





# **Leibniz Institute of Photonic Technology (IPHT)**



# Academic offer by Departments or Faculties (undergraduate and postgraduate programs) - I

## The Faculty of Physics and Astronomy


- M.Sc. Physics
- M.Sc. Photonics
- M.Sc. Medical Photonics
- B.Sc. Physics
- B. Sc. Material Science
- M.Sc. Material Science



# Academic offer by Departments or Faculties (undergraduate and postgraduate programs) - II

The Faculty for Chemistry and Earth Sciences:

- Chemistry B. Sc. / Chemistry M. Sc.
- Chemical Biology M. Sc.
- Environmental Chemistry M. Sc.
- Geography B. Sc. / Geography M. Sc.
- Geo IT M. Sc.
- Geoscience B.Sc. / Geoscience M.Sc.
- Biogeoscience B. Sc. / Biogeoscience M. Sc.
- Geophysics M.Sc.
- Mineralogy M.Sc.
- M.Sc. Material Science



# Academic offer by Departments or Faculties (undergraduate and postgraduate programs) - III

## The Faculty of Physics and Astronomy

- M.Sc. Physics
- M.Sc. Photonics
- M.Sc. Medical Photonics
- B.Sc. Physics
- B. Sc. Material Science
- M.Sc. Material Science

# Research centers or institutes - I

Leibniz Institute of Photonic Technology -IPHT:

- <https://www.leibniz-ipht.de/en.htm>

Institute of Physical Chemistry – Friedrich Schiller University Jena:

- [https://www.uni-jena.de/en/Institute\\_of\\_Physical\\_Chemistry-EGOTEC-bbu.html](https://www.uni-jena.de/en/Institute_of_Physical_Chemistry-EGOTEC-bbu.html)

Fritz Lipmann Institute:

- <http://www.leibniz-fli.de/>

# Research centers or institutes - II

Fraunhofer- Institute of Applied Optics and Precision Engineering:

- <https://www.iof.fraunhofer.de>

Thüringian State Observatory Tautenburg:

- <http://www.tls-tautenburg.de/TLS/index.php?id=2>

University of Applied Sciences Jena:

- <https://www.eah-jena.de/de-de>

# Research centers or institutes - III

Helmholtz-Institute Jena:

- [https://www.helmholtz.de/en/about\\_us/](https://www.helmholtz.de/en/about_us/)

Medical Physics at the University Clinic Jena:

- <http://www.mrt.uni-jena.de/>

Deutsches Optisches Museum:

- <https://www.deutsches-optisches-museum.de/en/>



# Topics of interest to develop research projects - I

## Research Profile of Leibniz IPHT

- Photonics for Life: The main focus of our work is optical solutions to problems in the fields of medicine and the life and environmental sciences. It offers photonic process solutions that are designed together with the fiber optics and photonic detection research focuses specifically for system solutions.
- Research at IPHT is carried out in seven research departments and four research groups. The research department heads are generally appointed professors with the Friedrich Schiller University of Jena or are habilitated adjunct professors.



# Topics of interest to develop research projects - II

## Research Departments:

- Nanobiophotonics (plasmonic effects on nanoparticles and their application in resolving health and environmental issues and microfluidics)
- Nanoscopy ( topics regarding fundamental aspects of plasmon-based near field spectroscopy and plasmon-based substrate-probe interaction and biopolymers)
- Functional Interfaces (Ultrafast Spectroscopy, Semiconductor Nanostructures, Photovoltaic Systems)
- Microscopy (Biomedical Imaging)
- Research Groups: Magnetometry, Fiber Sensors, Clinical Spectroscopic Diagnostics, Nanooptics

# Topics of interest to develop research projects - III

## Research Departments:

- Spectroscopy and Imaging (Molecular Imaging, Raman and Infrared histopathology, Sensors systems, Fiber spectroscopic sensors, Statistical modelling and image analysis)
- Fiber Optics ( Optical fiber technology, Active fiber modules, passive fiber modules)
- Quantum Detection (Radiometry, Integrated thermoelectric and micromechanical technologies, Micro and Nanotechnology, Biopolarisation)



# Academic mobility programs with Latin America - Colombia for students, professors, researchers and staff

ERANet-LAC:

- <https://www.eucelac-platform.eu>

# Scholarship Program for international students - I

ASP Scholarships from the Free State of Thuringia:

- [https://www.asp.uni-jena.de/Master\\_s+Degree+Programs/M\\_Sc\\_+Photonics/Scholarships.html](https://www.asp.uni-jena.de/Master_s+Degree+Programs/M_Sc_+Photonics/Scholarships.html)

German scholarships –Deutschlandstipendien

- <https://www.deutschlandstipendium.uni-jena.de/en/>

ELectronic Research Funding Information System

- [http://www.elfi.info/e\\_index.php](http://www.elfi.info/e_index.php)

# Scholarship Program for international students - II

The German Academic Exchange Service – DAAD:

- <https://www.daad.de/deutschland/en>

The Global Study Awards:

- [https://www.mastersportal.com/pages/the-global-study-awards/#fflt:SP\\_GSA1](https://www.mastersportal.com/pages/the-global-study-awards/#fflt:SP_GSA1)

SPIE Student scholarship:

- <https://spie.org/membership/student-members/scholarships?SSO=1>