

Colloquium

[Electrical and Computer Engineering](#)

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Speaker: Ulrike Willer

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Germany

Recent advances in laser based chemical trace gas sensing

Thursday, February 7, 2008

4:00 PM to 5:00 PM

1064 Duncan Hall
Rice University
6100 Main St
Houston, Texas, USA

Abstract:

Laser spectroscopic techniques play an important role in trace gas sensing since they can often be applied without sampling, sample preparation or pre-concentration techniques. Several applications of environmental monitoring, industrial process control and in the field of national security will be presented. Mid-infrared laser absorption spectroscopy (LAS) is a powerful tool for sensitive, selective and fast detection of molecules. Specifically, the potential of LAS applied to the detection of explosives will be discussed.