Call for Papers

FROM PHOTOGRAPHY TO PHOTONICS - 50 YEARS OF SPIE 1955-2005

Submit your abstract today!

- Get published—in print and online
- Share your research
- Expand your career options

SPIE International Symposium on

Optomechatronic Technologies (ISOT 2005)

5–7 December 2005
Sapporo Convention Center
Sapporo, Japan

Symposium Chair: **Shun'ichi Kaneko,** Hokkaido Univ. (Japan)

Actuators and Manipulation

Sensors and Instrumentation

Micro/Nano Devices and Components

Machine Vision

Systems Control

Cooperating Organizations:
Institute of Control, Automation, and System Engineers (ICASE, Korea)
Japan Optomechatronics Association (JOEM, Japan)

The International Society for Optical Engineering

SPIE International Symposium on

Optomechatronic Technologies (ISOT 2005)

5–7 December 2005
Sapporo Convention Center, Sapporo, Japan

Symposium Co-chairs:

Hyung Suck Cho, Korea Advanced Institute of Science and Technology (South Korea)

George K. Knopf, The Univ. of Western Ontario (Canada)

Toru Yoshizawa, Mitutoyo Corp. (Japan) and Tokyo Univ. A&T (Japan)

Rainer Tutsch, Technische Univ. Braunschweig (Germany)

Jonathan Kofman, Univ. of Waterloo (Canada)

Cooperating Organizations:

Institute of Control, Automation, and System Engineers (ICASE, Korea)

Japan Optomechatronics Association (JOEM, Japan)

In recent years, most engineered products, processes, and systems have evolved toward high functionality, flexibility, intelligence, and small scale. Moreover, the close relationship between optical and mechatronic engineering has had the effect of both enhancing and multiplying device and application functionality.

Optomechatronic Technologies 2005 will bring together you and other scholars, researchers and engineers working in this highly interdisciplinary field. There will be many opportunities to discuss the latest developments and trends in optomechatronics, as well as share your research, experiences and views with colleagues. Don't miss the opportunity to broaden your own body of work and help advance the exciting new engineering field of optomechatronic technology.

We welcome your participation!

Shun'ichi Kaneko,
Hokkaido Univ. (Japan)
Symposium Chair

Coinciding with the 100th anniversary of Albert Einstein's "Miraculous Year," the events of the World Year of Physics 2005 aim to raise worldwide public awareness for physics and more generally for physical sciences.

SPIE would like to express its deepest appreciation to the symposium chairs, conference chairs, and program committees who have so generously given of their time and advice to make this symposium possible. The symposium, like our other conferences and activities, would not be possible without the dedicated contribution of our participants and members.

SPIE's Event Project Manager for this symposium is Marilyn Gorsuch. For information about the technical program, email: meetinginfo@spie.org.

All papers from this program will be published in the SPIE Digital Library.

SPIE Digital Library
spiedl.org

The symposium will consist of five coherent conferences as follows:

IMPORTANT DATES

Abstract Due Date: **18 July 2005**

Manuscript Due Date: **26 September 2005**

ACCELERATED TIMELINE FOR MANUSCRIPT SUBMISSIONS

Applicants will be notified of abstract acceptance by e-mail no later than **29 August 2005.** Accepted authors will be given four weeks from acceptance to complete their manuscripts and submit them online through MySPIE.

Optomechatronic Actuators and Manipulation (JOM101)

Conference Chair: **Kee S. Moon**, Michigan Technological Univ.

Cochairs: **Rainer Tutsch**, Technische Univ. Braunschweig (Germany); **Bijoy K. Ghosh**, Washington Univ.; **Toru Yoshizawa**, Mitutoyo Corp. (Japan) and Tokyo Univ. A&T (Japan)

Program Committee: **Masaaki Adachi**, Kanazawa Univ. (Japan); **Ridha Ben Mrad**, Univ. of Toronto (Canada); **Young June Cho**, Korea Institute of Industrial Technology (South Korea); **David W. Greve**, Carnegie Mellon Univ.; **Dae Hwa Jeong**, LG Electronics Inc. (South Korea); **Timothy P. Kurzweg**, Drexel Univ.; **Sung-Q Lee**, Electronics and Telecommunications Research Institute (South Korea); **Miguel Levy**, Michigan Technological Univ.; **Michael Nahum**, Micro Encoder Inc.; **Takanori Nomura**, Wakayama Univ. (Japan); **Yukitoshi Otani**, Tokyo Univ. of Agriculture and Technology (Japan); **Heung K. Park**, Hyundai Electronics Industries Co., Ltd. (South Korea); **Young Soo Park**, Argonne National Lab.; **Sergey S. Sarkisov**, Alabama A&M Univ.

There has been a rapid growth in actuation and manipulation research in the past few years. Many novel materials, architectures, and applications have been proposed, built, and studied. The goal of this conference is to keep a record of the state-of-the-art research in this fast moving area. This conference is designed to fulfill the need for closer collaboration between researchers, academics, manufacturers, and end users by bringing them together in a single forum to interact, exchange technical knowledge, and discuss their experiences. We invite submissions of papers on all aspects of innovative technology and application aspects of actuators and manipulation are welcome. We especially welcome discussions and demonstrations of implemented systems. Oral and poster presentations will be given. Particular topics of interest include, but are not limited to:

- smart materials
- piezoelectric actuation
- thermal actuation
- optical actuation
- optical sensor and actuator integration
- micro-mirrors
- nanopositioning equipment
- micro/nano-manipulators
- distributed actuation
- artificial muscles
- micro-valves
- micro-pumps
- scanning probe microscopy
- industrial and commercial developments and applications
- electromagnetic/magnetic actuation
- SMA actuation
- actuator for microoptics
- optical micro-manipulation
- optical switches/ relays
- actuation for light modulation
- micro/nano-actuators
- micro-robot
- next generation robotic manipulators
- actuation for optical/medical devices
- energy-efficient manipulation strategies
- actuation for disk storage devices
- phase-shift microscopy.

Invited Sessions:
Invited sessions are aimed at providing focused discussion on new and timely research topics, and innovative issues on optomechatronics. Each invited session will consist of at least four papers, which will be reviewed through the regular reviewing process. Those interested in organizing an invited session should contact the conference chair, **Professor Shun'ichi Kaneko (Hokkaido University, Japan), kaneko@ssi.ist.hokudai.ac.jp,** by July 12, 2005, and submit a proposal including the list of contribution papers and a session title.

Submit your abstract today!
spie.org/events/jom

Call for Papers

Optomechatronic Sensors and Instrumentation (JOM102)

Conference Chair: **Yasuhiro Takaya**, Osaka Univ. (Japan)

Cochairs: **Akira Ishii**, Ritsumeikan Univ. (Japan); **Takayuki Tanaka**, Hokkaido Univ. (Japan); **Taeho Ha**, Korea Institute of Machinery & Materials (South Korea); **Jonathan Kofman**, Univ. of Waterloo (Canada)

Program Committee: **Young June Cho**, Korea Institute of Science and Technology (South Korea); **Sangsoo Choi**, LG Electronics Inc. (South Korea); **Terutake Hayashi**, Osaka Univ. (Japan); **Hideki Ina**, Canon Inc. (Japan); **George K. Knopf**, The Univ. of Western Ontario (Canada); **Hiroki Shimizu**, Tohoku Univ. (Japan); **Satoru Takahashi**, The Univ. of Tokyo (Japan)

The novel achievements in optics, semiconductors, micro-machines, and micro-system technologies significantly enhance the requirements for highly precise and efficient sensors and instrumentation. Furthermore, for the tremendous developments in the rapidly increasing field of nanotechnology, a tight link between electro-optical components and mechanical systems becomes essential. This conference will focus on recent developments in sensors, instrumentation, and their applications in the engineering field of optomechatronic technology emerging from the integration and functional fusion of optical and mechatronic engineering. It brings together engineers and researchers seeking solutions for their particular optomechatronic problems. The conference program will consist of oral and poster presentations on topics that include, but are not limited to:

- metrology for microtechnology and nanotechnology
- microstructure measurement
- shape measurement/reverse engineering
- large-area and aspheric surface inspection
- accurate roundness, cylindricity, and diameter measurement
- coordinate measuring machine (CMM) measurement
- sensing and measurement in positioning stage systems
- precision angle measurement
- wavelength or optical frequency measurement
- measurement of environmental influences
- refractive index of air correction
- non-destructive evaluation of structures
- calibration and standardization in optical metrology
- calibration standards and uncertainty evaluation
- surface quality control and material research
- characterization of nanostructured functional surfaces and modeling procedures
- nanotopography and roughness measurement
- particle, defect, flow analysis, and sub-surface detection
- film thickness measurement
- light scattering techniques (BSDF; Total Scatter etc.)
- Fourier transform (FT) instruments
- Interferometry, photogrammetry, liquid crystals, infrared sensing
- holographic and speckle techniques
- fiber optic sensors
- short- or partial-coherence interferometry
- fiber gratings
- photonic crystal circuits for integrated optics
- novel applications of near-field optics
- near-field enhancements of plasmonic imaging or sensing.

Invited Sessions:
Invited sessions are aimed at providing focused discussion on new and timely research topics, and innovative issues on optomechatronics. Each invited session will consist of at least four papers, which will be reviewed through the regular reviewing process. Those interested in organizing an invited session should contact the conference chair, **Professor Shun'ichi Kaneko (Hokkaido University, Japan), kaneko@ssi.ist.hokudai.ac.jp,** by July 12, 2005, and submit a proposal including the list of contribution papers and a session title.

IMPORTANT DATES

Abstract Due Date: **18 July 2005**

Manuscript Due Date:
26 September 2005

ACCELERATED TIMELINE
FOR MANUSCRIPT SUBMISSIONS

Applicants will be notified of abstract acceptance by e-mail no later than **29 August 2005.** Accepted authors will be given four weeks from acceptance to complete their manuscripts and submit them online through MySPIE.

Optomechatronic Micro/Nano Devices and Components (JOM103)

Conference Chair: **Yoshitada Katagiri**, Nippon Telegraph and Telephone Corp. (Japan)

Cochairs: **Eiji Higurashi**, The Univ. of Tokyo (Japan); **Katsuo Kurabayashi**, Univ. of Michigan; **Pamela R. Patterson**, HRL Labs.; **Akiko Gomyo**, NEC Corp. (Japan); **Ichirou Ishimaru**, Kagawa Univ. (Japan); **Kazuo Hotate**, The Univ. of Tokyo (Japan); **Bradley J. Nelson**, ETH Zürich (Switzerland)

Program Committee: **Kazuo Aida**, Shizuoka Univ. (Japan); **Andres Fernandez**, Glimmerglass; **Terunao Hirota**, The Univ. of Tokyo (Japan); **Mikio Horie**, Tokyo Institute of Technology (Japan); **Sang-Gook Kim**, Massachusetts Institute of Technology; **Horacio Lamela**, Univ. Carlos III de Madrid (Spain); **Takashi Matsuoka**, Tohoku Univ. (Japan); **Yasuyuki Mitsuoka**, Seiko Instruments Inc. (Japan); **Mitsuru Naganuma**, Teikyo Univ. of Science and Technology (Japan); **Masashi Nakao**, NTT Photonics Labs. (Japan); **Luis R. Nunes**, National Institute of Information and Communications Technology (Japan); **Toshifumi Ohkubo**, Toyo Univ. (Japan); **Kazuhiro Oiwa**, National Institute of Information and Communications Technology (Japan); **Fumikazu Oohira**, Kagawa Univ. (Japan); **Metin Sitti**, Carnegie Mellon Univ.; **Shuichi Takeda**, Applied Diamond Inc. (Japan); **Hakan Urey**, Koç Univ. (Turkey); **Katsuyuki Utaka**, Waseda Univ. (Japan); **Manabu Yamamoto**, Tokyo Univ. of Science (Japan)

At this very young stage of the twenty-first century, the emergence of a novel stream is expected to be seen in nanoscale technologies dealing with small objects, including atoms and molecules to establish a sophisticated information-oriented society with some epoch-making innovations, which may include novel computers equivalent to human brains. Although the expectation is supported by many technological sprouts in a wide variety of fields including telecommunications, information processing, and sensing, we are still faced with some critical issues that include how the diffraction limit is overcome or how optical signals are stored against the theory of relativity. For success in a continuing mission to improve science and technologies for the society of the future, it is due time to move on to discussing ways of overcoming such issues. Researchers and engineers will have an opportunity to exchange their opinions in this interdisciplinary conference. Papers on all aspects of the topics are welcome, including, but not limited to, the following:

- micro/nano mechaphotonics and applications including MEMS/NEMS devices, components, and sub-systems for data storage, communications, and network sensing
- nanophotonic active/passive devices and related physics including quantum and optical non-linear effects
- nano-bio mechanics and medical engineering including manipulation of atoms and molecules
- nanofabrication technologies including micro/nano processing, nano-imprinting, and homo/hetero splicing
- novel computer architectures based on quantum mechanics or molecular biology.

Invited Sessions:
Invited sessions are aimed at providing focused discussion on new and timely research topics, and innovative issues on optomechatronics. Each invited session will consist of at least four papers, which will be reviewed through the regular reviewing process. Those interested in organizing an invited session should contact the conference chair, **Professor Shun'ichi Kaneko (Hokkaido University, Japan), kaneko@ssi.ist.hokudai.ac.jp,** by July 12, 2005, and submit a proposal including the list of contribution papers and a session title.

Optomechatronic Machine Vision (JOM104)

Conference Chair: **Kazuhiko Sumi**, Kyoto Univ. (Japan)

Cochairs: **Hiroyasu Koshimizu**, Chukyo Univ. (Japan); **Yeong-Ho Ha**, Kyungpook National Univ. (South Korea); **Jonathan Kofman**, Univ. of Waterloo (Canada); **Claudio A. Perez**, Univ. de Chile (Chile)

Program Committee: **John Billingsley**, Univ. of Southern Queensland (Australia); **Didier Coquin**, Univ. de Savoie (France); **Seiji Hata**, Kagawa Univ. (Japan); **Dieter Just**, Eumetsat (Germany); **Yukio Sato**, Nagoya Institute of Technology (Japan); **Jun'ichi Yamaguchi**, Kagawa Univ. (Japan)

Machine vision technology, which originates from industrial robot vision and automated inspection, is now widely used in research and industry. Recent progress of sensors and processors has achieved higher performance of machine vision, which is in many applications far beyond human vision in terms of sensitivity, precision, and processing speed. Machine vision is a key technology of automation. In particular, optical sensing and information processing of sensor data are now pioneering a new technological world, overcoming the shortcomings of conventional TV cameras and electronic image processing. This conference will focus on proposals, principles, and applications related to sensing and information-processing technology of machine vision, and speakers and participants will exchange their latest knowledge. Particular topics of interest include, but are not limited to:

- sensing technology for machine vision including optics, illuminations, image sensors, devices, and measurement methods
- imaging technology including range imaging, stereo, surface analysis, particle analysis, defect analysis, and other measurements
- integration of sensing technologies including multi-sensor fusion, and multi-view analysis
- information processing for optomechatronic sensory data
- applications including automation, robotics, vehicle control, visual inspection, and human interface
- development environments and tools.

Invited Sessions:
Invited sessions are aimed at providing focused discussion on new and timely research topics, and innovative issues on optomechatronics. Each invited session will consist of at least four papers, which will be reviewed through the regular reviewing process. Those interested in organizing an invited session should contact the conference chair, **Professor Shun'ichi Kaneko (Hokkaido University, Japan), kaneko@ssi.ist.hokudai.ac.jp,** by July 12, 2005, and submit a proposal including the list of contribution papers and a session title.

Call for Papers

Optomechatronic Systems Control (JOM105)

Conference Chair: **Farrokh Janabi-Sharifi**, Ryerson Univ. (Canada)

Cochairs: **Toshio Fukuda**, Nagoya Univ. (Japan); **Frank L. Lewis**, The Univ. of Texas at Arlington; **Wei Gao**, Tohuku Univ. (Japan); **Hyung Suck Cho**, Korea Advanced Institute of Science and Technology (South Korea)

Program Committee: **George Barbastathis**, Massachusetts Institute of Technology; **Francois Chaumette**, Institut National de Recherche en Informatique et en Automatique (France); **Iraj Hassanzadeh**, Ryerson Univ. (Canada); **Chih-Kung Lee**, National Taiwan Univ. (Taiwan); **Cheng-Hsien Liu**, National Tsing Hua Univ. (Taiwan); **Bradley J. Nelson**, ETH Zürich (Switzerland); **Yves-Alain Peter**, École Polytechnique de Montréal (Canada); **Masatake Shiraishi**, Ibaraki Univ. (Japan); **Bruno Siciliano**, Univ. degli studi di Napoli Federico II (Italy)

Optomechatronic control systems deal with the control of integrated optical and mechatronic systems to achieve high performance and functionality, such as high precision, rapid information processing, and intelligent functions. Based on the integration method, optomechatronic control systems could be classified into: optically embedded mechatronic systems, mechatronically embedded optical systems, and optomechatronically fused systems. These control systems offer significant potential advantages over the conventional control systems in terms of power, signal attenuation, bandwidth, flow of information, electromagnetic interference immunity, and safety. However, control of optomechatronic systems involves serious challenges due to inherent system non-linearities, uncertainties, time-varying properties, and disturbances. Addressing such control problems is vital for future advancement and the advent of new applications of optomechatronic technology. In order to strengthen the science and engineering of opto-mechatronic control systems, it is essential that researchers and engineers communicate and coordinate their work. The purpose of this conference is to promote research activities in various areas of design and implementation of optomechatronic control systems by providing a forum for the exchange of ideas, presentation of technological achievements, and discussion of future directions. Particular topics of interest include, but are not limited to:

- modeling
- estimation and identification
- automated navigation
- motion control
- robot control
- guidance and flight control
- vibration and noise control
- computer network control
- process control
- vehicle and transportation control
- consumer electronics control
- medical equipment control
- bio-systems control
- virtual reality systems control
- teleoperation
- industrial automation
- synergistic control design methodologies
- control interface design
- emerging control technologies
- micro systems (MEMS) control
- IC-embedded control
- control signal transmission
- open architectures
- intelligent control
- learning control
- robust control
- hybrid systems
- rapid prototyping
- control education.

Invited Sessions:
Invited sessions are aimed at providing focused discussion on new and timely research topics, and innovative issues on optomechatronics. Each invited session will consist of at least four papers, which will be reviewed through the regular reviewing process. Those interested in organizing an invited session should contact the conference chair, **Professor Shun'ichi Kaneko (Hokkaido University, Japan), kaneko@ssi.ist.hokudai.ac.jp,** by July 12, 2005, and submit a proposal including the list of contribution papers and a session title.

Submit your abstract today!
spie.org/events/jom

IMPORTANT DATES

Abstract Due Date: **18 July 2005**

Manuscript Due Date:
26 September 2005

ACCELERATED TIMELINE
FOR MANUSCRIPT SUBMISSIONS

Applicants will be notified of abstract acceptance by e-mail no later than **29 August 2005.** Accepted authors will be given four weeks from acceptance to complete their manuscripts and submit them online through MySPIE.

Your Resource. Your Society.

Information is increasingly a source of competitive advantage. Through face-to-face interaction, publications and online resources, you gain more from your membership in SPIE.

Join today.

spie.org/membership

FROM PHOTOGRAPHY TO PHOTONICS - 50 YEARS OF SPIE 1955-2005

The International Society for Optical Engineering

Tel: +1 360 676 3290 • spie@spie.org

General Information

Hotel Accommodations

Information concerning hotel reservations, as well as a hotel reservation form, will be included in the Technical Program available online in late September 2005.

Registration

The registration form for conferences will be available in the Technical Program.

Technical Program

Available online in late September 2005

The comprehensive Technical Program for this symposium will list conferences, paper titles, and authors in order of presentation; an outline of all planned special events; and information detailing the hotel reservations process.

Clearance Information

If government and/or company clearance is needed to present and publish your presentation, start the process now to ensure that you receive clearance if your paper is accepted.

For those authors who need to obtain a Visa, remember to allow a minimum 2 months for processing and receiving.

Letters of Invitation for Visa Process

Individuals requiring letters of invitation to obtain travel visas to present their papers may access and print an Invitation Letter Request Form found at this web site:

http://spie.org/forms/invitationrequest.pdf

Please fill out a separate form for each person requesting a letter. All letters of inviation will be sent by airmail and by PDF e-mail attachment unless a courier account number or credit card number with expiration date is provided with the original request. Please allow ample time for processing requests. SPIE is not able to contact Embassies in support of an individual attempting to gain entry to attend an SPIE meeting. Because the application for a visa can be a lengthy process, we recommend that you start your visa application process as soon as you have been notified that your paper has been accepted. We also recommend that you secure your travel visa before registering for the symposium. Cancellations after the preregistration cutoff can result in a cancellation fee.

SPIE Membership

SPIE Members, through their collective talents, influence the future of optical, technical and scientific discovery. Members drive the Society in remarkable directions—furthering innovation in optics and photonics.

Membership in SPIE equals resources for you, anytime, anywhere:

- Peer-reviewed journals
- Discounted subscription for the SPIE Digital Library
- Publications
- Education
- International technical conferences and exhibitions
- **oe***magazine*
- Significant discounts on most SPIE products and services

Join now: **spie.org/membership**

Submission of Abstracts for Optomechatronic Technologies (ISOT 2005)

5–7 December 2005, Sapporo Convention Center, Sapporo, JAPAN

Abstract Due Date: **18 July 2005** *Manuscript Due Date:* **26 September 2005**
ALL DUE DATES MUST BE STRICTLY OBSERVED

IMPORTANT!

Submissions imply the intent of at least one author to register, attend the symposium, present the paper as assigned (either orally or in poster format), and submit a full-length manuscript for publication in the conference Proceedings.

All authors (including invited or solicited speakers), program committee members, and session chairs are responsible for registering and paying the reduced author, session chair, program committee registration fee. (Current SPIE Members receive a discount on the registration fee.)

Instructions for Submitting Abstracts via Web

You are STRONGLY ENCOURAGED to submit abstracts using the "submit an abstract" link at:

http://spie.org/events/jom

Submitting directly on the Web ensures that your abstract will be immediately accessible by the conference chair for review through MySPIE, SPIE's author/chair web site.

Please note! When submitting your abstract you must provide contact information for all authors, summarize your paper, and identify the **contact author** who will receive correspondence about the submission and who must submit the manuscript and all revisions. Please have this information available before you begin the submission process.

First-time users of MySPIE can create a new account by clicking on the create new account link. You can simplify account creation by using your SPIE ID# which is found on SPIE membership cards or the label of any SPIE mailing.

If you do not have web access, you may E-MAIL each abstract separately to: abstracts@spie.org in ASCII text (not encoded) format. There will be a time delay for abstracts submitted via e-mail as they will not be immediately processed for chair review. IMPORTANT! To ensure proper processing of your abstract, the SUBJECT line must include only:

SUBJECT: Conf. Code (example: jom101)

Your abstract submission must include all of the following:

1. **PAPER TITLE**
2. **AUTHORS** (principal author first) For each author: First (given) name (initials not acceptable), Last (family) name, Affiliation, Mailing address, Telephone, Fax, and Email address.
3. **PRESENTATION PREFERENCE** "Oral Presentation" or "Poster Presentation."
4. **PRINCIPAL AUTHOR'S BIOGRAPHY** Approximately 50 words.
5. **ABSTRACT TEXT** Approximately 250 words.
6. **KEYWORDS** Maximum of five keywords.

Conditions of Acceptance

- Authors are expected to secure funding for registration fees, travel, and accommodations, independent of SPIE, through their sponsoring organizations before submitting abstracts.
- Only original material should be submitted.
- Commercial papers, papers with no new research/development content, and papers where supporting data or a technical description cannot be given for proprietary reasons will not be accepted for presentation in this symposium.
- Abstracts should contain enough detail to clearly convey the approach and the results of the research.
- Government and company clearance to present and publish should be final at the time of submittal. If you are a DoD contractor, allow at least 60 days for clearance. Authors are required to warrant to SPIE in advance of publication of the Proceedings that all necessary permissions and clearances have been obtained, and that submitting authors are authorized to transfer copyright of the paper to SPIE.

Review, Notification, Program Placement

- To ensure a high-quality conference, all abstracts and Proceedings manuscripts will be reviewed by the Conference Chair/Editor for technical merit and suitability of content. Conference Chair/Editors may require manuscript revision before approving publication, and reserve the right to reject for presentation or publication any paper that does not meet content or presentation expectations. SPIE's decision on whether to accept a presentation or publish a manuscript is final.
- Applicants will be notified of abstract acceptance by e-mail no later than 29 August 2005, and manuscripts are due on 26 September 2005 from all accepted authors.
- Final placement in an oral or poster session is subject to the Chairs' discretion. Instructions for oral and poster presentations will be sent to you by email. All oral and poster presentations require presentation at the meeting and submission of a manuscript to be included in the *Proceedings of SPIE*.

Proceedings of SPIE *and SPIE Digital Library*

- These conferences will result in full-manuscript Chairs/Editor-reviewed volumes published in the *Proceedings of SPIE*.
- **ACCELERATED TIMELINE:** Accepted authors will be given four weeks from acceptance notifications to complete and submit their manuscripts.
- Correctly formatted, ready-to-print manuscripts submitted in English are required for all accepted oral and poster presentations. Electronic submissions are recommended, and result in higher quality reproduction. Submission must be provided in PostScript created with a printer driver compatible with SPIE's online Electronic Manuscript Submission system. Instructions are included in the author kit and from the "Author Info" link at the conference website.
- Authors are required to transfer copyright of the manuscript to SPIE or to provide a suitable publication license.
- Papers published are indexed in leading scientific databases including INSPEC, Ei Compendex, Chemical Abstracts, International Aerospace Abstracts, Index to Scientific and Technical Proceedings and NASA Astrophysical Data System.
- **Late manuscripts may not be published in the conference Proceedings.** The objective of this policy is to better serve the conference participants as well as the technical community at large, by enabling timely publication of the Proceedings.
- **Papers not presented at the meeting will not be published in the conference Proceedings,** except in the case of exceptional circumstances at the discretion of SPIE and the Conference Chairs/Editors.

The International Society for Optical Engineering

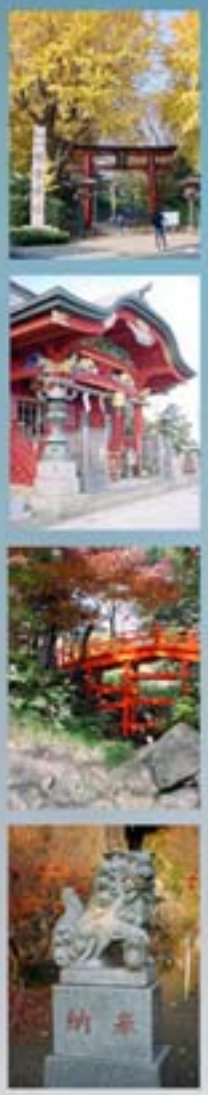
SPIE—The International Society for Optical Engineering is dedicated to advancing scientific research and engineering applications of optical, photonic, imaging, and optoelectronic technologies through its meetings, education programs, and publications.

SPIE International Headquarters
P.O. Box 10
Bellingham, WA 98227-0010 USA
Tel: +1 360 676 3290
Fax: +1 360 647-1445
E-mail: spie@spie.org
Web: www.spie.org

Shipping Address
1000 20th St.
Bellingham, WA 98225-6705 USA

SPIE in Europe
Karin Burger, Manager
spieeurope@spieeurope.org
Tel: +44 7974 214542
Fax: +44 29 2040 4873

SPIE in Russia/FSU
12, Mokhovaja str., 119019
Moscow, Russia
Tel/Fax: +7 095 202 1079
E-mail: edmund.spierus@relcom.ru



Call for Papers

SPIE International Symposium on

Optomechatronic Technologies (ISOT 2005)

5–7 December 2005
Sapporo Convention Center
Sapporo, Japan

- **Get published—in print and online**
- **Share your research**
- **Expand your career options**

Submit your abstract today!
spie.org/events/jom

SPIE Society of Photo-Optical Instrumentation Engineers
P.O. Box 10
Bellingham, WA 98227-0010 USA

DATED MATERIAL

Non-Profit Org.
U.S. Postage Paid
Society of
Photo-Optical
Instrumentation
Engineers