

OeAW - Discovering the future

As a central non-university institution for science and research, the **Austrian Academy of Sciences - OeAW** has the task of "**promoting science in every respect**". Founded in 1847 as a learned society, it now has over 760 members and around 1,800 employees dedicated to innovative basic research, interdisciplinary knowledge exchange and the dissemination of new insights. The OeAW initiates and maintains partnerships worldwide and represents Austria in international scientific organizations; it cooperates with numerous institutions in the scientific field in order to actively **shape the research landscape**.

Principal Researcher (f/m/x) – Advancing Acoustics with AI/ML

Job ID: ISF140PR226

The Acoustics Research Institute (ARI) of the Austrian Academy of Sciences (ÖAW), Austria's leading non-university research and science institution, is offering a position as

Principal Researcher (f/m/x) – Advancing Acoustics with AI/ML

(Full-time employee)

to establish a new, independent research group in Vienna. The position is tied to the call Vienna Research Groups for Young Investigators 2027 – "AI/ML for Vienna" of the Vienna Science and Technology Fund (WWTF), Track 2 "Advancing disciplines through AI/ML".

About ARI

ARI conducts application-oriented basic research in acoustics. It is based on dynamic, team-oriented, multidisciplinary research. ARI's strategy of "excellence through synergy" supports the cooperation between disciplines and covers a wide range of fundamental research related to acoustics. It brings together researchers from a lot of different fields, like physics, biology, and linguistics: we study how sound is generated, how it propagates and how it is analysed, perceived and processed by humans and animals. This work rests on methodological research in mathematics, numerics, signal processing and machine learning. ARI's research clusters are Biology, Hearing, Mathematics, Numerics and Phonetics. While ARI works a lot with machine learning, and an ML team supports the cooperative exchange between the clusters, there is yet no dedicated machine learning / AI research group.

Since late 2023, the institute has been located in the Postsparkasse building in central Vienna, with twelve laboratory rooms. ARI is committed to Open Science and reproducible research and maintains widely used open-source software such as the Large Time-Frequency Analysis Toolbox (LTFAT) and the Auditory Modelling Toolbox (AMT).

Your Tasks

We are looking for a researcher who develops new AI/ML concepts or methods to answer open questions in an acoustics-related discipline. The group may be located in any of ARI's research areas, for example:

- Audio and music: analysis and synthesis of sound
- Bioacoustics: animal communication, vocal behaviour, passive acoustic monitoring
- Computational and physical acoustics: sound propagation, numerical simulation, physics-informed learning
- Hearing: psychoacoustics, spatial hearing, hearing devices and cochlear implants, auditory modelling
- Phonetics and speech: speech production and perception, variation, voice

But new fields or disciplines are equally welcome, provided they fit ARI's multidisciplinary and cooperative concept, including exemplary acoustic metamaterials, architectural acoustics,

ultrasound, or others.
In line with the WWTF call, the proposed research must make genuine methodological contributions to the respective discipline through the development or advancement of AI/ML tools and concepts. Applying existing methods is not sufficient.

As a group leader at ARI you will:

- Build and lead an independent research group and develop a long-term research programme in the foundations of AI/ML
- Supervise PhD students independently, via one of our university partners (e.g. University of Vienna, TU Wien, Interdisciplinary Transformation University Austria, ….)
- Collaborate with ARI's research areas
- Acquire further third-party funding over the course of the project

Your Profile

- PhD in a field related to the project with a strong AI/ML component, awarded on or after 2 March 2019 (care duties may extend this period by up to four years)
- Currently based outside Austria: employed at a research institution abroad for at least two of the last three years before 2 March 2027, and no employment contract with an Austrian institution from 2 December 2026 onwards (WWTF eligibility rules; Austrian citizens returning to Austria are welcome)
- An outstanding publication record in leading AI/ML venues
- The ambition to shape a research field, and the potential to lead a group, its employees, and manage projects
- Eagerness for interdisciplinary collaboration, especially with mathematics, acoustics and other disciplines
- Excellent command of English

Our Offer

- A position as OeAW Principal Researcher (career stage R3), leading an independent group – comparable to a tenure-track assistant professorship
- A tenure option: after a successful tenure assessment, appointment to a permanent position as OeAW Distinguished Researcher

- No teaching obligations, with the opportunity to teach and to supervise Master's and PhD students via our university partners.
- The researcher will lead a work group and will be part of the steering committee of ARI – with the potential to guide and decide the strategic developments
- Access to the CLIP high-performance computing cluster, ARI's laboratories and datasets
- Office space, IT and software-development support, and administrative and grant-management support
- A vibrant, multidisciplinary environment in the centre of Vienna, with close links to Vienna's AI/ML community
- Flexible time arrangement
- Opportunity to work independently and develop personally

The minimum annual gross salary for this position is EUR 77.952,56 (full-time based, effective from January 1, 2027), in accordance with the collective agreement of the Austrian Academy of Sciences (ÖAW).

Selection procedure and timeline

The procedure has two stages. Please note that the time for preparing the joint WWTF proposal is ***very short***.

1. Application by 6 January 2027 with a project idea (see below).
2. Online interviews with shortlisted candidates in mid-January 2027.
3. Selection by ARI around 20 January 2027. ARI will nominate one or more candidates for the WWTF call.
4. Joint proposal development from late January to early February 2027. The WWTF proposal will build substantially on the candidate's project idea and be developed together with the ARI proponent. A near-final version is due for internal OeAW approval about three weeks before the WWTF deadline. Selected candidates must therefore be able to commit substantial time in this period.
5. Submission to WWTF by 2 March 2027. Online hearings take place in September 2027; the WWTF funding decision is expected in October 2027.
   The position will be offered only if the WWTF grant is awarded. All project ideas are treated confidentially; ideas of candidates who are not selected will not be used by ARI.

How to apply

Please apply online by **6 January 2027 (23:59 CET)**, including

- Cover letter (max. 2 pages): including a short statement of eligibility (date of PhD, current and previous employers with dates). A big part should be dedicated to explaining

the integration and fit with ARI.

- Curriculum vitae (max. 2 pages): including a narrative description of research output and a list of the top 10 selected publications (following the WWTF guidelines and their template)
- Project idea (max. 8 pages): research question and objectives; methodological contribution by AI/ML beyond the state of the art; specific links to ARI and planned collaborations; outline of the group (staff, GANTT chart) (as a basis for the proposal following the WWTF guidelines-> Work Programme)
- Statement on supervision and leadership (max. 1 page)
- Names and contact details of two to three referees

For questions, please contact Peter Balazs | Peter.Balazs@oeaw.ac.at

APPLY NOW

The Austrian Academy of Sciences (OeAW) pursues a non-discriminatory employment policy and values equal opportunities, as well as diversity. Individuals from underrepresented groups are particularly encouraged to apply.

Contact

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