

## Preliminary List of Invited Speakers

H. Bjelkhagen, USA / G. von Bally, FRG: Holographic biopsy and endoscopy for early detection of environmental and radiation induced Cancers  
YY. Fagan, UK / J. Trolinger, USA: Holography in earthquake engineering  
II. Grassei, FRG: Optical remote sensing and global climate changes  
P. Greguss, Hungary: Optical biosensors in the reduction of natural and technological disasters  
K. Hinsch, FRG: Optical methods in bioindication  
A. Larkin, Russia: Operative analysis of disaster situations by optical Computing methods  
A. Lucia, Italy: Optical methods for technological process monitoring and reliability assessment  
V. Markov, Ukraine: Holography in cultural heritage protection  
B. Rock, USA: The use of satellite remote sensing to monitor forest decline in the US and Europe  
S. Sugimoto, Japan: Optical approaches to atmospheric monitoring  
S. Svanberg, Sweden / II. Edner, Sweden: Optical monitoring of natural and man made emissions - including volcanic activities  
S. Takenioto, Japan: Laser holography and electronic speckle pattern interferometry in earthquake prediction and analysis

Further invited Speakers to be nominated

Conference Language

English

Conference Location

The Conference will take place in the Castle (Schloß) of Münster.  
Münster is located in the north-western part of Germany close to the Netherlands border. It can be reached by plane (airport Münster/Osnabrück), train and highway (A1/E3). October may show an Indian Summer, but seasonal rain showers have to be expected.

**Contributed and post-deadline papers, posters, proceedings, authors Instructions, accommodation, registration, social and accompanying persons program**

See attached registration form.

**Deadline for Submission of contributed papers to the Conference Chairman is**

**August 15, 1992 !!**

**For additional Information about this Conference and the International Society on Optics Within Life Sciences (OWLS) contact:**

**Gert von Bally  
Conference Chairman and President of the International Society on Optics within Life Sciences**

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**Related International Conference:**

**"OPTIK 1992"**

**Optics and Environment / Optics and Medicine  
International Exhibition: Laser-Optoelectronics  
Berlin, FRG, Sept. 19 - Oct. 1, 1992**

**Contact:**

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## Second Circular

United Nations

Council of Europe



**International Society on  
Optics Within Life Sciences**  
International Commission for Optics  
Under the Auspices of UNESCO

**Second  
International Conference on  
Optics Within Life Sciences  
(OWLS II):  
Optics for Protection of Man  
and Environment against  
Natural and Technological  
Disasters**

October 4-9, 1992  
Münster, Germany



University of Münster

## Scope

Increasing numbers of natural and technological disasters taking place world wide are threatening the global Community. Actual examples of these are: **depletion of the ozone layer; green house effect; consequences of pollution by burning oil wells and oil layer contamination in the Persian Gulf region; radioactive contamination due to the Tchernobyl accident; volcanic activities and floods in the Philippines; earthquakes, etc.** These events are a challenge to the scientific and technical Community to provide means for monitoring, prevention and protection. Optical science is utilized extensively in these areas, yet there has been no comprehensive Conference on this topic on a world wide scale. Thus, the **International Society on Optics Within Life Sciences (OWLS)** dedicates the second in its series of international Conferences on **Optics Within Life Sciences (OWLS II)** to the key topic "**Optics for protection of Man and Environment against Natural and Technological Disasters**". The Conference is organized in Cooperation with the International Commission for Optics (ICO) and other cosponsors under the auspices of the United Nations Educational, Scientific and Cultural Organization (UNESCO) together with the United Nations within the frame of the International Decade for Natural Disaster Reduction as well as the European Council within the frame of the Open Partial Agreement on the Prevention of, Protection against and Organization of Relief in the Event of Major Natural and Technological Disasters.

### Cosponsoring Organizations

City of Münster  
Council of Europe (CE)  
Deutsche Forschungsgemeinschaft (DFG)  
German Society for Applied Optics (DGaO)  
International Commission for Optics (ICO)  
International Society on Optics Within Life Sciences (OWLS)  
Ministry of Higher Education and Research Northrhine-Westfalia  
United Nations Educational, Scientific and Cultural Organization (UNESCO)  
United Nations International Decade for Natural Disaster Reduction office at Geneva (UN - IDNDR)  
University of Münster  
World Health Organization (WHO)

## Topics

**The scientific** program will include but is not restricted to the following topical sessions:

### Applications of Optics for

#### - earthquake prediction, analysis and early warning

by permanent laser optical remote monitoring of Continental shelf motion, etc.;

#### - disaster medicine and related medical specialities

by automated optical Screening techniques for laboratory mass analysis e.g. of immuno System and genetic defects, laser surgical methods for hemostasis e.g. of extended burning wounds, optical techniques for early detection and therapy of radiation and environmentally induced Cancers, etc.;

#### - protection of cultural heritage

by optical analysis of environmental influences on buildings and monuments, art pieces etc. and optical evaluation of corresponding protection methods, etc.;

#### - atmospheric, water and soil pollution as well as marine contamination monitoring

by optical spectroscopy, direct and remote sensing with the possibility to trace the cause and causer, including those pollutants caused by industrial processes, extended fires or volcanic activities (keywords: ozone layer, green house effect, pollution by burning oil wells and oil layer contamination in the Persian Gulf region ), etc.;

#### - bioindication

by optical analysis of growth and change of health Status of pollution sensitive plants (bioindicators) for permanent, temporal and on-spot monitoring, etc.;

#### - technological processes monitoring and control

by optical sensors and remote (ground as well as airborne) sensing for supervision, fault detection, early warning and triggering of safety procedures, etc.;

#### - transportation safety;

#### - other fields of biology, medicine and environmental research;

#### - optical technology assessment, education and ethics.

## International Program Committee

G. von Bally, FRG (chairman)  
H. Bjelkhagen, USA  
D. Briers, UK  
P. Greguss, Hungary  
K. Hinsch, FRG  
D. Hsu, P.R.China  
S. Khanna, USA  
F. Lanzl, FRG  
A. Larkin, Russia  
S. Lowenthal, France  
A. Lucia, Italy  
V. Markov, Ukraine  
H. Ohzu, Japan  
J. Ojeda-Castaneda, Mexico  
N. Orlova, Russia  
J. Pereira, Portugal  
C. Sheppard, Australia  
L. Tanin, Belorussia  
D. Vukicevic, Croatia

## International Organizing Committee

G. von Bally, FRG (International Society on Optics Within Life Sciences (OWLS) (chairman))  
P. Chavel, France (International Commission for Optics (ICO))  
A. Larkin, Russia (Moscow International Coherent Photonics Center)  
J. Massue, France (European Council / OPA)  
R. Torge, FRG (German Society for Applied Optics (DGaO))  
M. Hashizume, France (United Nations Educational, Scientific and Cultural Organization (UNESCO))  
E. Plate, FRG (United Nations International Decade for Natural Disaster Reduction (UN - IDNDR))  
S. Yahmed, Switzerland (World Health Organization (WHO))