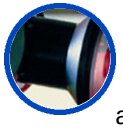
About Marseille in the heart of "Provence"



Close to the Mediterranean sea and the French Riviera, Marseille area is one of the major regions in France and in Europe for optics and photonics with companies like Alcatel Space, Cybernetix, Eurocopter, SESO… Around them, one finds famous laboratories like the Institut Fresnel, the Laboratoire d'Astrophysique de Marseille, the Observatoire de la Côte d'Azur or the Ifremer which contribute to the development of components and optical systems.

Moreover, the "Provence" region counts more than one hundred companies and more than thirty laboratories working in the field of optics and photonics. The companies and the laboratories can lean on several Universities or "grande école" providing education in optics and photonics at all levels.

Strongly connected with the micro and nano-technologies and with image processing and software engineering, optics and photonics have, in "Provence", all the competences (electronics, mechanics, software, micro and nano-technologies) to favour their development.

The large scientific and industrial equipments available in "Provence" are a complementary key of success.

For more informations consult POPsud

www.popsud.org

How to get to Marseille

- > Marseille : 1 million inhabitants
- > 2nd city of France
- > 1st French and Mediterranean harbor
- > International airport
- > Marseille-Paris : 3 hours by "High Speed Train" (TGV)

All the practical informaton on-line on our web site

www.ocs2005.org

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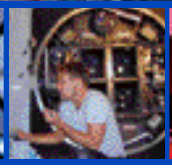
OCS 2005

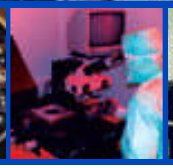
First International Conference on Optical Complex Systems & Technical Exhibition

24 to 27 October 2005

Marseille (France)

Jointly organized with **ETOP 2005** *(Education and Training in Optics and Photonics) - www.etop2005.org*





Organized jointly by POPsud & EGIM

(Pôle Optique et Photonique sud
& Ecole Généraliste d'Ingénieurs de Marseille)

Dead line for paper submission
May 27th, 2005

About OCS 2005

First International Conference on Optical Complex Systems & Technical Exhibition

The OCS Conference is the first edition of a new conference and exhibition on the Optical Complex Systems in Marseille from 24 up to 27 October in Marseille, in the heart of Provence (France). The aim of the conference is to provide a specialized forum for scientists, researchers, engineers interested in the Optical Complex Systems.

The optical technology is the heart of various complex systems throughout all the industrial activities and everyday life. Without this optical heart, the system cannot work. But, the optical engineering of such systems is shared in many industrial sectors all different.

From the environment up to the spatial in passing by the industrial monitoring, the transport, the robotics, the medical applications, the food industry or the sub-marine activity, all these sectors use optical complex systems without connexion together.

¬Posters session (25 October 2005)
¬Short courses (24 October 2005)

Technical exhibition (26 & 27 October 2005)

First announcement and call for paper

Dead line for paper submission : May 27th, 2005.
Jointly organized with ETOP 2005 (Education and Training in Optics and Photonics)

Submission

100 words abstract and a two pages summary maximum. The paper should be headed by title, authors, affiliation, adress, email and indicates in which topics (A-F) is submitted. Please, do not send photo or objects, requiring large disk space.

Electronic submission on : www.ocs2005.org

Key topics

This new conference is dedicated to present instruments, designs and/or data processing of systems using optical technologies. Today we have retained six main optical topics gathering users in the different application fields.

A Multi and hyperspectral analysis

The spectral characteristic of light linked to a physical process give information about chemical or bio chemical composition. This technique has been extensively used on ground (chemical analysis, atmosphere monitoring, pollution sensors...) then through airborne and now spaceborne observations (vegetation monitoring, geology, coastal zone studies, risk management, oceanology...). This session offers the possibility to stimulate interaction and exchanges between scientists users, spectral and hyperspectral instruments developers from the various domains of application.

B Multidimensional image instrumentation and data processing

The analysis of a physical phenomenon may require to take into account the two or three spatial dimensions + spectral +temporal + differential image status. The acquisition, reduction and data processing techniques with associated instrumentation will be presented. There is a wide range of applications, including medical, submarine and satellite imagery as well as 3D spectrometry in astrophysics.

C Robotics and Industrial Automatisation

The vision system is an important sub system of intelligent robots or more generally autonomous vehicle. Its includes the sensors part such for instance video camera, scanning laser or special advanced device, the real time processing and the scene modelisation using real virtuality techniques. In critical or hazardous conditions the robotic system is also running in remote mode, which needs a complex man machine interaction. Various fields of applications are involved such as walking machines, underwater robots, tactile display, surgical instruments, endoscopes, surface measurements, micro manipulation, road vehicles, manufacturing maintenance and quality control systems.

D Adaptative optics

During recent years, Adaptive Optics Systems have achieved a high level of sophistication and maturation. Today these Optical Complex Systems go beyond traditional applications in astronomy and the military into developments in medicine, ophthalmology, lasers, manufacturing and communications. Adaptive Optics turned into a multidisciplinary technology that requires application dedicated system approaches rather than simply devices. Control/command algorithms, data analysis and specific images reconstruction techniques are fundamental parts of these complex systems and contributed to their success.

>>>

Key topics

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E Management of complex systems and large system projects description

Optics and photonics are often an important part of multidisciplinary large systems or projects requiring specific management methods and organizations. This organization concerns a network of research laboratories on a national and international scale associating also industrial companies. This topics covers also the description of projects including multidisciplinary fields.

F Simulation of complex systems

Design of optical complex systems requires powerful simulation software in order to multiply virtual prototypes before manufacturing. Most of industries such as automotive, aerospace, optics, energy, defense and laser get high benefits from these simulations because engineers can easily forsee design, performances and tolerances. This session is a great opportunity to discover simulations methods and results used in various areas, so as to improve possible interactions between them.

Organisation

Chairman

>Jacques Boulesteix (Laboratoire d'Astrophysique de Marseille)

Local consulting committee

>Rodolphe Krawczyk (Alcatel Space) in charge of A : Multi and hyperspectral analysis.
>Michel Marcelin (Laboratoire d'Astrophysique de Marseille) in charge of B : Multidimentional image instrumentation and data processing.
>Jean-François Le Maître (Université Paul Cézanne Aix-Marseille 3) in charge of C : Robotics and Industrial Automatisation.
>Marc Ferrari (Laboratoire d'Astrophysique de Marseille) in charge of D : Adaptive optics.
>Clément Laviron (CEA-EURATOM) in charge of E : Management of complex systems and large system projects description.
>Jacques Delacour (Optis) in charge of F : Simulation of complex system.
>Michel Detaille (POPsud)
>Serge Ungar (POPsud)

Program Committee, see web site : www.ocs2005.org