

## Job offer No. 2021\_40

The Leibniz Centre for Photonics in Infection Research (LPI, <http://lpi-jena.de>) is a project of the National Roadmap for Research Infrastructures of the Federal Ministry of Education and Research (BMBF). As one of the supporting institutions of the LPI, the Leibniz Institute of Photonic Technologies (Leibniz-IPHT, <https://www.leibniz-ipht.de/>) is **looking to recruit a**

# PhD candidate or Postdoctoral Research Assistant (f/m/d)

The position of **PhD candidate is part-time (50%)** and **limited for three years**.

The position of **Postdoctoral Research Assistant is full-time** and **limited for two years**.

An extension might be sought upon suitability, but depends on availability of external, project-specific funding.

The LPI is being established by a consortium of four supporting institutions ([Leibniz-HKI](#), [Leibniz-IPHT](#), [FSU Jena](#), [Universitätsklinikum Jena](#)) In future, it will combine photonic technologies with infection research and thus contribute to the development of new methods for diagnosis, monitoring and therapy for human medicine. Research results will be transferred to clinical practice along the entire value chain. The LPI's research programme is divided into basic technologies, in which the four supporting institutions jointly address various scientific and technological focal points in an interdisciplinary approach. As a user-open translational infrastructure, LPI makes newly developed demonstrators and methods available to external partners within the framework of joint projects. The position to be filled comprises the development of advanced fibre laser systems for direct Mid-IR generation, particularly, operating in ultrashort pulse regime.

## Your tasks

- Development of fibre lasers systems operating in Mid-IR wavelength range (3-5  $\mu\text{m}$ )
- Enabling ultrashort pulse generation and characterisation
- Refining underlying nonlinear phenomena and fibre technologies
- Test the developed laser systems for spectroscopy instrument applied for diagnostics

## We expect

- **For PhD candidate:** Very good Master's degree (or equivalent) in Optical Engineering/ Electrical engineering / Laser Physics / Applied Physics / Engineering Physics or similar
- **For Postdoctoral Research Assistant:** PhD (or equivalent) in Optical Engineering/ Electrical engineering / Laser Physics / Applied Physics / Engineering Physics or similar
- For both positions:**
  - Experience in experimental work with fibre optic systems, and particularly, in fibre lasers
  - Sound knowledge in the field of ultrashort pulse generation and characterisation
  - A track record in scientific publications in the field of ultrafast lasers is desirable
  - Fluent English (spoken and written)
  - Highly motivated, team player, creative personality willing to learn

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## We also appreciate

- Hands on experience in fibre laser development
- Knowledge of standard computational techniques in Matlab or Python

## We offer

- An open welcoming culture
- A family-friendly atmosphere with work-life balance as a central concern
- Working in an interdisciplinary environment
- Promotion and further development for employees

Salary is in accordance with the regulations of the TV-L. We are a modern, internationally oriented research institute. The compatibility of work and family is one of our main concerns. We strive to increase diversity. Severely disabled people will be given preference if they are equally qualified.

## Further information:

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## Application:

Please send your application electronically **with Code 2021\_40** as one pdf file via Email **until January 21<sup>th</sup>, 2022** (including your CV, personal motivation statement on how your knowledge and experience will benefit the project, contact information of two professional references, publication list and university interim and final certificates) to:

**Leibniz-Institute of Photonic Technology**  
**Human Resources**  
**Albert-Einstein-Straße 9, 07745 Jena / Germany**  
**E-Mail: [Personal\\_Abtl@leibniz-ipht.de](mailto:Personal_Abtl@leibniz-ipht.de)**

### Privacy Notice:

By sending us your application documents, you consent to the processing of your personal data in connection with the application process. This consent can be revoked in writing or electronically at any time without giving reasons. Please note that revocation of consent may mean that the application can no longer be considered in the current procedure.

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