

## Action Plan: Human Resources Strategy for Researchers (HRS4R) – Status 2019

Remark: Only those principles out of the EU-Charter for Researchers and the Code of Conduct for the Recruitment of Researchers are pictured that are relevant:  
Principles no. 1, 2, 27, 29, 40

<b>I. General Principles and Requirements applicable to Researchers</b>				
<b>1. Research freedom: Scientific Integrity<sup>1</sup></b>				
Researchers should focus their research for the good of mankind and for expanding the frontiers of scientific knowledge, while enjoying the freedom of thought and expression, and the freedom to identify methods by which problems are solved, according to recognized ethical principles and practices. Researchers should, however, recognize the limitations to this freedom that could arise as a result of particular research circumstances (including supervision/guidance/management) or operational constraints, e.g. for budgetary or infrastructural reasons or, especially in the industrial sector, for reasons of intellectual property protection. Such limitations should not, however, contravene recognized ethical principles and practices, to which researchers have to adhere.				
<b>Relevant legislation (permitting or impeding the implementation of this principle)</b>	<b>Existing Institutional rules and/or practices</b>	<b>Actions required</b>	<b>When / Who</b>	<b>Status 31/07/2019</b>
	The Fraunhofer-Gesellschaft carries out freely chosen research projects, tasks assigned by the German federal and Länder governments and contract research. In its research, Fraunhofer adheres to the principles of good scientific practice and promotes scientific integrity by assuming full responsibility for the integrity and quality of its research. At the same time, Fraunhofer is aware of its responsibility in handling research freedom and the risks of research and thus supports the responsible handling of research.	<ul style="list-style-type: none"> <li><b>Training</b> the (newly recruited) scientists</li> </ul>	End of 2022  Agenda Fraunhofer 2022: Head of Department Dr. Lothar Behlau	<b>Qualification: In Progress.</b> At present, 20% of the Fraunhofer-Institutes are testing the good scientific practical experience of new employees. Regular events on good scientific practice are held at 56% of the institutes.

<sup>1</sup> Heading and text to Principle 1. Research freedom are taken literally from the EU Charter and Code of Conduct for Researchers.

	<p>The principles of good scientific practice are recorded in a binding internal organizational directive (Rules for ensuring good scientific practice). To ensure good scientific practice, there is an ombudsman at every Fraunhofer institute. His or her tasks are to help to convey scientific integrity at the Fraunhofer institute, provide advice and mediate in case of any conflicts of interest and assist in resolving conflicts.</p>	<ul style="list-style-type: none"> <li>• Conducting a regular exchange of <b>good practice</b> examples at meetings of the ombudspersons</li>   <li>• Introducing <b>written mentoring agreements</b> between the doctoral students and the direct mentor</li> </ul> <p>This action has changed as a result of circumstances. It is now:  <b>Formulation of standards for all doctoral students</b> with the Fraunhofer-Gesellschaft</p>		<p><b>Good Practice: Completed.</b>  There is an exchange platform for all ombudsmen on which good practice examples are stored. There are also quarterly mails with current data or actions by the person responsible for the topic. Every year, all ombudsmen meet to exchange best practices.</p> <p><b>Qualification agreements: in Progress.</b>  Towards the end of 2019, a Code of Conduct »Doctorate with Fraunhofer« will be introduced throughout Fraunhofer, in which the common basic understanding regarding the framework conditions for doctoral projects in the Fraunhofer-Institutes is formulated. The Code of Conduct is concretized by the Qualification Agreement, which is to be concluded between the doctoral candidate, the institute management and a direct mentor nominated by the institute management</p>

<b>2. Ethical principles<sup>2</sup>: Ethics and Scientific Responsibility</b>				
Researchers should adhere to the recognized ethical practices and fundamental ethical principles appropriate to their discipline(s) as well as to ethical standards as documented in the different national, sectoral or institutional Codes of Ethics.				
<b>Relevant legislation (permitting or impeding the implementation of this principle)</b>	<b>Existing Institutional rules and/or practices</b>	<b>Actions required</b>	<b>When / Who</b>	<b>Status 31/07/2019</b>
	<p>The Fraunhofer-Gesellschaft is aware of its responsibility in dealing with research freedom and research risks. In this context, Fraunhofer also supports the »Scientific Freedom and Scientific Responsibility – Recommendations on Handling Security-Relevant Research« initiative from the DFG, the German Research Foundation, and Leopoldina, the National Academy of Sciences. The Fraunhofer-Gesellschaft promotes internal and external dialog on the responsible handling of research that goes beyond legal requirements.</p> <p>In research projects, the Fraunhofer-Gesellschaft obtains advice and votes from external ethics committees and thus uses existing structures to support responsible research. It informs, advises and sensitizes its employees. The ethical responsibility of each individual is addressed in the Fraunhofer Code of Conduct and reference is also made to structural measures – such as central points of contact or the set-up of ethics advisory services.</p> <p>There is also an internal guide on handling ethical issues, which provides orientation for scientists on the procedures and basic principles that</p>	<ul style="list-style-type: none"> <li>• Firmly establishing the <b>internal ethics advisory unit</b> for the particular concerns of employees after the end of the pilot phase</li> <li>• Developing a <b>qualification module</b> and piloting it in the area of »ethical scientific responsibility« (within the framework of the JERRI project)</li> <li>• Developing a concept for and piloting of an <b>ethics screening system</b> in internal pre-competitive research (within the framework of the EU JERRI project)</li> </ul>	<p>End of 2019</p> <p>KEF office<sup>3</sup>: Research Coordination – Production, Light &amp; Surfaces, Materials, Innovation: Cornelia Reimoser</p> <p>Compliance Office: Dr. Verena Schmekel/ Anne Lazarek</p>	<p><b>Internal Ethics Advisory Centre: Completed</b> Ethics Secretariat and Ethics Steering Committee established on 1 January 2019.</p> <p><b>EU Project JERRI: Completed</b> (Project completion 05/2019) Concept for ethical reflection developed as qualification module</p> <p><b>Ethics: Screening: Completed</b> Guide to Ethics Scanning available. Statutes of the Ethics Committee adopted (09.2018). Ethics Committee can be convened ad hoc if appropriate questions arise. Further information:</p>

<sup>2</sup> Heading and text to Principle 2. Ethical principles are taken literally from the EU Charter and the Code of Conduct for Researchers.

<sup>3</sup> Secretariat of the Commission for Ethics in Safety-related Research

	must be complied with. The Fraunhofer-Gesellschaft provides information and advisory services and will continue to expand its range of training and events. The Fraunhofer-Gesellschaft makes an important active contribution to responsibility in the area of research within the framework of its broad-based sustainability initiative.			<a href="https://www.fraunhofer.de/en/about-fraunhofer/corporate-responsibility/research-and-development/ethics-committee-for-security-relevant-research.html">https://www.fraunhofer.de/en/about-fraunhofer/corporate-responsibility/research-and-development/ethics-committee-for-security-relevant-research.html</a>  <a href="https://www.fraunhofer.de/en/about-fraunhofer/corporate-responsibility/research-and-development/ethics-and-scientific-responsibility.html">https://www.fraunhofer.de/en/about-fraunhofer/corporate-responsibility/research-and-development/ethics-and-scientific-responsibility.html</a>
<b>III. Working conditions and social security</b>				
<b>27. Gender Balance<sup>4</sup>: Equal Employment Opportunities</b>				
Employers and/or funders should aim for a representative gender balance at all levels of staff, including at supervisory and managerial level. This should be achieved on the basis of an equal opportunity policy at recruitment and at the subsequent career stages without, however, taking precedence over quality and competence criteria. To ensure equal treatment, selection and evaluation committees should have an adequate gender balance.				
<b>Relevant legislation (permitting or impeding the implementation of this principle)</b>	<b>Existing Institutional rules and/or practices</b>	<b>Actions required</b>	<b>When / Who</b>	<b>Status 31/07/2019</b>
The General Equal Treatment Act (AGG) applies in Germany. It	Gender equality is an essential part of Fraunhofer's organizational culture. The aim is to ena-	<ul style="list-style-type: none"> <li><b>Increasing the number of women scientists employed at all career levels</b></li> </ul>	End of 2022	<b>Increasing the number of women scientists employed at all career levels:</b>

<sup>4</sup> Heading and text on Principle 27. Gender Balance is taken literally from the EU Charter and the Code of Conduct for Researchers.

<p>states that there shall be no discrimination on the basis of origin, gender, religion or belief, disability, age or sexual orientation.</p>	<p>ble women and men to achieve their full potential as far as they are able in their various life phases. There is an equal opportunity officer (BfC) at every Fraunhofer institute as a contact for questions on gender equality, on the compatibility of family and work, and on protection against sexual harassment in the workplace. Equal opportunity officers work together with the HR division on an ongoing basis on the implementation of issues related to gender equality. The BfCs form a Fraunhofer-wide network in conjunction with the central equal rights officer.</p> <p>The equal opportunity officers are involved in all social, organizational and personal issues provided these relate to equal opportunities between men and women.</p> <p>Through the internal Equal Opportunities Toolbox, a collection of all the projects and offers at Fraunhofer concerning the issues of equal opportunities for women and men and work-life balance has been available since 2014.</p> <p>Recruiting more women in applied research is an important goal of Fraunhofer. It is working to reach this goal with a very comprehensive development concept that specifically targets female scientists. The number of female scientists, which has been consistently increasing for years, demonstrates that Fraunhofer is on the right path overall and its efforts are bearing fruit. The following selected measures – which are already being implemented – clearly show</p>	<p>and with connections to universities and colleges by recruiting and developing female scientists</p> <ul style="list-style-type: none"> <li>• <b>HR development programs</b> (step forward, TALENTA) as well as individual, specific measures (e.g. qualification for higher appointments)</li> </ul>	<p>Executive Vice President Human Resources, Legal Affairs and IP Management: Prof. Alexander Kurz</p>	<p><b>in Progress and Extended</b></p> <p>Fraunhofer has not yet been able to significantly increase the number of female scientists employed. In 2018, it was approx. 22%, in the management levels 14% (level 2<sup>5</sup>) and almost 4% (level 1<sup>6</sup>) respectively.</p> <p><b>HR development programs: Completed</b></p> <p>Regular implementation of the Fraunhofer »Wissenschaftscampus« (»National and International Science Campus«) for prospective female STEM scientists who strive for a career science and research. TALENTA support program for the systematic career development of women: Since 2013, 416 women have participated, 151 of them in 2018 alone. In 2018, the »Gender Equitable Careers of Excellence« project was launched to support women in obtaining a professorship through internal career guidance and professional worldwide scouting. In addition, a recruiting commission was formed</p>
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<sup>5</sup> Level 2 includes all management positions below the Institute Management level

<sup>6</sup> Level 1: Institute Management

	<p>the breadth and depth of how this issue is treated:</p> <ul style="list-style-type: none"> <li>• Fraunhofer TALENTA: career development program for female career starters, female scientists with job experience and female managers</li> <li>• Fraunhofer role models: Making female scientists at Fraunhofer visible both internally and externally</li> <li>• Fraunhofer-wide guidelines for gender-appropriate language</li> <li>• Guidelines on gender-appropriate personnel selection</li> <li>• Specific target group marketing – specifically addressing female scientists</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Raising awareness among and supporting managers</b> with tools, guidelines, HR development measures, and expansion of the existing internal development program</li> </ul>		<p>consisting of the four executive boards of the Fraunhofer-Gesellschaft as well as the Director of Research and the Director of Human Resources. These internal and external measures are intended to recruit ten more female institute directors by the end of 2021.</p> <p><b>Raising awareness among and supporting managers: In Progress</b></p> <p>Diversity is an integral part of management training at Fraunhofer. In addition, association-related roadmaps were developed to increase the proportion of female scientists. The Diversity program provides financial support for the institutes for measures aimed at reconciling work and family life, equal career opportunities for women and men, and the inclusion of employees with disabilities. A new feature is the Fraunhofer Family Logo, an internal audit that Fraunhofer Institutes have been able to use since 2018 to achieve an outstanding work-life balance. By 2018, 16 institutes had already ac-</p>
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				quired the Family Logo. After all, Fraunhofer is part of the »Initiative Chefsache network. Information is available at <a href="https://www.fraunhofer.de/en/about-fraunhofer/corporate-responsibility/hr-management/diversity-management.html">https://www.fraunhofer.de/en/about-fraunhofer/corporate-responsibility/hr-management/diversity-management.html</a>
<p><b>29. Value of mobility<sup>7</sup>: Internationalization</b></p> <p>Employers and/or funders must recognize the value of geographical, inter sectoral, inter- and trans-disciplinary and virtual mobility as well as mobility between the public and private sector as an important means of enhancing scientific knowledge and professional development at any stage of a researcher's career. Consequently, they should build such options into the specific career development strategy and fully value and acknowledge any mobility experience within their career progression/appraisal system.</p> <p>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.</p>				
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	Fraunhofer's mission illustrates its commitment to the transfer of expertise: »Our employees shape the future – in ambitious positions at Fraunhofer or in other areas of science and business. Fraunhofer thus places great importance on their personal and professional development. « Fraunhofer has refined this mission-driven human resources policy through its »Career with	<ul style="list-style-type: none"> <li>Preparing a qualified overview of <b>international mobility programs</b></li> </ul>	<p>End of 2018</p> <p>International HR &amp; Labor Law: Head of Group Annika Gehrmann</p>	<b>Overview of International Mobility programs: Completed and Extended</b> Intranet overview of the international mobility programs relevant for Fraunhofer including Fraunhofer internal evaluation of selected programs with regard to

<sup>7</sup> Headline and text on Principle 29: Valuing mobility is taken literally from the EU Charter and the Code of Conduct for Researchers.

	<p>Fraunhofer« concept. In the process, attention is focused on personal career advancement – of which Fraunhofer is a part. In this context, it is clear that Fraunhofer is responsible for training young people for their next career move – in industry, science, setting up their own company or also at Fraunhofer.</p> <p>The growing number of projects abroad enables Fraunhofer employees to gather sound practical experience in international markets with foreign partners. Hence, Fraunhofer’s international orientation plays a major role in training people for ambitious tasks in the global economy and science, which meanwhile require job applicants to have experience in international project implementation. In addition to projects abroad, mobility measures such as hosting foreign guest scientists (e.g. doctoral candidate support programs with the Chinese Academy of Sciences CAS, award of the Fraunhofer Bessel Prize) help to bring new scientific know-how to Fraunhofer through international research results and eminent researchers.</p> <p>In the course of the internal international HR project at Fraunhofer, key processes in recruitment, human resources management and employee development were enhanced in 2015 in order to provide better service for international recruitment.</p> <p>For example, the »Handbook on International Secondments« explains what action is required prior to a stay abroad, which contacts can be consulted on what subjects at headquarters and what should be kept in mind to also efficiently organize the repatriation of the person sent abroad. In addition, international job portals, checklists for the recruitment of people</p>	<ul style="list-style-type: none"> <li>• Supporting the recruitment and onboarding of foreign nationals by providing <b>information, forms and documents in English</b></li> </ul>		<p>adaptability and usability (e.g. Fraunhofer Bessel Prize, but also EU programs such as Marie-Sklodowska-Curie).</p> <p>Further information: <a href="https://info.fraunhofer.de/ueber-fraunhofer/zentrale/Abteilungen%20der%20Zentrale/1P/P5/Seiten/Mobilitaetsprogramme.aspx">https://info.fraunhofer.de/ueber-fraunhofer/zentrale/Abteilungen%20der%20Zentrale/1P/P5/Seiten/Mobilitaetsprogramme.aspx</a></p> <p><b>Extension:</b> New Fraunhofer internal mobility program for stays of up to 5.5 months at Fraunhofer foreign affiliates, Fraunhofer representative offices and Fraunhofer Project Centers (»CONNECT«).</p> <p><b>Recruiting and Onboarding Support: Completed</b>  Provision of a »Welcome-to-Fraunhofer« brochure in German and English with lots of useful information for entry and the start of employment. Further information: <a href="https://www.fraunhofer.de/content/dam/zv/en/about-fraunhofer/HumanResourceManagement/Welcome-to-Fraunhofer.pdf">https://www.fraunhofer.de/content/dam/zv/en/about-fraunhofer/HumanResourceManagement/Welcome-to-Fraunhofer.pdf</a></p>
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	<p>from abroad and a number of samples in English are provided.</p> <p>Postgraduate researchers are also increasingly recruited from abroad. Since 2016, the »Welcome to Fraunhofer« brochure (in English and German) has been available to assist people coming to Fraunhofer from abroad. Another example is the international science campus in collaboration with an Italian university that was held in September 2016.</p>			<p>Translation aids for the various types of employment contracts are created in English. For this purpose a »Glossary on Basic principles and content of employment contracts« was created.</p> <p>Updating of the checklists for the recruitment of international applicants.</p> <p>Further information:  <a href="https://info.fraunhofer.de/personal/querschnittsthem/hr-international/Seiten/Einstellung-auslaendischer-MA_deutsch.aspx">https://info.fraunhofer.de/personal/querschnittsthem/hr-international/Seiten/Einstellung-auslaendischer-MA_deutsch.aspx</a></p> <p>Comprehensive information on the right of residence including leaflets, training for HR officers. Sample presentation for introductory event for new employees available in English. Samples or sample modules for the creation of job references / letters of reference available.</p>

<b>IV. Training</b>				
<b>40. Supervision<sup>8</sup>: Developing an understanding of management and increasing the effectiveness of management</b>				
Employers and/or funders should ensure that a person is clearly identified to whom early-stage researchers can refer for the performance of their professional duties, and should inform the researchers accordingly. Such arrangements should clearly define that the proposed supervisors are sufficiently expert in supervising research, have the time, knowledge, experience, expertise and commitment to be able to offer the research trainee appropriate support and provide for the necessary progress and review procedures, as well as the necessary feedback mechanisms.				
<b>Relevant legislation (permitting or impeding the implementation of this principle)</b>	<b>Existing Institutional rules and/or practices</b>	<b>Actions required</b>	<b>When / Who</b>	<b>Status 31/07/2019</b>
	The institute management has the task of ensuring that young researchers are supervised by senior researchers. This supervision may not be confined to merely having formal responsibility for them but also requires that the mentor actively supervises the scientific work of the research trainee. This has been made a binding requirement in an organizational directive (cf. I.1.). Researchers are always assigned to a manager who has specialist and disciplinary management responsibility. Feedback on performance and working conditions are an integral part of regular performance reviews. Feedback techniques are taught in management training. Fraunhofer has developed a central management model that defines the requirements for management at Fraunhofer. Managers always also have the role of acting as HR developers and are responsible for fostering and supporting employees and designing the framework conditions.	<ul style="list-style-type: none"> <li>• <b>Expanding the advisory services provided by institutes</b> on the following key topics: <ul style="list-style-type: none"> <li>- Developing an <b>institute-specific understanding of management</b> based on the Fraunhofer management model (e.g. in the form of management guidelines)</li> <li>- Implementing <b>transparent, systematic career and development paths</b> for junior scientists (e.g. introduction of specialist careers)</li> </ul> </li> </ul>	<p>End of 2022</p> <p>HR Development: Head of Department Susanne Woltering</p>	<p><b>Expansion the advisory services on the following key topics:</b></p> <ul style="list-style-type: none"> <li>- Development of an <b>institute-specific understanding of management: in Progress</b> Leadership guidelines (based on the Fraunhofer-Gesellschaft's leadership model) implemented at 21 institutes</li> <li>- <b>Career and development paths: in Progress</b> Professional careers (based on the Fraunhofer framework model) implemented at 17 institutes</li> </ul>

<sup>8</sup> Headline and text on Principle 40. The support is taken literally from the EU Charter and the Code of Conduct for Researchers.

		<ul style="list-style-type: none"> <li>- Developing <b>transparent criteria</b> to assess the performance of junior scientists</li> <li>• <b>Expanding the range of training</b> available for the development of management skills</li> </ul>		<ul style="list-style-type: none"> <li>- <b>Development of transparent criteria: Completed</b> Tailor-made performance review systems have been implemented in all 72 institutes</li> <li><b>Expanding the range of training: in Progress</b> Participation rate in the new, central offer for managers: 32% (out of a total of 2650 managers at Fraunhofer) have participated</li> </ul>
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<p><b>Principle from the EU Charter and Code of Conduct for Researchers, which fits to the »New Work@Fraunhofer« project as part of the Fraunhofer Agenda 2022:</b></p> <p>Various principles could form the ideal framework for the »New Work@Fraunhofer« implementation project, e.g. Principle 23 »Research environment« or Principle 24 »Working conditions«. A clear assignment was not possible because aspects such as employer attractiveness and customer perspective were missing. Fraunhofer has therefore decided to leave the question of the underlying principle open at this point.</p> <p>Fraunhofer's goal: »New Work« challenges and encourages us to further develop our working world. It is our goal to offer work forms that promote agility, networking and flexibility in terms of time and place of work. We see this as a key element in securing and increasing our attractiveness as an employer, our efficiency and our innovative strength. We want to be the benchmark in the labor market of innovation-oriented employers and large-scale research institutions and thus also become a dialogue partner at eye level with the political designers of the world of work.</p>				
<b>Relevant legislation (permitting or impeding the implementation of this principle)</b>	<b>Existing Institutional rules and/or practices</b>	<b>Actions required</b>	<b>When / Who</b>	
	In the first phase of the project, an <b>inventory</b> of the existing design and needs in the institutes will be carried out, supplemented by the evaluation of relevant benchmarks of other research organizations in 2018.	<ul style="list-style-type: none"> <li>• Development of a web-based tool with which the institutes can assess their level of maturity with regard to the fields of action of</li> </ul>	End of 2022  Hauptabteilung Personal:	<b>New</b>

	<p>In the second project phase, selected <b>innovative forms of implementation will be accompanied and evaluated</b> on a pilot basis. As a result, practice-oriented solution approaches will be available, which will be transferred back to the institutes by the executives, personnel managers and institute/administration managers.</p>	<p>New Work (e.g. flexibilization of work place / work time, spatial-organizational readjustment and design of work environments or possibilities for employees to participate and an increase in self-organization based on this) and plan and implement measures for development in certain fields of design.</p> <ul style="list-style-type: none"> <li>• Anchoring this instrument in the strategic plan of the institutes</li> </ul>	<p>Direktorin Personal Elisabeth Ewen</p>	
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