

Job ID: IWF021PD224

The Space Research Institute ([IWF](#)) of the Austrian Academy of Sciences ([OeAW](#)), Austria's leading non-university research and science institution, is offering a

## POSTDOC POSITION (F/M/X)

### *Cloud Droplets and Redox Pairs in the Venusian Atmosphere*

(full-time, 40h per week)

The successful candidate will be appointed in the FWF Austrian-Czech project “*Redox Disequilibrium in the Clouds of Venus - A Sign of Life?*” and will join the research groups led by Dr. Peter Woitke and Doz.Dr. Helmut Lammer at the Space Research Institute (IWF) in Graz. This project will investigate whether Redox Disequilibrium Pairs (RDPs - H<sub>2</sub>S, NH<sub>3</sub> and PH<sub>3</sub> in combination with O<sub>2</sub> have been detected in the Venus atmosphere) can be produced by photo-processes on the surfaces of acidic cloud particles, as novel experiments by our Czech project partners around Dr. Martin Ferus (Institute of Physical Chemistry in Prague) suggest.

#### Your profile

- The applicant must hold a PhD in Geosciences or Astrophysics.
- The successful candidate is expected to bring know-how and hands-on experience with computational petrology and/or aqueous chemistry.
- Previous experience with chemical modelling of planetary atmospheres.
- Experience with compiled computer languages, including non-python.

#### Your Tasks

- Collect thermo-chemical data and implement aqueous chemistry into the chemical and phase equilibrium code GGchem (Woitke et al. 2018, A&A 614, A1).
- Work with the ARGO code on the Venusian atmosphere (Rimmer et al. 2021, PSJ 2, 133), to include cloud formation and surface chemical processes on cloud particles.
- Collaborate with our Czech and UK colleagues via team meetings and working visits.
- Connect our work to the ESA EnVision Space mission.

The appointment is for a duration of 3 years. The appointment is planned to start in October/November 1<sup>st</sup>, 2024.

We offer an annual gross salary of € 66.501,40 according to the collective agreement of the Austrian Academy of Sciences (OeAW).

A valid application must include (1) a curriculum vitae, (2) a publication list, (3) a research plan - max 2 pages, (4) academic certificates, and (5) names of three referees who agreed on send letters of recommendation. Applications should be sent via email to [cosima.muck@oeaw.ac.at](mailto:cosima.muck@oeaw.ac.at) (mentioning Job ID: IWF021PD224) in a single PDF file. The closing date of applications is **June 15<sup>th</sup>, 2024**. For inquiries, contact Dr. Peter Woitke ([peter.woitke@oeaw.ac.at](mailto:peter.woitke@oeaw.ac.at)).

*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.*