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| <p align="center">Peter the Great St. Petersburg Polytechnic University</p>  | <p align="center">Leibniz University Hannover</p>  |
| <p align="center">Institute of Physics, Nanotechnology and Telecommunications</p> | <p align="center">Institute of Quantum Optics</p> |
| <p align="center">Prof. Dr. Sci. Victor Petrov Deputy Director of the Institute of Physics, Nanotechnology and Telecommunications Head of Department of Quantum Electronics</p> | <p align="center">Prof. Dr. Boris Chichkov Chair of Nanoengineering</p> |
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BRIEF DESCRIPTION OF THE UNIT / RESEARCH GROUP

The members of our research group are experts in the field of laser optics, optical holography, optical and fiber-optical interferometry and electro-optical materials. The main areas of our activities are:

- High-sensitive dynamic optical interferometers
- Fiber-optic polarization interferometers
- Optical sensors based on Bragg gratings
- Optical sensors based on different types of interferometers
- Optical sensors based on diffuse reflectance polarimetry
- Acousto-optical systems for 1- and 2-D patterns formation
 - Optical sensing for biomedical and industrial applications
 - Nanomechanics

WHAT WE OFFER / PROJECT DESCRIPTION

We offer applied research in co-operation with an industrial company on both the basis of contract research and public funding within the following fields of technology:

1. A high-precision optical sensor for measuring of alternative current without galvanic connection.
2. A high-precision optical sensor for measuring of high-voltage without galvanic connection.

KEYWORDS

Interferometry, fiber-optic sensors, electric field and current measurements.

COLLABORATIONS SOUGHT

Research & Development, Technical Co-operation, etc.