 2017**
• **Course on communication, preparing resumes and cover letters**	**Head of PhD Studies**	**IIQ 2017**

• Workshop and/or lecture on the patent law	Director`s proxy for property rights	
• Training on ethics in research	Head of PhD Studies	IIIQ 2017
• Annual survey on key HR aspects with possible adjustments of actions; report published on the web page	Deputy Director; HR WG	IQ 2018
• Training on ethics in research	Head of PhD Studies	IIIQ 2018
• Annual survey on key HR aspects with possible adjustments of actions; report published on the web page	Deputy Director; HR WG	IQ 2019
• Course on communication, preparing resumes and cover letters	Head of PhD Studies	IIQ 2019
• Training on ethics in research		IIIQ 2019
• Annual survey on key HR aspects with possible adjustments of actions; report published on the web page	Deputy Director; HR WG	IQ 2020
• Training on ethics in research	Head of PhD Studies	IIIQ 2020