# HR Excellence in Research

# **Action Plan**

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Case number

2023RO111493

#### Name Organisation under review

Institutul National de Cercetare-Dezvoltare pentru Fizica Materialelor

# Organisation's contact details

Atomistilor 405A, Magurele, Ilfov, 077125, Romania

#### Submission date to the European Commission

05/06/2024

# 1. Organisational Information

Please provide a limited number of key figures for your organisation. Figures marked \* are compulsory.

STAFF & STUDENTS	FTE
Total researchers = staff, fellowship holders, bursary holders, PhD. students either full-time or part-time involved in research *	206
Of whom are international (i.e. foreign nationality) *	32
Of whom are externally funded (i.e. for whom the organisation is host organisation) *	25
Of whom are women *	107
Of whom are stage R3 or R4 = Researchers with a large degree of autonomy, typically holding the status of Principal Investigator or Professor. *	78
Of whom are stage R2 = in most organisations corresponding with postdoctoral level *	73
Of whom are stage R1 = in most organisations corresponding with doctoral level *	55
Total number of students (if relevant) *	0
Total number of staff (including management, administrative, teaching and research staff) *	294
RESEARCH FUNDING (figures for most recent fiscal year)	€
Total annual organisational budget	12510974
Annual organisational direct government funding (designated for research)	200000
Annual competitive government-sourced funding (designated for research, obtained in competition with other organisations – including EU funding)	10753172
Annual funding from private, non-government sources, designated for research	1557802

Institutul National de Cercetare-Dezvoltare pentru Fizica Materialelor (English name is National Institute of Materials Physics-NIMP) is a self-funding government research organization. Its mission is:

- The preparation, characterization and study of the physical properties of new materials connected to high technology products and devices
- The development of analytical techniques and methods applied in materials science
- Training of young scientists, PhD and MSc students, students and technicians
- Supply the public institutions and companies with the Institute.s R&D know-how and expertise
- Collaboration with the universities and other higher education establishments
- · Development of international collaboration, especially based on EU funded projects

# 2. Strengths and weaknesses of the current practice

Please provide an overview of the organisation in terms of the current strengths and weaknesses of the current practice under the four thematic headings of the Charter and Code at your organization.

**Note:**Click on the name of each of the four thematic headings of the Charter and Code to open the editor and provide your answer.

Ethical and professional aspects\*

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# Strengths and Weaknesses (max. 800 words)

Strengths and Weaknesses (max. 800 words)

NIMP is an elite research institute in Romania, recognized both nationally and internationally for its highly specialized human resource and performant research infrastructure. The institute adhered to the highest ethical standards in the research activity, in conformity with the national legislation (law 206/2004) and European good practices. It has an internal ethical code (see https://infim.ro/wp-content/uploads/2019/09/REGULAMENT-ETICA.pdf (https://infim.ro/wp-content/uploads/2019/09/REGULAMENT-ETICA.pdf)) and a working ethical commission.

The main strength is that all the researchers follow the ethical rules, in the last 10 years being one single case to judge for the ethical commission (see https://infim.ro/wp-content/uploads/2019/09/decizia-comisiei-de-analiza.pdf (https://infim.ro/wp-content/uploads/2019/09/decizia-comisiei-de-analiza.pdf)).

The weakness is that the ethical documents are only in Romanian language and should be translated in English.

Recruitment and selection\*

#### Strengths and Weaknesses (max. 800 words)

Strengths and Weaknesses (max. 800 words)

The main strength is that NIMP has implemented in the last 10 years an open, transparent and merit based recruitment plan. There are specific rules and regulation for employing researchers of different degrees, starting from assistant researcher up to equivalent professors or principal investigators, as well as engineers for technological development (see https://infim.ro/en/rules-and-regulations/ (https://infim.ro/en/rules-and-regulations/)). All the internal rules and regulation obey the provision of the law 319/2003 regarding the status of researchers. We underline that the nomenclature of Romanian researchers degrees (hierarchy) do not correspond to the hierarchy and nomenclature used in EU (see https://euraxess.ec.europa.eu/europe/career-development/training-researchers/research-profiles-descriptors (https://euraxess.ec.europa.eu/europe/career-development/training-researchers/research-profiles-descriptors)). The recruitment procedures are differentiated depending on the career stage. For R1, the most promising candidates are selected based on the results in the high education institution, a presentation of their bachelor or master dissertation and an interview. The selected candidates are employed for limited term and have to follow training courses, with examination after 6 months. After this first filter, the successful candidates start to work in research under the supervision of a senior researcher. After two years they present their results and a decision is taken if the contract end or is transformed in a permanent one. For R2, R3 and R4 specific rules apply, in agreement with national regulations (law 319/2003 and Ministry Order 6129/2016). The required level of expertise is detailed in the advertise for the open position. The main criterion for selection is the merit, considering all aspects of a research career (publications, highlights of the most important results, PI in projects, training abilities for young researchers, international visibility probed by citations, imitated lectures, prizes, etc.). The thresholds are set depending on the level of expertise required by the open position. All these procedures are functioning well and the governing bodies of the institute are satisfied with the results, including the fact that more and more researchers from abroad are attracted to work in the institute, especially from the less developed countries in Africa, Asia or countries that are not member of EU.

The main weakness is that all the rules and regulations are in Romanian language, limiting in a way the access of researchers from abroad to the open positions in the institute. Other weaknesses: the 3 years limit for limited term contracts (see https://www.codulmuncii.ro/titlul\_2/capitolul\_6\_1.html); the absence of post-doc positions in the nomenclature of Romanian researchers degrees/ranks; complicated procedures to obtain visas and work permits for researchers coming from outside EU; the absence of independent members (not employed in the institute) in the Scientific Council, to have an objective view over the recruitment procedures. We mention that the selection commissions are nominated in agreement with law 319/2003, with at least one member from outside the institute for R2 and at least 2 members from outside the institute for R3 and R4. The selection commission members should have positions at least equivalent, or higher, than the positions open for competition.

# Strengths and Weaknesses (max. 800 words)

Strengths and Weaknesses (max. 800 words)

The working conditions are nearly excellent in NIMP. The working environment is friendly and encouraging cooperation between the staff members. A collective work agreement is negotiated every 2 years between the institute top management and the representatives of the union of researchers, including the salaries and other benefits. There is also a procedure to evaluate the performance of the researchers, working for more than 10 years. The evaluation is performed in the first quarter of each year, considering the results of the previous 3 calendar years (it is considered that the research work has many unknown variables, e.g. the calendar for project calls, the number of publications, patent requests, conference participations, other activities, one year can be with better results than another, therefore the performance is weighted for a period of three years to allow a proper and correct evaluation). The results of the evaluation reflect in bonuses to salary for the next 12 months, until the next evaluation.

Another strength is the equilibrated gender balance with almost equal numbers of female and male researchers. The males are somewhat dominant at R3 and R4 level (the average age is also higher, reflecting somehow the mentality of the past, when more males were working in research), while female are dominant at R1 and R2 level.

Weaknesses: although the career path is a personal decision, the institute encourage professional development through participation to summer schools, work stages abroad (preferably at collaborating institutions), training courses, etc. there is no specific plan for activities envisaging the professional development (even the possibility of such a plan is mentioned in the collective work agreement). Another weakness is the reduced interest for mobility, meaning to work in another institution, preferably abroad. Historically speaking, a large brain drain was registered during 1990-2000 period, when many skilled researchers have left the country due to very low salaries. Some of these researchers returned after 2005-2006, when the working conditions in research started to improve and the incomes become decent. They are now the senior researchers. After adhering to EU and recognition of diploma obtained in Romanian universities, the interest for PhD studies abroad decreased, even for post-doc positions. Young researchers prefer to follow PhD studies in Romania and then follow a research career in universities or research institutes, especially considering that the infrastructure has been considerably improved and the salaries in many research organizations are competitive with average salaries in other EU countries. However, another brain drain is in place now, not for the university graduates but for pre-university students (lyceum graduates).

Training and development\*

#### Strengths and Weaknesses (max. 800 words)

Strengths and Weaknesses (max. 800 words)

NIMP is not part of a higher education institution. Therefore, in principle, there are no teaching obligations except those of the PhD supervisors associated to the doctoral schools of the Bucharest University. However, training activities are included among the obligations of the senior researchers. As mentioned above, all the newly employed assistant researchers has to follow a set of internal courses addressing basic knowledge in the field of condensed matter physics and materials science, including principles of the main experimental methods used in the institute.

The career path is known by all researchers, including the rules and regulations to promote from one stage to another. The speed of promotion is a personal choice and depends very much on the individual effort to achieve, sooner or later, the thresholds for the next stage (time spend in the previous position as set by law 319/2003, other thresholds established by Ministry Order 6129/2016). The management of the institute take care to ensure for everybody equal chances for promotion, supporting submission of project proposals, implementation of the won projects, professional development by aces to relevant literature and through specific training activities, and by organizing each year promotion exams according legal documents mentioned above and local rules and regulations approved by the management of the institute (see https://infim.ro/reguli-si-reglementari/ (https://infim.ro/reguli-si-reglementari/)).

# 3. Actions

The Action Plan and HRS4R strategy must be published on an easily accessible location of the organisation's website.

#### Please provide the web link to the organization's Action Plan/HR Strategy dedicated webpage(s):

Please fill in the list of all individual actions to be undertaken in your organisation's HRS4R to address the weaknesses or strengths identified in the Gap-Analysis. The listed actions should be concise, but detailed enough for the assessors to evaluate the level of ambition, engagement and the expected implementation process. The institution should strive to provide a detailed plan, not just an enumeration of actions.

**Note:** Choose one or more of the principles automatically retrieved from the GAP Analysis with their implementation ratings.

Action 1  Data management Plan	GAP Principle(s)	Timing (at least by year's quarter/semester)
	(+/-) 3. Professional responsibility	2nd semester 2024
	Responsible Unit Indicator(s) / Target(s)	
	Legal Department; Scientific Council	
Action 2  Procedure to approve, monitor and archive projects	GAP Principle(s)	Timing (at least by year's quarter/semester)
	(+/-) 4. Professional attitude	2nd semester 2024
	Responsible Unit Indicator(s) / Target(s)	
	Scientific Council Procedure to approve, mo	onitor and archive projects

# **Proposed ACTIONS**

Action 3  Update work fishes	GAP Principle		Timing (at least by year's quarter/semester)
	(+/-) 5. Contra	ctual and legal obligations	2nd semester 2024
	Responsible Unit	Indicator(s) / Target(s)	
	HR Officer; Legal Department Updated position fiches for researchers. Disciplinary measures against those who do not obey the internal regulations, according the law and collective work agreement.		ot obey the internal
Action 4  Procedure to handle research output with IPR potential; GDPR procedure	GAP Principle	e(s)	Timing (at least by year's quarter/semester)
procedure	(+/-) 7. Good p	practice in research	2nd semester 2024
	Responsible Unit	Indicator(s) / Target(s)	
	Administration Council; HR Officer; Legal Department	n Procedure to handle research or GDPR procedure	utput with IPR potential;

Action 5 Visibility	GAP Principle(	s)	Timing (at least by year's quarter/semester)
	(+/-) 9. Public e	ngagement	2 quarter 2025
	PR	Indicator(s) / Target(s) Posts on website and media channels	
Action 6 Selection independent members in Scientific Council	GAP Principle(	s)	Timing (at least by year's quarter/semester)
	(+/-) 11. Evalua	tion/ appraisal systems	3 quarter 2025
	Responsible Unit	Indicator(s) / Target(s)	
	Administration Council; Scientific Council	Independent members in the Scienti	fic Council (at least 6)

Action 7  Translation of rules and regulations	GAP Principle(	s)	Timing (at least by year's quarter/semester)	
	(+/-) 15. Transp	parency (Code)	1 quarter 2025	
	Responsible Unit	Indicator(s) / Target(s)		
	HR Officer Translation of all rules and regulation employing process in English		ons applied in the	
Action 8			Timing (at least by year's	
Postdoctoral	GAP Principle(	s)	quarter/semester)	
	(+/-) 21. Postdo	octoral appointments (Code)	1 quarter 2025	
	Responsible Unit	Indicator(s) / Target(s)		
	Administration Council; General Director	Request to the public authority for 319/2003 to the nomenclature accresearch positions. Differentiation promotion inside the same organizew personnel.	cepted at EU level for between career	

# **Proposed ACTIONS**

Action 9  Plan for professional development	GAP Principle(s)	Timing (at least by year's quarter/semester)
	(+/-) 28. Career development	1 quarter 2025
	Responsible Unit Indicator(s) / Target(s)	
	Direction Committee; Scientific Council	elopment
Action 10 Plan of workstages for PhD students and post-docs	GAP Principle(s)	Timing (at least by year's quarter/semester)
	(+/-) 29. Value of mobility	1 quarter 2025
	Responsible Unit Indicator(s) / Target(s)	
	Direction Committee; Scientific Council	nD students and post-docs

#### **Unselected principles:**

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(++) 1. Research freedom
                           (++) 2. Ethical principles
                                                   (++) 6. Accountability (++) 8. Dissemination, exploitation of results
(++) 10. Non discrimination
                            (++) 12. Recruitment
                                                   (++) 13. Recruitment (Code) (++) 14. Selection (Code) (++) 16. Judging merit (Code)
(++) 17. Variations in the chronological order of CVs (Code) (++) 18. Recognition of mobility experience (Code)
(++) 19. Recognition of qualifications (Code)
                                             (++) 20. Seniority (Code) (++) 22. Recognition of the profession
                                                                                                               (++) 23. Research environment
(++) 24. Working conditions (++) 25. Stability and permanence of employment (++) 26. Funding and salaries
                                                                                                              (++) 27. Gender balance
(++) 30. Access to career advice (++) 31. Intellectual Property Rights (++) 32. Co-authorship (++) 33. Teaching
                                                                                                                  (++) 34. Complains/ appeals
(++) 35. Participation in decision-making bodies
                                                (++) 36. Relation with supervisors (++) 37. Supervision and managerial duties
(++) 38. Continuing Professional Development (++) 39. Access to research training and continuous development (++) 40. Supervision
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The establishment of an Open Recruitment Policy is a key element in the HRS4R strategy. Please also indicate how your organisation will use the Open, Transparent and Merit-Based Recruitment Toolkit and how you intend to implement/are implementing the principles of Open, Transparent and Merit-Based Recruitment. Although there may be some overlap with a range of actions listed above, please provide a short commentary demonstrating this implementation. If the case, please make the link between the OTM-R checklist and the overall action plan. (max. 1000 words) \*

Our organization has implemented a Open, Transparent and Merit based recruitment strategy. The related rules and regulations are available on the institutions web site (https://infim.ro/en/rules-and-regulations/ (https://infim.ro/en/rules-and-regulations/)). Clear OTM-R procedures and practices for all types of positions are established (https://infim.ro/en/rules-and-regulations/) (https://infim.ro/en/rules-and-regulations/)). The staff involved in the recruitment process is aligned to Law 319/2003 and includes a HR officer and a legal advisor. Open positions are advertised on Euraxess (Romanian and English), social media, institutes web page and national journals. The rules are in line with policies to attract underrepresented groups, in the same time providing attractive working conditions for researchers (https://intranet.infim.ro/wp-content/uploads/2021/03/RI-INCDFM-2019-VARIANTA-FINALA-Shortcut.lnk\_.pdf (https://intranet.infim.ro/wp-content/uploads/2021/03/RI-INCDFM-2019-VARIANTA-FINALA-Shortcut.lnk\_.pdf)). The institution, through the HR department succeeds in keeping the administrative burden at a minimum for the candidate, according to law 319/2003 (no additional proofs/qualifications, translations, nr of copies etc are required). There are clear rules governing the appointment and composition of selection committees (assured by Law 319/2003). The selection committees are gender balanced, with at least one female researcher. There are clear guidelines for selection committees, which help to judge 'merit' in a way that leads to the best candidate being selected (Law 319/2003. https://infim.ro/en/rules-and-regulations/)). A system involving Administration Council, Direction Committee and Scientific Council is used to assess whether OTM-R delivers on its objectives.

As shown above, NIMP OTM-R policy is well aligned with the HRS4R strategy, with a good overall assessment regarding the matter. However, there are some actions needed in order to completely check all the points form the OTM-R checklist:

- i) The rules and regulations available on NIMP website only in Romanian will be made available also in English version.
- ii) We will improve the policy to share the news of job openings on social media (e.g. LinkedIn, Facebook, Instagram) as well as content promoting institute updates that give inside into research developments.
- iii) Independent members will be included in the OTM-R process.

The supervision of the recruitment process will be administered by the HR department or designated staff. The supervision and recruitment efficiency will be checked periodically by external HR-audit performed by a leading company in the field.

HR department and/or designated staff will gather analyze qualitative and quantitative data relevant to the recruitment process (HR-metrics including recruitment, retention, training and employee satisfaction, performance and productivity). The data will be used to adapt the OTM-R accordingly.

- iv) The open positions will be advertised bilingually (English/Romanian)
- v) A feedback form for both successful and unsuccessful candidates which will focused only on skills (and may include suggestions form the selection committee on how they can improve they overall performance) will be implemented.

If your organisation already has a recruitment strategy which implements the principles of Open, Transparent and Merit-Based Recruitment, please provide the web link where this strategy can be found on your organisation's website:

#### URL:

# 4. Implementation

General overview of the expected overall implementation process of the action plan: (max. 1000 words)

In line with the HRS4R guideline, NIMP has proposed 10 actions with their associated tasks for the implementation of Action Plan. During the time leading up to the HR Award application, key members were identified who would be involved in the document development, implementation, monitoring, and evaluation processes.

A Steering Committee was appointed by decision of the General Director. The Committee includes relevant players in the process of recruitment: 1) Scientific Director-by law (319/2003) is the president of selection commissions for all recruitment procedures, 2) Economic Director-is signing the work contracts, taking care of the financial aspects and other material benefits, 3) Director of CIFRA-CIFRA, acting as an independent unit inside the institute; it has to follow the same recruitment rules as NIMP, 4) President of the Scientific Council-the Scientific Council is the governing body conceiving the internal recruitment rules and regulations, respecting the legal documents in force at national level, law 319/2003, law 206/2004 and

Ministry Order 6129/2016, 4) HR Officer-is preparing the contracts and implements any changes in the work contract, 5) Legal Adviser-is taking care that all the recruitment procedures and rules established at the level of the institute are following the national legislation in the field of work conditions and relations

The SC has nominated an Working Group (WG) composed of academic (R1- R4) and administrative staff, which has as duties, gap analysis and OTM-R evaluation of the current situation and afterwards the development of tAction Plan wich is approved by the SC. The working group members have knowledge of rules and regulation that applies research environments, training, working conditions, ethics committees, and recruiting in alignment with HRS4R principles.

The SC will ensure that the initiatives are implemented promptly and evaluate progress for the following two years after the European Commission approves the plan of action.

Make sure you also cover all the aspects highlighted in the checklist below, which you will need to describe in detail:

**Note:**Click on each question of the checklist to open the editor.

How will the implementation committee and/or steering group regularly oversee progress?\*

#### Detailed description and duly justification (max. 500 words)

The Working Group met every two months to work on the documents and to implement recommendations and corrections suggested/required by the Steering Committee. The final form was checked by the legal adviser for conformity to the national legislation.

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The Steering Committee met every quarter and discussed the progress of the Working Group, making recommendations to enhance or to correct the documents for HRS4R. When the documents were finalized, they were presented to the top management body of the institute, the Administration Council, who adopted them by decision signed by the President of the Administration Council and General Director of the institute.

How do you intend to involve the research community, your main stakeholders, in the implementation process?\*

#### Detailed description and duly justification (max. 500 words)

The preparation and application procedure for HRS4R is a collaborative effort that encompasses the entire research community at NIMP.

NIMP aims to ensure active involvement of the research community, encompassing its principal stakeholders, in the implementation process. Recognizing the significance of broad participation and diversity of perspectives, the NIMP will develop consultation mechanisms that includes surveys, interviews, workshops, training programs, seminars, and e-mail announcements. The HRS4R website serves as a central repository, providing updates on implementation progress. Additionally, regular articles in internal press releases and on the NIMP website offer insights into ongoing developments.

Human resources procedural changes are implemented in an inclusive manner, ensuring that all stakeholder groups are informed and provided with opportunities to provide feedback. Internal consultations and feedback sessions with the research comunnity and stakeholder enable improvement of the implementation of processes.

The composition of the Steering Committee and working group (which involve researcher R1-R4 and administrative staff) reflects the institution's commitment to diversity, ensuring that all voices are heard in the implementation process.

In essence, the NIMP's approach to involving the research community and its stakeholders in the implementation process is characterized by transparency, inclusivity, and a commitment to diversity.

How do you proceed with the alignment of organisational policies with the HRS4R? Make sure the HRS4R is recognized in the organisation's research strategy, as the overarching HR policy.

#### Detailed description and duly justification (max. 500 words)

While NIMP research community is not yet fully-informed about HRS4R, national legislation and existing internal procedures are predominantly in accordance with the HR policies of the Charter and Code. Academics, researchers, and recruiters will undoubtedly become more informed about the new regulations and procedures as a result of the consultations that will occur throughout the action plan's implementation.

Efforts to implement the HRS4R process will be sustained by the management team (SC) and the following collective decision-making body, by revising relevant policy documents, guidelines and codes and/or creation of new regulations.

How will you ensure that the proposed actions are implemented?\*

#### Detailed description and duly justification (max. 500 words)

The proposed actions are implemented by Steering Committee who is directly involved in the development of the Action Plan. This action plan enters into implementation following top management body of the institute (President of the Administration Council and General Director of the institute) approval. SC will promptly address any requirements that may arise during the implementation phase to include additional members in the working groups that develop rules and regulations. SC will organize periodic meetings to review and deliberate on the advancements of the implementation process.

The indicators or objective must be entirely met before an action can be declared finished and completely implemented. We have chosen attainable and practical objectives and indicators so as to prevent any modifications to the action plan. We will, however, make every effort to strictly conform to the proposed action plan. Furthermore, the levels of implementations can be better comprehended with the aid of survey results incorporated into the actions, therefore survey will be periodically run in order to ensure a good implementation of the proposed actions.

How will you monitor progress (timeline)?\*

# Detailed description and duly justification (max. 500 words)

To monitor the progress, the implementation team will hold regular meetings.

Regular SC meetings will be held to deliberate on forthcoming actions, milestones, coordination and monitoring action implementation (at least every six months, and more frequently if required). Moreover, annually, the Head of the SC will inform the Administration Council about the statement of progress.

To ensure the successful and timely completion of each task, a comprehensive checklist will be established, outlining the activities and corresponding timeline. In accordance with the action, quarterly meetings will be planned by the Working Group, to assess progress and guide subsequent actions as required.

Working Group may establish additional quantifies the adherence to the Action Plan's specified	that are explicitly outlined in the action plan. To ensure tasks are advancing successfull able sub-indicators that correspond to those specified in the action plan. In order to timeline, evaluations will be conducted at the quarterly meetings and four seminars. be tasked with overseeing the effort and suggesting modifications to account for
ess the adherence to the Action Plan's specified minent members of the Steering Committee will	timeline, evaluations will be conducted at the quarterly meetings and four semina