

Job ID: ISF080DOC224

The Acoustics Research Institute ([ARI](#)), an interdisciplinary research institution of the Austrian Academy of Sciences ([OeAW](#)), Austria's leading non-university research facility, is offering a

PHD STUDENT POSITION (F/M/X)

(part-time, 30h per week)

The position is assigned to a WWTF project entitled "Decoding elephant communication with AI" led by Dr. [Angela Stoeger](#), Priv.Doz., Dr. [Peter Balazs](#) and Prof. [Matthias Zeppelzauer](#), FH St. Pölten.

The central research question investigated in this project is: Can we leverage AI to decode elephant communication from large-scale data? Elephants are a socially and spatially flexible species and sound is a crucial mode of communication. Although it is known that elephant calls convey biologically significant information, the diversity of their calls make it difficult to decode and interpret their communication pattern. AI offers potential to analyze communication patterns that can be used to generate novel hypotheses about the biological function of acoustical signals, and may ultimately aid in the design of controlled experiments to verify these hypotheses via synthesized signals. Within this project, biologists, application-oriented mathematicians, and experts in machine learning will closely collaborate. The announced position here will focus on elephant communication pattern from a behavioral and bioacoustics angle.

Your tasks:

- Conduct acoustic and video analysis
- Design and conduct playback experiments in South Africa
- Close interaction with the machine learning team
- Communication of scientific results in scientific publications and at scientific meetings

Your profile:

- Master's degree (or equivalent) in a discipline related behavioural/cognitive biology
- Profound knowledge of written and oral English
- Skills on acoustic recording, acoustic and statistical analysis and data management
- Driving licence
- Experience in field work and experimental design

The position is limited to 3 years. The starting date is flexible between September and October 2024. The successful candidate will be enrolled in the Vienna Doctoral School in Cognition, Behavior and Neuroscience (<https://vds-cobene.univie.ac.at>). The annual gross salary is € 37.773,33 according to the OeAW's collective agreement.

Candidates should send a CV, copies of relevant certificates, and a brief statement describing motivation, personal qualification, and research interests by e-mail (mentioning Job ID: ISF080DOC224) to angela.stoeger-horwath@oeaw.ac.at, who also can be contacted for informal inquiries and questions. The first round of evaluation will start in August 2024.

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.