

**283. Job Advertisement – One vacant position for a full-time senior scientist (m/f/d) at the Chair of Physical Chemistry, in the Department General, Analytical and Physical Chemistry –  
Reference ID: 2308WPD**

One vacant position for a full-time senior scientist (m/f/d) at the Chair of Physical Chemistry, in the Department General, Analytical and Physical Chemistry - Start 01. December 2023 in an employment contract limited to six years. Salary Group B1 according to the Uni-KV, monthly minimum salary excl. Szlg.: € 4.351,90 for 40 hours per week (14 x).

**Requirements:**

- Completed academic degree (Dr./PhD) from a natural scientific or technical university (e.g. chemistry or physics)
- Very good command of German and English

**Desired additional qualifications:**

- Independent scientific working
- Very good knowledge in the field of characterization of heterogeneous catalyst systems (z.B. XRD, SEM, BET, XPS, etc.)
- Very good knowledge in the field of chemical energy conversion and catalysis, e.g. the utilization and conversion of CO<sub>2</sub> into renewable raw materials and fuels.
- Relevant experience in the field of heterogenization of homogeneous catalyst systems on carrier materials, also at high temperatures (e.g. loading of carriers with catalysts).- Experience in the field of organometallic/organic synthesis of catalysts
- Experience in organizing, holding and supervising student laboratories. Supervision of bachelor and master theses
- Experience in the characterization of organic compounds using NMR spectroscopy
- Ability to work and communicate in a team

**Job Profile:**

- Synthesis of novel complex oxides (e.g. perovskites, spinells, ...) for chemical energy conversion, especially the conversion of CO<sub>2</sub> into value added products or the generation of H<sub>2</sub>.
- Synthesis of novel supported catalysts on the base of organic/metalorganic routes.
- Structure and catalytic characterization of fundamental materials properties by in-situ (operando) spectroscopic methods (X-ray Photoelectron Spectroscopy or X-ray Diffraction)
- Investigation of metal-support interactions and the resulting influence on the catalytic properties of the materials.
- Investigation of nanoparticle exsolution and the influence of this process on the (electro)catalytic properties of the materials
- Compiling of 3<sup>rd</sup> party funding proposals
- Investigations to the electrochemical promotion of catalytic reactions and the influence of polarization on the surface chemistry.
- Future development and improvement of catalytic testing equipment
- Assisting in compiling scientific publications
- Participation in teaching (laboratory exercises) and research
- Assisting in examinations

- Assisting in the supervision of the scientific work of students
- Involvement in the administration of the university

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**End of Application:28.09.2023**

The Montanuniversitaet Leoben intends to increase the number of women on its faculty and therefore specifically invites applications by women. Among equally qualified applicants women will receive preferential consideration.

For the application please use the online form on the homepage: <http://www.unileoben.ac.at/jobs>

Der Rektor:  
Univ.-Prof. Dipl.-Ing. Dr.techn. Dr.h.c. Wilfried Eichlseder

**Impressum und Offenlegung (gemäß MedienG):**

Medieninhaber, Herausgeber und Hersteller: Montanuniversität Leoben, Franz Josef-Straße 18, A-8700 Leoben.  
Vertretungsbefugtes Organ des Medieninhabers: Rektor Univ.-Prof. Dipl.-Ing. Dr. Dr.h.c. Wilfried Eichlseder. Verlags- und Herstellungsort: Leoben. Anschrift der Redaktion: Zentrale Dienste der Montanuniversität Leoben, Franz-Josef-Straße 18, A-8700 Leoben.  
Unternehmensgegenstand: Erfüllung von Aufgaben gemäß § 3 Universitätsgesetz 2002, BGBl. I Nr. 120/2002 in der jeweils geltenden Fassung. Art und Höhe der Beteiligung: Eigentum 100%. Grundlegende Richtung: Information der Öffentlichkeit in Angelegenheiten der Forschung und Lehre sowie der Organisation und Verwaltung der Montanuniversität Leoben sowie Veröffentlichung von Informationen nach § 20 Abs. 6 Universitätsgesetz 2002.