The Leibniz-Institut für Analytische Wissenschaften - ISAS - e. V. is a research institute dedicated to
the development and improvement of analytical methods and tools for health research and related
fields. The ISAS is a member of the Leibniz Association and is publicly funded by the Federal Republic of
Germany and its federal states.

In the group Bioimaging (Department of Biospectroscopy) in Dortmund we invite applications for a

**PhD position (m/f/d)**

Your job

In this DFG-funded project with a cell biological focus, the biological mode of action of bimetallic ultra-
small nanoparticles (1-2nm) will be investigated. Such ultra-small nanoparticles are particularly mobile
in cells and have a size comparable to biological macromolecules such as proteins. Their biological
pathways and effects are insufficiently studied and understood. The focus of the project is on the
mechanistic analysis such as the uptake mechanisms (e.g. endocytosis or passive transport) of ultra-
small bimetallic nanoparticles in cells and bacteria as well as the cell activation, and the analysis of cell
death. The research is carried out in an interdisciplinary collaboration with chemists and physicists.
Your tasks will include cell culture techniques (cell lines and primary cells), microbiological analyses
(MHC, MBC, etc.), molecular biological work (ELISA, H-NMR, RT-PCR, etc.) and microscopic analyses as
well as flow cytometric analyses.

Your profile

- Masters, Diploma or equivalent degree in natural sciences, preferably in biology or
biochemistry, is required
- Practical experience in cell biology, microbiological techniques, stem cell research and
fluorescence microscopic methods such as confocal laser scanning microscopy is an
advantage.
- Willingness for interdisciplinary scientific work, ability to work in a team, open-mindedness,
commitment as well as written and spoken English are required.
- Confident handling of Microsoft Office (excel, powerpoint etc.) and image processing programs
(e.g. CoralDraw) is required.

We offer

- A clear research topic as well as multifold training and support for PhD students in framework
of ISAS and the Leibniz association.
- Training and scientific development opportunities in an international environment and an
excellent working atmosphere in a very dynamic and professional team
• Extensive state-of-the-art equipment and infrastructure in various analytical methods
• The opportunity to present your data on international conferences and participate in workshops

Non-residents who apply for this job will receive help from the institute to find accommodation and to handle authorities. Applications from disabled applicants are welcome. ISAS supports the principle of equal opportunity for all employees and would therefore particularly encourage women to apply.

The salary will be according to the German TV. The part-time position (65%) is offered for 3 years. The position is available immediately. The time limitation of the contract is based on the Wissenschaftszeitvertragsgesetz (WissZeitVG).

ISAS collects and processes the personal data of its applicants in accordance with European and German legal regulations. Further information on data protection and the processing of personal data can be found at www.isas.de/datenschutzhinweise-fuer-bewerberinnen-und-bewerber.

Closing date for application is 16th of July 2021. Complete applications with an extended curriculum vitae with full publication list, a cover letter, copies of your diplomas, a 2-page research statement that clearly describes your research profile and interests in the position as well as your expertise and methodological competencies, names and contact information of 2 references, if available, should be submitted (quoting the reference number 15/2021 in the subject header) as a single pdf document to personal@isas.de. Informal inquiries are welcome and can be submitted to the human resources department (personal@isas.de). For further information on the institute please see: http://www.isas.de.