

## **Call for papers: Special issue “Trends in laser sources, spectroscopic techniques and their application to trace gas detection”**

A special issue of Applied Physics B – Lasers and Optics, a leading international journal that covers laser physics, optics and laser spectroscopy of atoms will be published in mid-2006. This special issue is intended to highlight the latest achievements in the use of visible to THz laser radiation in real-world chemical sensing applications and to stimulate research in this important area of optical physics.

**Topics to be covered by this special issue include, but are not restricted to, the following:**

- Optical parametric devices
- Infrared semiconductor lasers
- Quantum and interband cascade lasers
- New instrumentation and innovative optical methods
- Applications of laser sources in urban, industrial and rural emission measurements
- Applications of laser sources in environmental monitoring and atmospheric chemistry
- Applications of laser sources in industrial process monitoring and control
- Applications of laser sources in biomedical and clinical diagnostics
- Applications of laser sources in remote sensing
- Fundamental science and photochemistry
- Forensic science and security

Scientists and engineers working in the area of infrared laser applications to chemical and environmental analysis are encouraged to submit original contributions to be published in the forthcoming special issue of Applied Physics B. Papers should be prepared according to the instructions for authors (see URL address below) and submitted as a PDF file to Frank Tittel or Anatoliy Kosterev no later than 1 April 2006.

All manuscripts must be accompanied by the name and full address of the corresponding author, telephone and fax numbers, e-mail address and a completed copyright transfer form in PDF format. The manuscripts will be reviewed according to the usual standards of Applied Physics B – Lasers and Optics. The Word or L<sup>A</sup>T<sub>E</sub>X source file of the final version of the article will be requested after acceptance for publication. Accepted articles will be published online as soon as the authors have returned the corrected proofs i.e., before the printed version appears in July 2006.

To facilitate planning, we would very much appreciate if you could let us know as soon as possible, but not later than 10 February 2006, if you plan to submit a contribution. Please also include a tentative title (see the reply form posted online).

**Benefits for authors:**

Rapid publication online as well as in print  
High-profile focused publication  
High scientific standards  
Electronic submission in the form of PDF files  
Electronic supplementary material  
50 free off-prints  
No page charges

**Instructions for authors and copyright transfer form:**

<http://www.physik.uni-kassel.de/exp1/applphys/springer.htm>

We are looking forward to receiving many excellent contributions.

*Anatoliy Kosterev*  
Rice University  
Electrical and Computer Engineering  
MS – 366  
6100 Main Street  
Houston, TX 77005, USA  
Tel.: +1-713-3485418  
Fax: +1-713-3485686  
E-mail: akoster@rice.edu

*Frank Tittel*  
Rice University  
Electrical and Computer Engineering  
MS – 366  
6100 Main Street  
Houston, TX 77005, USA  
Tel.: +1-713-3484833  
Fax: +1-713-3485686  
E-mail: fkt@rice.edu