

HRS4R @ FHTW

R&D Personnel Strategy and
Revised Action Plan 2017-2020
May 2017



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Foreword

In summer 2012, the UAS Technikum Wien's Rector Fritz Schmöllebeck and CEO Michael Würdinger signed the "European Charter for Researchers" and the "Code of Conduct for the Recruitment of Researchers" and secured the commitment of the UAS to this initiative.

In line with the the principles outlined in these documents and based on the HRS4R process for research institutes, in the autumn of 2014 the UASTW published a personnel strategy for R & D employees - the UASTW's Human Resources Strategy for Researchers (HRS4R), including a 2-year action plan for its implementation.

On the basis of this strategy and the process that took place, in May 2015, the European Commission awarded the "HR Excellence in Research" logo to the UASTW, the sole university of applied sciences among only five Austrian institutions. In accordance with the HRS4R process, an interim assessment was carried out at the UASTW in spring 2017 after the first two-year implementation phase. The results of the assessment are presented in this document as an adapted R & D personnel strategy and included in a (3-year) Revised Action Plan for the period 2017- 2020.

Universities of Applied Sciences in Austria

The Austrian Universities of Applied Sciences sector has a short history. The Universities of Applied Sciences Studies Act (FHStG) entered into force in 1993; a year later the first University of Applied Sciences degree programs began. In contrast to other European countries the Universities of Applied Sciences sector has been built and expanded completely from scratch, not by improving existing educational institutions, but by the accreditation of individual programs. In the academic year 2016/17 there were 21 Universities of Applied Sciences, 424 UAS degree programs and about 50,000 students. Against the background of educational policy goals of decentralization and deregulation, privately organized operating organizations receive financial public funding to organize study programs. In 2012 a new university quality assurance law (HS-QSG) entered into force.

R & D at universities of applied sciences is relevance-oriented, i.e. in the questions asked, it addresses the needs and challenges of companies and society. The obligation to carry out R&D is anchored in the FHStG. Accreditation requires that the steps necessary to achieve the objectives and to ensure the principles of application-oriented research and development activities are carried out by members of the teaching and research staff. Furthermore, the operator has to ensure that the teaching and research staff participate in application-oriented research and development work. This is especially true for master programs. The flowback into the teaching thus plays a central role. The law and financing model do not provide core funding for R&D at universities of applied

sciences from the federal government. The strategic impetus and the capital requirement for funded projects are to be borne by the operator. This fact significantly affects conditions and design possibilities of R&D at universities of applied sciences.

Austrian universities of applied sciences do not offer doctoral programs, this path is reserved for general universities and is open to graduates of UAS Master's or Diploma courses. If the standard duration of a UAS degree program is shorter than a comparative program at a general university, the doctoral program shall be extended by the difference in time. Dissertation collaboration is possible within the scope of individual R&D projects as well as institutional agreements with general universities in Austria and abroad.

The University of Applied Sciences Technikum Wien

The UASTW was the first institution in Vienna to receive its university of applied sciences status in 2000. The support body responsible for the UASTW is a non-profit organization that was founded on the initiative of well-known companies in the electrical and electronics industries and the FEEI (Association of the Electrical and Electronics Industry) in 1994. This means that companies, and not a public support body, form the association and board of directors.

In the academic year 2016/17 the UASTW offered 30 technical Bachelor's (13) and Master's (17) degree programs in the areas of:

- Communication Technologies & Electronic Engineering
- Information Technologies & Business Solutions
- Engineering & Environmental Technologies
- Life Science Technologies

In 2015/16, more than 3,900 people were studying at the UASTW (full-time or part-time or as distance learning) and nearly 10,000 have already received their Diploma, Bachelor or Master's degree here. Teaching and R&D are carried out by 13 departments that work across a range of degree programs in a clustered matrix organization. In the area of R&D at Austrian universities of applied sciences, the UASTW was most recently ranked fifth in relation to annual R&D turnover (data up to and including 2010), and first among universities of applied sciences that have no fixed state funding. Since 2012, the UASTW has been a full member of the European University Association (EUA).

The existing R & D strategy of the UAS Technikum Wien was formulated in 2015 and adopted and published at the beginning of 2016. It has planned for the following research focusses (cross-department and cross-degree program):

- Embedded Systems and Cyber-Physical Systems
- Renewable Urban Energy Systems

- Secure Services, eHealth & Mobility
- Tissue Engineering & Molecular Life Science Technologies
- Automation & Robotics

The funded R&D activities of the UASTW are increasingly focused on these research focusses. They are being continually expanded and there is a push towards cross-institutional R&D cooperation in order to let R&D staff and students from other areas share in the expansion of the R&D priorities.

Typically, the academic staff is active both in teaching and R&D at the UASTW. The extent depends on their personal profile and development. This also applies to Junior Researchers who go into the R&D sector straight after a Master's degree or during their Master's program. The instrument of the dissertation cooperation for the higher qualification of academic staff has been selectively used so far and will be further developed in the future, specifically to increase the proportion of PhDs among R&D employees. This share currently amounts to nearly 30%.

Since the academic year 2014/15 a UAS internal dissertation support system has been established at the UASTW. In the summer semester 2017, 8 researchers are profiting (to varying degrees) from this support. Since 2016, the UASTW has been an active member of the Dual Career Service Network and Contact Point of the Euraxess Network Austria. This provides free individual consultations on mobility and career development for researchers (and from the Dual Career Service also for their partners).

The external funding comes from grants (European, national, regional), from contract projects and other contributions.

The state of Vienna supports the Viennese universities of applied sciences, unlike other federal states in Austria, in the form of competitively acquired project-based funding, which is coupled to the universities' using their own resources, amounting to 30% of the total. A comprehensive description of the various indicators and their development is available in the intellectual capital statements published annually by the UASTW.

Indicators 2015/16:

(FTE = full time equivalent)

▪ Number of full and part-time employees in total	1.058
▪ Of whom are women	324 (31%)
▪ Staff in teaching and R&D	845 (80%)
▪ Full-time (fixed salaried) employees in FTE	316
▪ Of whom are women	150
▪ Full-time (fixed salaried) R&D employees in FTE	64,6
▪ Total Number of externally funded projects	58
▪ Volume of externally funded projects (€ million) total	4,6
▪ Of which is external funding (€ million)	3,4
▪ Of which is external funding from grants (€ million)	3,2

HRS4R@FHTW – The Project

The UAS-internal project HRS4R @ HTW for carrying out the gap analysis and drafting of the action plan was launched at the beginning of the summer semester 2013.

In the first project phase, steps 1 and 2 of the HRS4R process were carried out with a large working group that crossed over departments and functions (gap analysis and elaboration of the personnel strategy for researchers, including the action plan). This first project phase ended in autumn 2014 with the adoption and publication of the R & D personnel strategy and the 2-year action plan. In May 2015, the UASTW was awarded the "HR Excellence in Research" logo of the European Commission on the basis of this first project phase. Work was then taken up on the implementation phase. The monitoring of the implementation as well as the central control of changes to the action plan were carried out as part of the UAS internal program for the preparation of the institutional audit of the quality assurance system, statutorily scheduled for 2017.

For the interim assessment in the spring of 2017, it was possible to use the information and structures collected and available from the 2017 audit. In addition, all employees in R & D were invited in writing to participate in the preparation of the new 3-year action plan 2017-2020, and the Academic Management team was informed and provided feedback and further inputs. The structured exchange for the review of the first implementation phase 2015-2017 and for the coordination and drafting of the Revised Action Plan 2017-2020 again took place with the working group from the first phase, both in writing and through a workshop. The results of this working group were coordinated with the University Council and the Rectorate and adopted and published in this document.

The UAS internal working group for the preparation of the Revised Action Plan 2017-2020 was involved both in writing and through a workshop, at the workshop 11 persons from the following interest groups (partly in dual roles) were present:

- Employees in teaching and research from 4 of 13 departments
- (Deputy) Heads of 3 departments / degree programs / research focusses
- Representatives of 6 service sectors: HR Services, Coordination of R&D and Projectservice, Quality and Degree Program Development, Gender and Diversity, Center for International Relations, In-service training

Revised Action Plan 2017-2020

For each theme cluster, the current situation at the UASTW in Spring 2017 will first be presented and the implementation of the action plan 2015-2017 discussed. Under "Challenges and Measures 2017-2020" the priority areas of action for the period 2017-2020 (based on principles in Charter & Code) will be listed, with the corresponding measures, responsibilities for the implementation of these measures, time windows and potential indicators.

I. Ethical and professional aspects

In accordance with the Universities of Applied Sciences Studies Act (FHStG), the operator has to ensure that the educational and R&D personnel take part in application-oriented R&D work. In principle, freedom of R&D is exercised at the UASTW, however, it is nevertheless molded by financial considerations. The financing of an R&D project will be clarified in advance and due to personnel and infrastructure needs has to be borne almost exclusively by external funding.

The longer-term orientation of research activities at the UASTW is anchored in the R & D strategy, whose current version was adopted and published in early 2016. The UASTW's subsidized R & D activities are increasingly concentrated on five cross-departmental and cross-degree program research focusses. Commissioned projects can also be found in other areas of competence of the departments.

Financial and controlling processes are regulated uniformly at the UASTW. For the majority of projects (funded projects) the specific requirements of the funding bodies have to be observed. The existing central controlling, which includes the total annual budget for R&D (to be adopted by the UAS Council and Managing Committee), and the corresponding multi-year plan are continuously being expanded.

There are rules for the dissemination of project results. In addition to the publications, the return flow into teaching plays a special role, as defined in the R & D strategy. There is also a guide to copyright and regulations on the handling of intellectual property rights (IPR). Because of the necessity to protect resulting IPR in collaboration with companies, there may selectively be restrictions regarding dissemination activities. The UASTW endeavours to avoid any agreements with companies which restrict the freedom to research.

Accordingly, cooperation agreements consistently include the possibility of using the findings and results of the projects in academic teaching and R&D, as well as generating scientific publications from them. Since 2013, the UASTW has been a member of the Open Access Network Austria (OANA). Since the academic year 2016/17, a UAS-internal Open-Access Publication Fund has been available. Guidelines on open access and open source software are provided.

In addition to R&D cooperation with partners from science and industry and the resulting technology transfer, the UASTW ensures in many ways that the R&D results are made available to

society; among other things via the ongoing flowback into teaching, participation in the scientific community and the activities to disseminate research results effectively to different audiences.

Since the academic year 2015/16 the UASTW has been a member of the Austrian Alliance for Responsible Science.

Funded R&D projects are subject to continuous evaluation by the funding body, scientific publications mostly undergo peer review by the respective community and therefore quality is assured. Since the 2016/17 academic year, an internal, regular, UAS interdisciplinary evaluation of the work of R & D staff has been taking place at the level of R & D quality indicators according to the R & D strategy, overlapping and per research focus.

Equal treatment and equal opportunities are strategically anchored. In the academic year 2012/13 a comprehensive diversity actual analysis was performed.

On the basis of the results, firstly an action plan was developed, then principles of conduct were defined and these were adopted by the UAS Council in 2014.

These principles of conduct also include a chapter on scientific integrity, which can later serve as a starting section for a guide to good scientific practice.

The UASTW is a member of the Austrian Agency for Research Integrity, so its employees are obliged to follow the Guidelines for Good Scientific Practice of this cross-institution agency.

Overview implementation plan 2015-2017

- Elaboration of binding principles for R&D employees: Two areas were covered: the area of ethics and data protection, and the area of research integrity. For both areas, regulations on specific implementation were developed and published internally in the UAS, and for data protection templates are also available. In terms of research integrity, in accordance with the existing process for students, a process for the case of infringement respectively suspicion of infringement among teaching and research personnel has been implemented.
- Creation of an Open Access Policy: Corresponding documents were prepared and published internally in the UAS, the institutional understanding was retained in the R & D strategy and the Budapest Declaration was signed by UASTW.
- Definition of input / output criteria for R&D: R & D quality objectives and indicators were developed and published in the R & D strategy. Initial values for the academic year 2016/17 were collected at UAS level as well as for the individual research focusses.
- Measures for the promotion of publications: Since the academic year 2016/17, a UAS-internal Open Access publication fund has been available. In addition, other types of publications, which can not be financed by third-party funding projects, have been selectively supported. A central recording of all publications by UAS members is available.

Challenges and Measures 2017-2020

Principle(s)	Action	Who is Responsible?	By When?	Possible Indicators
Research freedom; ethical principles; professional responsibility; professional attitude; good practice in research	Definition and implementation of a policy concerning research freedom and dual use	Head of Research Organization	31.8.2018	Policy is adopted and published/communicated within the UAS, as well as considered in the coordination of projects and in the further education measures for researchers
Dissemination and exploitation of results; public engagement	Improvement of the framework conditions for dissemination activities (publications, social dialogue, use)	Head of Research Organization	31.8.2019	Different ways of dissemination are intensified, the financing possibilities and framework conditions on the part of the UAS are improved and clearly regulated, the monitoring is extended
Evaluation / appraisal system	Definition of criteria for development along the career path	Head of Research Organization	28.2.2020	Criteria have been defined in reference to the career path and are considered when recruiting or selecting and in career development

II. Recruitment

Since the beginning of 2016 the UASTW has had a career path available that includes all career levels for R & D staff.

At the UASTW, R&D employees are full-time or part-time, on temporary or permanent contracts. Sometimes they may also be students, especially from Master's degree programs, who begin as junior researchers. The main focus may be on R&D or on teaching and the proportion is then determined individually. Furthermore, junior researchers can also be actively employed in teaching. Austrian universities of applied sciences do not have the right to award doctorates and dissertations are written in cooperation with general universities in Austria and abroad. The central focus is on a mix of experience and qualifications, which also are the basis of the formal criteria required for a UAS professorship.

The UASTW has the goal of a more equitable gender balance in all areas enshrined in its strategy. One particular goal is to increase significantly the proportion of women in leading positions in the scientific field (teaching and R & D personnel, as well as degree program directors and heads of departments), and for this purpose appropriate measures are being continuously implemented.

The vast majority of the new positions for R&D staff (project based) are advertised both internally and externally, as defined in the R&D career paths. In view of the increase in the proportion of women among the R&D personnel, specific channels, which directly address women, are also being used. If required, channels for students will also be used. The recruitment process for R&D staff follows clear procedures.

An appointment committee convenes for the posts for which it is defined:

In some cases, a commission is convened either when provided for by the statutes (e.g. degree program directors) or if so required by the funding authority (e.g. endowed professorships).

The same applies for Diversity Management, whose overarching objectives are anchored in the strategy and are tracked in detail in action plans. Since 2013/14 the UASTW has been examined according to the University and Family audit. In addition, the UASTW has been a member of the Dual Career Service network since 2015/16 and Euraxess Contact Point in Austria since 2016/17.

Overview implementation plan 2015-2017

- Optimization of the hiring process and establishing criteria for tenders: The recruitment process for research personnel has been reviewed, adapted and re-published. Criteria and requirements were defined in the R & D career path as well as in the personnel development concept of the UASTW.
- Guidelines for Appeals Commissions: These were added to the R & D career path as a supplement to the Statutes and further specified in the personnel development concept of the UASTW.

Challenges and Measures 2017-2020

Principle(s)	Action	Who is Responsible?	By When?	Possible Indicators
OTM-R toolkit and re-recommendations	Formulation and publication of an institutional OTM-R Policy	Head of Research Organization and Head of HR Services	28.2.2019	OTM-R Policy is agreed and published (externally), and fulfils the criteria of the OTM-R Toolkit and Recommendations
OTM-R toolkit and re-recommendations	Monitoring of quality OTM-R	Head of Quality Assurance and Degree Program Development	28.2.2020	A quality monitoring system is available
OTM-R toolkit and re-recommendations	Implementation of the organizational aspects of the OTM-R Policy	Head of Research Organization	28.2.2020	Organizational adjustments that are required in various procedures due to the OTM-R Policy adopted are implemented.

III. Working conditions and social security

The UASTW employs R&D staff under both temporary as well as permanent employment contracts, full and part-time. The framework conditions for R&D employees are dependent on financing in externally funded projects. Since the adoption of the R&D strategy, more permanent R&D employees have been hired in the R&D research focusses. The employment contracts can be individual solutions from a mix consisting of teaching, R&D and management.

The general criteria and designations were fixed in the R & D career path at the beginning of 2016.

Conditions that have been defined for those on fixed contracts also apply to R&D employees, e.g. employment agreements, pension plans, salary adjustments, as well as equipment and technical infrastructure, internal communication channels and various in-service training opportunities

In principle, R&D employees work in their respective department, where the head of the department is responsible for the personnel, also in terms of staff development, in-service training, staff appraisals, teaching assignments and the like. The planning and the deployment in R&D projects is carried out in coordination between those responsible for R&D research focusses and the department heads.

The UASTW has defined regulations for Intellectual Property Rights, in particular relating to inventions in service and works contracts (as well as in the training contract for students). The preemptive rights of the University of Applied Sciences, as well as the claim of the employees for remuneration, is regulated, and corresponding processes have been implemented. Issues relating to copyright law are explained in a guide. Furthermore, the regulations in PIL relating to students who work in R&D projects, yet are not employed, were specifically defined. The institutional orientation in questions of open access and open source software are also explicitly defined for employees.

In accordance with the statutes, teaching and R&D employees on a permanent contract are given passive and active voting rights for the appropriate curia in the council, regardless of whether their contract of service is limited or unlimited. In accordance with the statutes, the Council is tasked with establishing committees, commissions and working groups in which teaching and R&D personnel are appointed (e.g. in appointments committees).

Overview Implementation Plan 2015-2017

- Definition of career paths, names and criteria for R&D positions: A comprehensive R & D career path was adopted and communicated in early 2016, binding for all new R & D staff since March 2016.
- Internal support for dissertations: Since 2015 an internship program for dissertations by R & D staff has been implemented at UASTW. The criteria and modalities of the annual tenders are published internally in the UAS. In the summer semester 2017, 8 people are benefiting from this opportunity, and for the first time in 2016/17 also 2 female researchers. The tender for the academic year 2017/18 has already been published.

- Definition of sabbatical and parental leave models: These definitions are currently being drawn up, delayed by the wait for a new law which came into force in Austria on 1 March 2017. They will be published in the form of internal guidelines respectively best-practice-models by the end of August 2017. The main points are already defined in the personnel development concept of the UASTW and are continually being further developed within the framework of the University and Family Audit (e.g. with regard to paternity leave).
- Measures for support for publications: See point “I. Ethical and Professional Aspects”.

Challenges and Measures 2017-2020

Principle(s)	Action	Who is Responsible?	By When?	Possible Indicators
Recognition of the profession; research environment; working conditions; stability and permanence of employment;	Support for the job security of researchers (-> permanent contracts)	Head of Research Organization	28.2.2020	Proportion of researchers on a permanent contract has increased.
Recognition of the profession; research environment; working conditions; stability and permanence of employment;	Improvement of organizational framework for the recording of work time by researchers	Head of Research Organization and Head of HR Services	28.2.2020	Process of recording work time has become more efficient and more transparent for researchers
Recognition of the profession; research environment; working conditions; funding and salaries	Transparent design of the framework conditions (-> standardized employment contract and designation) and adjustment to career path; assessment and further development of the career path	Head of Research Organization	28.2.2020	More standardized employment contracts for researchers. More standardized designation for researchers in line with the career path.
Complaints / Appeals	Establishment of an ombudsman's office for researchers	Management and Rectorate	31.8.2018	The ombudsman's office and role is defined and introduced

IV. Training

R&D activities and personnel development for R&D staff will take place in the departments. Those responsible for the research focusses take charge of the project and staff scheduling with respect to the respective research focus. The personal care and supervision of R&D employees is assumed by the department heads or delegated to senior/key researchers. This group of people also carries out the annual staff appraisal with the R&D employees.

Interdisciplinary in-service training is organized by the central service sector in-service training. For this purpose, annual inputs and suggestions from senior staff (including the staff appraisals), from other service sectors and from staff surveys are translated into a program of in-service training that is open to all employees irrespective of their function, grading and type of employment.

In addition, there are targeted in-service training opportunities that are also aimed at freelance employees. The costs are borne by the training service sector together with the respective organizational units. Data on the training available and to what extent they are taken advantage of is centrally available and is regularly evaluated. Subject-specific in-service training is determined and financed by departments.

Participation in conferences, seminars, workshops and internal in-service training is also possible for R&D employees with fixed-term contracts, within consideration of the budgetary framework. There is also the opportunity for external students to participate in courses at the UASTW.

Since the academic year 2016/17, there have been special training courses for the researchers' target group, as well as an annual two-day R & D retreat, following the model of the didactics retreats already held at the UASTW.

Overview implementation plan 2015-2017

- Development of the in-service training program with targeted training for specific groups of R&D employees: Implemented since 2016/17, consisting on the one hand of short seminars on standard topics and, on the other, an annual 2-day retreat for researchers on current topics (e.g. Open Science).
- Internal funding instruments for external in-service training and conference visits for R&D employees: Information on this was published centrally (UAS internally) in 2016.

Challenges and Measures 2017-2020

Principle(s)	Action	Who is Responsible?	By When?	Possible Indicators
Continuing professional development	Further development of the further education portfolio for and networking between researchers	Head of in-service training	31.8.2018	A systematic program of further education opportunities in various formats for researchers, coordinated with the career path, is defined and implemented. Its further development is systematically secured
Relation with supervisors; supervision and managerial duties	Establishing a clear allocation of young/new researchers in the departments and support in personnel development	Head of HR Services and Head of Research Organization	31.8.2019	Support opportunities for researchers in supervisory roles is available (also in further education). The use of the staff appraisal as an instrument with researchers is being surveyed and has increased
Continuing professional development	Development of institutional dissertation cooperation in at least two different research areas	Rectorate and Head of Research Organization	28.2.2020	Dissertation cooperations with clear framework conditions are defined and accessible for researchers