Dr. Konstantin L. Vodopyanov

The 21st Century World Class Scholar Endowed Chair & Professor of Optics, CREOL, UCF

Contact Information

CREOL, The College of Optics & Photonics, University of Central Florida
4000 Central Florida Blvd. Bldg. 53, Room A113
Orlando, FL 32816-2700
Tel: (407) 823-6818
Email: vodopyanov@creol.ucf.edu
Website: http://mir.creol.ucf.edu

Education

DSci (Habilitation), Prokhorov General Physics Institute, Moscow, 1993
PhD, Lebedev Physical Institute, Moscow, 1983
MS, Moscow Institute of Physics and Technology, 1976

Employment

Univ. Cent. Florida: Endowed Chair & Professor of Optics, 2013 -
Stanford University: Research Professor, 2003 – 2012
Picarro Inc, CA: Director of Mid-IR Systems, 2000-03
INRAD Inc, NJ: Head of Laser Group, 1999-2000
Imperial College London, UK: Lecturer, 1992-98
University of Bayreuth, Germany: Alexander-von-Humboldt Fellow, 1990-92
Moscow Institute of Physics and Technology, Assistant Professor, 1985-90
Prokhorov General Physics Institute: Research Scientist 1983-90

Awards and Honors

Fellow of the American Physical Society (APS), 2010
Fellow of SPIE -International Society for Optical Engineering, 2009
Fellow of the Optical Society of America (OSA), 1998
Fellow of the Institute of Physics (IOP), UK, 1997
Senior member of IEEE, 2008
Royal Society of London, Fellowship, 1992
Alexander von Humboldt Foundation, Fellowship, 1990

Research Interests

Nonlinear optics, laser spectroscopy, biomedical applications of lasers, mid-IR and terahertz-wave generation, broadband IR frequency combs and their spectroscopic applications, nano-IR microscopy.

Teaching

Univ. Central Florida: teaching at graduate level; supervising PhD projects, 2013-
Stanford University: teaching at graduate level, supervising PhD projects, 2003-2012
Imperial College London: teaching at undergrad. and grad. Levels; advising of MSc and PhD students, 1993-98
Moscow Institute of Physics and Technology: undergraduate teaching, supervising MS students 1985-90

Publications

Author and co-author of 5 books and eight book chapters; 350 technical publications including 110 papers in peer-reviewed journals; 70 invited, tutorial, and plenary conference talks, total > 200 communications to scientific meetings; 15 US and UK patents

Professional Contribution

General Chair, Int. Symp. on Photodetection and Imaging (ISPDI), Beijing, China, 2013
Conference Chair, LASE, Photonics West, 2011 - present
General Chair CLEO'2010 and Program Chair CLEO'2008

Organizer, chair, and program committee member of major laser conferences including Advanced Solid State Photonics (ASSP), LASE and OPTO of SPIE Photonics West, Conference on Mid-IR Coherent Sources (MICS).
Teaching short courses at OSA and SPIE conferences, 2008 - present
OSA Fellow Traveling Lecturer: laser science lecture tours in foreign countries, 2003, 2006, and 2010
Science popularization: articles, radio interviews
Laser Focus World's commendation for excellence in technical communications, 2001

Konstantin L. Vodopyanov obtained his MS degree from Moscow Institute of Physics and Technology ("Phys-Tech") and accomplished his PhD and DSc (Habilitation) in the Oscillations Lab. of Lebedev Physical Institute (later General Physics Inst.), led by Nobel Prize winner Alexander Prokhorov. He was an assistant professor at Moscow Phys-Tech (1985-90), Alexander-von-Humboldt Fellow at the University of Bayreuth, Germany (1990-92), and a Royal Society postdoctoral fellow and lecturer at Imperial College, London, UK (1992-98). In 1998, he moved to the United States and became head of the laser group at Inrad, Inc., NJ (1998-2000), and later director of mid-IR systems at Picarro, Inc., CA (2000-2003). His other industry experience includes co-founding and providing technical guidance for several US and European companies. In 2003 he returned to Academia (Stanford University, 2003-2012) and is now a 21st Century Scholar Chair & Professor of Optics at CREOL, College of Optics & Photonics, Univ. Central Florida. Dr. Vodopyanov is a Fellow of the American Physical Society (APS), Optical Society of America (OSA), SPIE - International Society for Optical Engineering, UK Institute of Physics (IOP), and a Senior Member of IEEE. He has 350 technical publications and is member of program committees for several major laser conferences including CLEO (most recent, General Chair in 2010) and Photonics West (Conference Chair). His research interests include nonlinear optics, laser spectroscopy, mid-IR and terahertz-wave generation, ultra broadband frequency combs and their biomedical and standoff sensing applications.