

# **LUMDETR**

**5<sup>TH</sup> EUROPEAN CONFERENCE ON LUMINESCENT  
DETECTORS AND TRANSFORMERS OF IONIZING  
RADIATION**

**BOOK OF ABSTRACTS**

**K. NITSCH AND M. RODOVÁ  
EDITORS**

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**Czech Technical University in Prague**  
*Faculty of Nuclear Sciences and Physical Engineering*  
Břehová 7, 115 19 Praha 1, Czech Republic

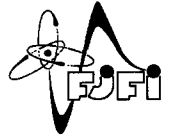
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**Institute of Physics**  
**Academy of Sciences of the Czech Republic**  
Na Slovance 2, 182 21 Praha 8, Czech Republic



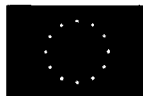
**Czech Technical University in Prague**



**Faculty of Nuclear Sciences and Physical Engineering**

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A. Beitlerová

**Institute of Physics AS CR, Cukrovarnická 10, 162 53 Prague, Czech Republic**

Phone: +420-2-20318-111

Fax: +420-2-33343184

E-mail: [ldt03@fzu.cz](mailto:ldt03@fzu.cz)

# FOREWORD

The Institute of Physics of the AS CR and Faculty of Nuclear Science and Physical Engineering, Czech Technical University cordially welcome all colleagues, participants of the 5<sup>th</sup> European Conference on Luminescent Detectors and Transformers of Ionizing Radiation held in Prague, September 1-5, 2003. LUMDETR2003 continues the tradition established by previous meetings in Latvia (Riga, 1991), Estonia (Tallin, 1994), Poland (Ustron, 1997) and Latvia again (Riga, 2000). This conference provides an interdisciplinary forum for the presentation of latest developments in the basic and applied research in the field of radioluminescence, the processes of energy transfer and storage in solid-state systems, the physics and chemistry of luminescent phosphor and scintillation materials, as well as all related applications.

Nearly two hundred colleagues from 29 countries of Europe, Asia, Africa and America have registered to participate at the conference. Camera-ready abstracts are published in an originally received form. Therefore organizers do not take any responsibility for their technical and language quality. Accepted contributions are distributed into eight sections:

1. Scintillation materials – performance and characterization
2. Dosimetric materials – performance and characterization
3. Physics, chemistry and technology
4. Luminescence mechanism
5. Impurities, defects, traps
6. Novel concepts, methods and phenomena
7. Theory and modeling
8. Applications.

The program of these sections will be introduced altogether by thirteen invited lectures presented by outstanding scientists of the field. Besides, 39 oral and 145 poster presentations will complete the scientific content of the conference.

Organization committee did its best to prepare a comfortable stay in Prague for all of you. We sincerely hope that you will not only be highly satisfied by rich conference program, but as well pleased by remarkable beauty of one of the mid-European jewel – the city of Prague.

We would like to thank all of you for coming and wish you an enjoyable stay in Prague and in the Czech Republic.

On behalf of the Organization committee

Martin Nikl and Tomáš Čechák  
Conference chairmen

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