SYNOPSIS

promote the generic science of optical measurement, machine vision and image processing. Beside the EOS-Congress on Imaging other conferences under the umbrella World of Photonics Congress 2005 will be held:

- **A meeting on Optical Metrology (organized by SPIE and Co-Sponsored by the EOS)**
- **the CLEO EUROPE/EQEC Conference (organized by EPS, OSA, IEEE/LEOS)**
- **A meeting on Lasers in Manufacturing (organized by WLT)**
- **The European Conference on Biomedical Optics (organized by SPIE and OSA)**
- **The 15th annual meeting of Deutsche Gesellschaft für Lasermedizin (DGLM e.V.).**

Plenary talks in the morning will give attendees a comprehensive look at the entire sector. Various other gatherings will give conference participants and exhibitors an additional opportunity to exchange ideas. Posters will be on display in poster sessions featuring additional discussions.

We are convinced that the World of Photonics Congress will provide an optimum overview that includes all aspects of the photonics sector, and that having the congress and world's leading exhibition under a single roof combined with excellent facilities in Munich will contribute to stimulating discussions, enhance communication between researchers working on basic research and industrial applications and offer all participants unique utility.

Joseph Braat
General Chair

MEMBERS OF THE SCIENTIFIC COMMITTEE:

- **Prof. Dr. Bernd Jähne**
  University of Heidelberg (Germany)
- **Prof. Paul Whelan**
  Dublin City University (Ireland)
- **MSc Tech. Antti Soini**
  Polytechnic Research and Development Centre O'Sata (Finland)
- **Dr. Jean-Pierre Moy**
  CEA-LETI, Grenoble (France)
- **Prof. Dr. Wolfgang Osten**
  University of Stuttgart (Germany)
- **Prof. Dr. Bernd Michaelis**
  University of Magdeburg (Germany)
- **Prof. Dr. Zergej Sheltov**
  Institute of Aviation Research, Moscow (Russia)
- **Dr. Daniel Dolfi**
  Thales Research and Technology, Orsay (France)
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MESSE MÜNCHEN INTERNATIONAL

World of Photonics Congress 2005

17th International Conference on Photonics in Europe

Co-located with LASER 2005. World of Photonics

EOS

EOS Conference on Industrial Imaging and Machine Vision

CALL FOR PAPERS
second announcement

June 13–15, 2005
Munich ICM
International Congress Centre Munich

www.photonics-congress.com

In cooperation with:

SPIE

SYNOPSIS

The EOS-Conference on Industrial Imaging and Machine Vision is part of the upcoming congress for lasers, laser applications and photonics being held in conjunction with the Laser 2005.World of Photonics exhibition in Munich from June 13 to 17, 2005.

The topics being covered at this year's conferences have been coordinated to avoid overlapping. The admission fee entitles participants to attend all presentations as well as the exhibition.

The congress is sponsored by the German BMBF - Ministry of Education and Research (Ministerium für Bildung und Forschung). In the future it will be called the **World of Photonics Congress.**

Imaging, in all its aspects, is a crucial component of many sciences, engineering and medical applications. This was the reason for the European Optical Society to include this topic into the congress programme in Munich. This conference considers four aspects:

June 13th 2005
Imaging: methods, sensors and processing

June 14th 2005
Shape and pattern recognition

June 15th 2005
Machine vision

June 15th 2005
Imaging in robotics

Each of these topics covers a wide range of research and application areas of importance to the industrial and university sectors alike. We are looking for contributed abstracts covering the following (not exclusive) areas which in general

PAPER CONTRIBUTIONS

- **Submission date of abstracts: 31 March 2005**
- **Notification: April 2005**
- **Mailing of the final program: April 2005**
- **Pre-registration: 1 January 2005**

Authors are requested to submit an abstract covering approximately one page in a word file or in a pdf file via email to the EOS office at **laser2005@myeos.org**. Authors shall in the first place be willing to give an oral presentation of 15 minutes (plus five minutes for discussions), but they may be asked to prepare a poster presentation instead. A number of contributed abstracts covering original, unpublished work on the conference topics will be accepted for presentation. The abstracts will be reviewed by the Scientific Committee of the conference.

All accepted contributions will be published in the printed EOS Conference Proceeding which will be available at the beginning of the conference. The authors will be notified of the acceptance of their contribution within three to four weeks from the date of the submission. Authors are asked to register via EOS-Homepage **www.myeos.org** after acceptance of the abstracts.

CONFERENCE TIME TABLE AND TOPICS

June 13th 2005

IMAGING : METHODS, SENSORS AND PROCESSING

Chair: Prof. Dr. Danièle Fournier
(UPMC, Paris – France)

Recent advances in materials research have allowed imaging sensors to operate on a broader spectrum, from X rays to Terahertz radiation. Moreover, increasingly sophisticated methods are available to achieve submicronic or even nanometric resolution. Conference contributions are solicited from any kind of theoretical and practical research, including advances in imaging sensors, imaging methods and their application to industrial purposes.

June 14th 2005

SHAPE AND PATTERN RECOGNITION

Chair: Dr. Pieter Jonker
(University of Delft, Delft – The Netherlands)

3D shape plays an important role in the detection - as in robot vision - and measurement - as in industrial inspection - of 3D objects in our (3+1) dimensional world.
We would like to emphasize on topics such as: Shape recognition, shape perception, shape invariances, shape descriptors, shape representation and 3D geometry, shape classifiers, supervised and unsupervised methods for shape recognition, reinforcement, based learning of shapes, shape reconstruction from multiple views, complexity of shape pattern classes, shape similarity measures, shape description in stochastic geometry, shape geometry in high dimensional feature spaces, …

June 15th 2005

IMAGING IN ROBOTICS

Chair: Dr. Ulrich Schmucker
(Fraunhofer Institute for Factory Operation and Automation IFF, Magdeburg – Germany)

Image processing is widely used in connection with robots, for example for quality control or decision making in industrial production, for navigation and path planning in mobile systems and many others. Conference contributions are solicited from any kind of theoretical and practical research, case studies and applications of image processing systems and techniques in robotics. This includes industrial robots, mobile and autonomous robots as well.

June 15th 2005

MACHINE VISION

Chair: Don Braggins
(Machine Vision Systems Consultancy, Meldreth – UK)

Machine Vision in the context of Industrial Imaging relates to the automatic interpretation of images for the purposes of recognition, motion control, or inspection. Papers are invited any topic within this definition, including but not limited to:
- Innovative applications
- Sub-pixel metrology
- High speed web inspection
- Innovative illumination techniques
- Camera evaluation and matching to application requirements

EOS CONFERENCE REGISTRATION

Whenever possible the electronic registration and payment via www.myeos.org is requested. Register now via the EOS Online Shop www.myeos-shop.org – then you can attend every other conference www.global-electronics.net/id/35070 on the World of Photonics congress as well as the exhibition Laser 2005.

INDUSTRIAL IMAGING AND MACHINE VISION
June 13–15, 2005, Munich ICM
World of Photonics Congress 2005

Please find an overview of the conference fees 2005 below:

	Registration before March 31, 2005	Later than March 31, 2005 or on-site
Full member⧆	EUR 400	EUR 460
Non-member	EUR 500	EUR 575
Student member⧆	EUR 95	EUR 135
Student non-member	EUR 130	EUR 165
One day	EUR 175	EUR 220

⧆ Member of:
EOS, WLT, SPIE, EPS, LEOS, IEEE, OSA, DGLM

The registration fee includes the conference proceedings and coffee breaks