

## **Conference:**

# **Terahertz Optics and Biophotonics III**

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**The main goal** of the Conference covers recent developments in terahertz science and technology for biomedical applications and its further advances and possibilities. The main topics will cover fundamental and applied aspects of this area, such as computational and experimental problems of terahertz technology, THz spectroscopy and imaging systems for medical diagnosis and exploration of biological tissue samples, development and fabrication of terahertz optical and electronic components, interaction of terahertz radiation with living tissues and cells. Special attention will be paid to application of terahertz technology in noninvasive, least invasive and intraoperative diagnosis of malignancies.

Authors are invited to publish their papers in special sections of peer-reviewed journals: Optical engineering (Special Section "Advances in Terahertz and Infrared Optoelectronics") and Journal of Biomedical Optics

(Special Section "Advances in Terahertz Biomedical Science and Applications").

**Topics:**

- Fundamental problems of terahertz sources and detectors;
- Terahertz materials and optical components;
- Terahertz plasmonic devices and systems;
- Terahertz waveguides and fiber optics technology;
- Interaction of terahertz radiation with biological and chemical objects;
- Fundamental and applied problems of THz-radiation–tissue interactions;
- Terahertz in vivo and in vitro spectroscopy of biomedical samples;
- High-resolution terahertz spectroscopy and imaging;
- Terahertz technologies for medical diagnosis;
- Applications of THz technology in regenerative medicine and reconstructive plastic surgery