

5th International CONFERENCE on ADVANCED OPTOELECTRONICS and LASERS (CAOL'2010)

September 10 -14, 2010

Sevastopol, Crimea, Ukraine

<http://caol.kture.kharkov.ua>

Deadline for submission of 3 pages camera-ready papers and 50 words abstract indicating address, fax number and e-mail address is May 15, 2010



Organized jointly by:

IEEE Photonics Society Ukraine Chapter
IEEE AP/MTT/ED/AES/GRS/NPS/EMB East Ukraine Joint Chapter
Kharkov National University of Radio Electronics, Ukraine
V.N. Karazin National University, Kharkov, Ukraine
Taurida National V.I.Vernadsky University, Simferopol, Crimea, Ukraine
Institute of Physics, National Academy of Sciences of Ukraine, Kyiv, Ukraine
University of Guanajuato, Mexico
Academy of Sciences of Applied Radio Electronics, Ukraine
Ministry of Education and Science of Ukraine

The 5th International Conference on Advanced Optoelectronics and Lasers (CAOL'2010) will be held in Sevastopol, Crimea, Ukraine, **September 10 - 14, 2010**. CAOL'2010 will provide a forum for experts in a wide area of laser physics and optoelectronics. The previous conferences were successfully provided in 2003, 2005 and 2008 in Crimea, and in 2006 in Guanajuato, Mexico.

Information on the previous international meetings on optoelectronics and lasers can be found in the magazines *IEEE/LEOS Newsletters*: 4-1999, 4-2000, 4-2001, 3-2004 2-2006, 2-2009 and *IEEE Antennas and Propagation Magazine*: 4&5-1998, and 3-2001. The conference will cover wide frontiers in laser physics, nanotechnology, new materials, nonlinear optics and optical communications. Its characteristic feature is a stronger emphasis on the mathematical, physical and technological aspects of the researches, together with a detail analysis of the application problems. The technical program traditionally consists of invited lectures and regular contributed papers.

Conference will be held in collaboration with IEEE/Photonics Society, Regional IEEE Chapters, OSA and SPIE.

CAOL'2010 TOPICS

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| Physics of advanced and novel lasers | Nonlinear optic materials and devices |
| Solid-state, liquid and gas lasers and applications | High-speed optics and photonic links |
| Semiconductor lasers | PBG and photonic crystal devices |
| Laser resonators and beam propagation | Structured fibers and fiber lasers |
| THz generation, detection, guidance and control | Optical communications. Integrated and nonlinear waveguide photonics |
| Laser biomedicine and chemistry | Liquid Crystals in optics and photonics |
| – Nanophotonics, plasmonics, near field optics | Quantum information |
| – Metamaterials, optical invisibility, and transformation optics | Optical measurement and instrumentation |
| – Silicon nano-photonics: nano-optoelectronics, nano-antennas, nano sources and confined light emitters | Organic coherent optics and bio-photonics |

CAOL 2010 HONORARY CO-CHAIRS

Prof. Mikhail F. Bondarenko, National University of Radio Electronics, Kharkov, Ukraine

Prof. Nikolay V. Bagrov, Taurida National V.I.Vernadsky University, Simferopol, Crimea, Ukraine

CAOL 2010 GENERAL CHEAR

Prof. Igor A. Sukhoivanov, University of Guanajuato, Mexico

TECHNICAL PROGRAM COMMITTEE CO-CHAIRS

Prof. Marian Marciniak, National Institute of Telecommunications, Poland

Prof. Vasiliy A. Svich, V.N.Karazin National University, Kharkov, Ukraine

ORGANIZING COMMITTEE CO-CHAIRS

Prof. Vyacheslav A. Maslov, V.N. Karazin National University, Kharkov, Ukraine

Dr. Igor V. Dzedolik, Taurida National V.I.Vernadsky University, Simferopol, Crimea, Ukraine

Dr. Sergii I. Petrov, National University of Radio Electronics, Kharkiv, Ukraine

Accompanying events:

10th International Conference on Laser and Fiber-Optical Networks Modeling (LFNM'2010)

September 13-14, 2010

<http://lfnm.kture.kharkov.ua>

LFNM'2010 topics:

- **Modeling of physical processes in lasers including semiconductor, solid-state, liquid and gas ones**
- **Nonlinear effects in active and passive optical devices and systems**
- **Short pulse generation, ultrafast effects and dynamical phenomena**
- **Dispersive media and light beam propagation in the optical waveguides and gratings**
- **Novel materials, devices, and simulation tools**
- **Photonic integrated circuits and broadband optical networks modeling**

CAOL TECHNICAL PROGRAM COMMITTEE CO-CHAIRS

Marian Marciniak, National Institute of Telecommunications, Warsaw, Poland
Vasiliy A. Svich, V.N.Karazin National University, Kharkov, Ukraine

CAOL/LFNM EXPECTED INVITED SPEAKERS:

Kiyoshi Asakawa, National Institute of Materials Science (NIMS), Tsukuba, Japan
Pedro Chamorro Posada, Universidad de Valladolid, Valladolid, Spain
Richard M. De La Rue, University of Glasgow, UK
Silvano Donati, University of Pavia, Italy
N. N. Elkin, State R&D Center TRINITY, Troitsk, Russia
Tugrul Hakioglu, Bilkent Universitesi, Ankara, Turkey
Yuriy Kivshar, Nonlinear Physics Centre, Australian National University, Canberra, Australia
V.V. Kocharovskiy, Institute of Applied Physics of the Russian Academy of Science, Nizhny Novgorod, Russia
V.K.Kononenko, B.I. Stepanov Institute of Physics, National Academy of Sciences of Belarus, Minsk, Belarus
Antonio Lapucci, Istituto Nazionale di Ottica Applicata, Firenze, Italy
YoungPak Lee, Quantum Photonic Science Research Centre, Seoul Korea
Marian Marciniak, National Institute of Telecommunications, Warsaw, Poland
Graham McDonald, Centre of Theory & Modelling (IMR) Joule Physics Lab, University of Salford, UK
Humberto Michinel, Optics Lab. University of Vigo, Facultade de Ciencias de Ourense, As Lagoas s/n. Ourense, 32004. Spain
A.M. Negriyko, Institute of Physics, National Academy of Science of Ukraine, Kyiv, Ukraine
V.V.Obukhovskiy, Taras Shevchenko University of Kyiv, Kyiv, Ukraine
A.F.Glova, State R&D Center TRINITY, Troitsk, Russia
Mauro Pereira, Sheffield Hallam University, UK
A.V.Kudryashov, Moscow State Open University, Moscow, Russia
S.L.Prosvirnin, Institute of Radio Astronomy, National Academy of Sciences of Ukraine, Kharkov, Ukraine
Bouchta Sahraoui, Laboratoire POMA CNRS UMR 6136, Université d'Angers, France
Thomas Südmeyer, Swiss Federal Institute of Technology - ETH Zürich, Switzerland
E. O. Tikhonov, Institute of Physics, National Academy of Science of Ukraine, Kyiv, Ukraine
Bo Yong, Institute of Physics, Chinese Academy of Sciences, Beijing, China
V.V.Vasiltsov, Institute on Laser and Information Technologies, Shatura, Russia
Roberto Morandotti, INRS-EMT in Montreal, Canada
V.P.Kandidov, M.V.Lomonosov Moscow State University, Moscow, Russia

SPECIAL SESSION ON NONLINEAR PHOTONICS

Anton Desyatnikov, chair, Nonlinear Physics Centre, Australian National University, Canberra, Australia
Konstantin Bliokh, National University of Ireland, UK
Etienne Brasselet, Université Bordeaux 1, France
Arkadi Chipouline, Friedrich Schiller University Jena, Germany
Albert Ferrando, Universitat de València, Spain
Yana V. Izdebskaya, Australian National University
Andrei Maimistov, Moscow Eng. Phys. Inst., Russia
Andrey E. Miroschnichenko, Australian National University
Thomas Pertsch, Friedrich Schiller University Jena, Germany
José Ramón Salgueiro, University of Vigo, Spain
Stefan Skupin, University Jena, Germany
Sergei Turitsyn, Aston University, UK

2nd International Workshop “THz Radiation: Basic Research and Applications”

(TERA'2010)

September 13-14, 2010

<http://tera.kture.kharkov.ua>

TERA'2010 topics

THz sources and detectors
Intersubband lasers and detectors
Inversionless lasers
Methods and strategies for THz generation and detection
THz waveguiding and localization
THz metamaterials
Nonlinear THz optics

Intersubband transport and optics
THz imaging and remote sensing
Material properties at THz frequencies
Novel materials for THz applications
Applications in biology and medical diagnosis
Detection of explosives and dangerous substances
Integration of THz with optical fibers

TERA'2010 Co-CHAIRS:

Igor A. Sukhoivanov, National University of Radio Electronics, Ukraine
Mauro Pereira, Sheffield Hallam University, United Kingdom

Venue and Location:

The conference will be held in the one of the well-known cities of the Crimea, in Sevastopol. Sevastopol is the city of Russian war glory. The city is one of the famous historical places in Crimea and nice place for vacation in the South-West Crimea with the population of about 380 thousand people. It has numerous hotels and cultural objects. The average temperature in September ranges from +16 to +25 C.

Transportation Connections: daily air flight connection Simferopol with Kiev, capital of Ukraine. Kiev airport Borispil is accessible by daily flights from many airports of Europe, Asia and America.

From the Simferopol airport you can take a bus or minibuses. There are also frequent domestic trains from Simferopol train station to Sevastopol; about which you can learn at the airports.

Contact information

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VISA

Every foreign visitor must have a valid passport. **No visa is required for citizens of the USA, Canada, EU, Norway, Switzerland, Japan.** Participants except those mentioned need a visa to enter Ukraine. The Organizing Committee will arrange visa support, if necessary provided applications are made at least two month in advance.

For more information look at the conference site <http://caol.kture.kharkov.ua>

Important dates:

Deadline for submission of camera-ready paper including 50 words **abstract** indicating address, fax number and e-mail address is **May 15, 2010** (by e-mail). Length of paper is from 3 pages.

Postdeadline paper may be submitted up to **August 1, 2010**

Information for authors: The Conference Proceedings will be published in English and will be available at the registration desk. All accepted contributions will be submitted to IEEE Xplore Digital Library.

Registration and accommodation

The **registration fee** for participants is 300 € before / on July 30 and 350 € after July 30. This registration fee includes all conference sessions, the conference proceedings, coffee breaks, reception, conference dinner and one excursion.

Cancellation Policy: A €50 service charge will be assessed for processing refunds.

Conference registration form with details about registration and hotel prices will be available on the conference web site. The arrangement of the accommodation for the participants and accompanying persons will be offered by the Conference Secretariat. A guest program will be organized to take advantage of the history and nature charm of Sevastopol region.

SOCIAL EVENTS: City excursion; Boat trip around Sevastopol bay; Excursion to the Chersonese; Trip to Balaklava; Visiting to the winery "Inkerman".