

# ***Novel Optical Instrumentation for Biomedical Applications IV***

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**I. Alex Vitkin**

*Editors*

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# Contents

- ix *Conference Committee*  
xi Introduction

---

## ADVANCED IMAGING AND SPECTROSCOPY I

---

- 7371 02 **Three-dimensional speckle holography of cellular motion inside tissue** [7371-58]  
D. D. Nolte, J. Turek, Purdue Univ. (United States)
- 7371 04 **Optical tomography by digital holographic microscopy** [7371-09]  
N. Pavillon, J. Kühn, F. Charrière, C. Depeursinge, Advanced Photonics Lab., Ecole Polytechnique Fédérale de Lausanne (Switzerland)
- 7371 06 **Turbid polarimetry for tissue characterization** [7371-22]  
M. F. G. Wood, N. Ghosh, M. A. Wallenburg, E. H. Moriyama, Ontario Cancer Institute, Univ. of Toronto (Canada); S.-H. Li, R. D. Weisel, Toronto General Research Institute, Canada and Toronto General Hospital (Canada); B. C. Wilson, Ontario Cancer Institute, Univ. of Toronto (Canada); R.-K. Li, Toronto General Research Institute, Canada and Toronto General Hospital (Canada); I. A. Vitkin, Ontario Cancer Institute, Univ. of Toronto (Canada)

---

## ADVANCED IMAGING AND SPECTROSCOPY II

---

- 7371 08 **Fiber bundle based fluorescence tomography system for human breast imaging** [7371-48]  
Y. Lin, O. Nalcioglu, G. Gulsen, Ctr. for Functional Onco-Imaging, Univ. of California, Irvine (United States)
- 7371 0A **Time-resolved optical stratigraphy in turbid media** [7371-16]  
L. Spinelli, Istituto di Fotonica e Nanotecnologie, CNR (Italy); A. Pifferi, Istituto di Fotonica e Nanotecnologie, CNR (Italy), Politecnico di Milano (Italy), and ULTRAS-INFM-CNR, National Lab. for Ultrafast and Ultraintense Optical Science (Italy); D. Contini, Politecnico di Milano (Italy); R. Cubeddu, Istituto di Fotonica e Nanotecnologie, CNR (Italy), Politecnico di Milano (Italy), and ULTRAS-INFM-CNR, National Lab. for Ultrafast and Ultraintense Optical Science (Italy); A. Torricelli, Politecnico di Milano (Italy)

---

## TISSUE AND SPECIMEN IMAGING I

---

- 7371 0C **A safe, low-cost, and portable instrumentation for bedside time-resolved picosecond near infrared spectroscopy** [7371-07]  
M. Amouroux, Lab. d'Imagerie et de Neurosciences Cognitives, CNRS, Univ. de Strasbourg (France); W. Uhring, Institut d'Electronique du Solide et des Systèmes, CNRS, Univ. de Strasbourg (France); T. Pebayle, P. Poulet, L. Marlier, Lab. d'Imagerie et de Neurosciences Cognitives, CNRS, Univ. de Strasbourg (France)

- 7371 OF **Laser ablation synthesis route of CdTe colloidal quantum dots for biological applications** [7371-01]  
D. B. Almeida, E. Rodriguez, R. S. Moreira, State Univ. of Campinas (Brazil); S. Agouram, Univ. de Valencia (Spain); L. C. Barbosa, State Univ. of Campinas (Brazil); E. Jimenez, Univ. de Valencia (Spain); C. L. Cesar, State Univ. of Campinas (Brazil)

---

## TISSUE AND SPECIMEN IMAGING II

---

- 7371 OI **Development of an autofluorescent probe for brain cancer: simulations and phantom studies** [7371-20]  
B. Leh, Lab. IMNC (France); Y. Charon, Lab. IMNC (France) and Univ. Paris 7 (France); M.-A. Duval, Lab. IMNC (France) and Univ. d'Evry (France); F. Jean, F. Lefebvre, Lab. IMNC (France); L. Menard, M. H. Vu Thi, Lab. IMNC (France) and Univ. Paris 7 (France); R. Siebert, Lab. IMNC (France)
- 7371 OJ **Non-linear grating-based angular filter for ballistic transillumination** [7371-05]  
P. Vacas-Jacques, Ctr. de Investigaciones en Óptica (Mexico); V. Ryabukho, Saratov State Univ. (Russian Federation); M. Strojnik, Ctr. de Investigaciones en Óptica (Mexico); V. Tuchin, Saratov State Univ. (Russian Federation); G. Paez, Ctr. de Investigaciones en Óptica (Mexico)
- 7371 ON **Enhancement of cancerous/normal tissue contrast via combined white light and fluorescence image processing: initial investigation ex vivo** [7371-49]  
A. A. Kalitzeos, A. Zam, Friedrich-Alexander Univ. of Erlangen-Nuremberg (Germany); F. Stelzle, E. G. Hahn, M. Raithel, Erlangen Univ. Hospital (Germany) and Friedrich-Alexander Univ. of Erlangen-Nuremberg (Germany); A. Douplik, Friedrich-Alexander Univ. of Erlangen-Nuremberg (Germany)
- 7371 OO **Comparison of binning approaches for pulsed photothermal temperature profiling** [7371-12]  
M. Milanič, B. Majaron, Jožef Stefan Institute (Slovenia)

---

## PHOTOACOUSTIC I

---

- 7371 OQ **Photoacoustic NO detection for asthma diagnostics** [7371-52]  
M. Germer, M. Wolff, Hamburg Univ. of Applied Sciences (Germany); H. Harde, Helmut-Schmidt-Univ. (Germany)
- 7371 OR **Photoacoustic generation of X-waves and their application in a dual mode scanning acoustic microscope** [7371-23]  
K. Passler, R. Nuster, S. Gratt, Karl-Franzens-Univ. Graz (Austria); P. Burgholzer, RECENDT, GmbH (Austria); G. Paltauf, Karl-Franzens-Univ. Graz (Austria)

---

## PHOTOACOUSTIC II

---

- 7371 OS **Ultrasound-transmission parameter imaging in a photoacoustic imager** [7371-10]  
J. Jose, MIRA Institute for Biomedical Technology and Technical Medicine, Univ. of Twente (Netherlands); R. Willemink, Univ. of Twente (Netherlands); S. Resink, T. Maalderink, J. C. G. van Hespren, MIRA Institute for Biomedical Technology and Technical Medicine, Univ. of Twente (Netherlands); T. G. van Leeuwen, MIRA Institute for Biomedical Technology and Technical Medicine, Univ. of Twente (Netherlands) and Biomedical Photonics, Academic Medical Ctr., Univ. van Amsterdam (Netherlands); S. Manohar, MIRA Institute for Biomedical Technology and Technical Medicine, Univ. of Twente (Netherlands)
- 7371 OT **Fiber-based detectors for photoacoustic imaging** [7371-17]  
H. Grün, T. Berer, RECENDT, Research Ctr. for Non-Destructive Testing GmbH (Austria); R. Nuster, G. Paltauf, Karl-Franzens-Univ. Graz (Austria); P. Burgholzer, RECENDT, Research Ctr. for Non-Destructive Testing GmbH (Austria)
- 7371 OW **Photoacoustic imaging using a conical axicon detector** [7371-06]  
S. Gratt, K. Passler, R. Nuster, G. Paltauf, Karl-Franzens-Univ. Graz (Austria)
- 7371 OX **Photoacoustic microscopy with large integrating optical annular detectors** [7371-15]  
T. Berer, H. Grün, C. Hofer, P. Burgholzer, RECENDT, Research Ctr. for Non-Destructive Testing GmbH (Austria)

---

## LAB ON A CHIP

---

- 7371 10 **Optically modulated rapid electrokinetic patterning for micro and nano particles** [7371-04]  
A. Kumar, S. J. Williams, S. T. Wereley, Purdue Univ. (United States)
- 7371 13 **Optofluidic chip system with integrated fluidically controllable optics** [7371-29]  
M. Schubert, Institut für Photonische Technologien e. V. (Germany); M. Arras, Friedrich-Schiller Univ. Jena (Germany); G. Mayer, T. Henkel, Institut für Photonische Technologien e. V. (Germany)
- 7371 14 **Optically controlled three-dimensional assembly of microfabricated building blocks** [7371-36]  
P. J. Rodrigo, Technical Univ. of Denmark (Denmark); L. Kelemen, Institute of Biophysics, Biological Research Ctr. (Hungary); D. Palima, Technical Univ. of Denmark (Denmark); P. Ormos, Institute of Biophysics, Biological Research Ctr. (Hungary); J. Glückstad, Technical Univ. of Denmark (Denmark)

---

## ENDOSCOPIC TECHNIQUES

---

- 7371 18 **Comparative study of image registration techniques for bladder video-endoscopy** [7371-50]  
A. Ben Hamadou, C. Soussen, W. Blondel, C. Daul, D. Wolf, Ctr. de Recherche en Automatique de Nancy, Nancy Univ., CNRS (France)

- 7371 19 **Design and validation of a bimodal MRI-optics endoluminal probe for colorectal cancer diagnosis** [7371-11]  
A. Ramgolam, R. Sablong, CREATIS-LRMN, CNRS, Univ. Claude Bernard Lyon 1, (France);  
H. Saint-Jalmes, LTSI, Inserm, Univ. de Rennes 1 (France); O. Beuf, CREATIS-LRMN, CNRS, Univ.  
Claude Bernard Lyon 1 (France)
- 7371 1A **Image restoration for video endoscope systems** [7371-31]  
B.-S. Chow, National Sun Yat-Sen Univ. (Taiwan)

---

**POSTER SESSION**

- 7371 1C **Multispectral imaging of the ocular fundus using LED illumination** [7371-47]  
N. L. Everdell, Univ. College London (United Kingdom); I. B. Styles, E. Claridge, Univ. of  
Birmingham (United Kingdom); J. C. Hebden, Univ. College London (United Kingdom);  
A. S. Calcagni, Univ of Birmingham (United Kingdom)
- 7371 1D **Simultaneous imaging of blood flow and hemoglobin concentration change in skin tissue  
using NIR speckle patterns** [7371-26]  
Y. Aizu, T. Hirata, T. Maeda, Muroran Institute of Technology (Japan); I. Nishidate,  
Bio-Applied Systems Engineering, Tokyo Univ. of Agriculture and Technology (Japan);  
N. Yokoi, Asahikawa National College of Technology (Japan)
- 7371 1E **Light collection from fluorescence-based biochips by holographic diffractive optical  
elements** [7371-08]  
P. Macko, M. P. Whelan, Institute for Health and Consumer Protection, European  
Commission (Italy)
- 7371 1F **Infrared signature analysis of the thyroid tumors** [7371-34]  
G. Gavriiloaia, Univ. of Pitesti (Romania); A.-M. Ghemigian, M.-R. Gavriiloaia, Medical and  
Pharmaceutical Univ. of Bucharest (Romania)
- 7371 1G **Light scattering by multiple spheres: solutions of Maxwell theory compared to radiative  
transfer theory** [7371-56]  
F. Voit, J. Schäfer, A. Kienle, ILM, Univ. Ulm (Germany)
- 7371 1H **Exploiting of optical transforms for bacteria evaluation in vitro** [7371-55]  
I. Buzalewicz, K. Wysocka, H. Podbielska, Bio-Optics Group, Institute of Biomedical  
Engineering and Instrumentation, Wroclaw Univ. of Technology (Poland)
- 7371 1I **Polarization selection of two-dimensional phase-inhomogeneous pathologically changed  
biological tissue images** [7371-40]  
S. B. Yermolenko, Y. A. Ushenko, V. I. Istratey, P. V. Ivashko, Chernivtsi National Univ. (Ukraine)
- 7371 1L **Monitoring of epithelium capillary density** [7371-03]  
R. Kanawade, G. Saiko, A. Douplik, Friedrich-Alexander-Univ. Erlangen-Nuremberg  
(Germany)
- 7371 1M **Spectropolarimetry in singular structure biofissure images for diagnostics of their  
pathological changes** [7371-37]  
S. Yermolenko, Y. Ushenko, A. Prydiy, S. Guminetski, Chernivtsi National Univ. (Ukraine);  
I. Gruia, Univ. of Bucharest (Romania)

7371 1P

**Experimental determination of frequency dependent acoustic attenuation for photoacoustic imaging [7371-41]**

J. Bauer-Marschallinger, F. Camacho-Gonzales, T. Berer, H. Grün, P. Burgholzer, RECENDT, Research Center for Non-Destructive Testing (Austria)

*Author Index*





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**Melissa J. Suter**, Wellman Center for Photomedicine, Massachusetts  
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## Introduction

The European Conference on Biomedical Optics (ECBO) was held in Munich, Germany on 14–18 June 2009 and showcased the depth and breadth of worldwide research effort in biophotonics. Its ~500 attendees were treated to seven thematic sub-conferences, with each featuring oral and poster presentations delivered during the ECBO week. Many of the authors also submitted manuscript summaries of these presentations, which were compiled into the present conference proceedings volumes. The one you are currently holding in your hands represents the summary of the Novel Optical Instrumentation for Biomedical Optics (NOIBA) sub-conference.

The NOIBA sessions were characterized by a variety of exciting and emerging biophotonic approaches. As you read this volume, you will discover novel and challenging biophysical studies and technology developments that employ photoacoustic, holographic, coherent, and polarimetric methods, among others. Lab-on-chip research, endoscopic implementations, and advanced imaging and spectroscopy applications are also well represented. The breadth and variety of the research for photonic tissue assessment and manipulation were certainly in evidence during the NOIBA sessions at the conference, and we hope that the present volume conveys some of that excitement. We also encourage you to peruse the other six proceedings volumes of the ECBO 2009 conference, and we look forward to your continuing active participation in the biophotonics field!

**Christian D. Depeursinge**  
**I. Alex Vitkin**

