

## Media communiqué

Duebendorf, St. Gall, Thun, 30<sup>th</sup> June 2009

**International Structural Health Monitoring Conference being held in Switzerland for the first time**

### **Taking the Pulse of Buildings with Intelligent Monitoring Systems**

**Over 180 experts from about thirty countries meet in Zurich at the end of July to discuss the latest developments and newest technologies in the field of monitoring buildings and structures. Empa is for the first time organizing the renowned SHMII Conference («Structural Health Monitoring of Intelligent Infrastructures»), which is taking place from July 22<sup>nd</sup> to 24<sup>th</sup> at the ETH Zurich**

On the desk of the US President, Barack Obama, lies a study prepared by the Information Technology & Innovation Foundation (ITIF). It contains a proposal for investing 30 billion US dollars in the digital infrastructure of the USA, which it maintains could create one million jobs within a year. Sections of this economic booster package cover, for instance, intelligent power networks and Structural Health Monitoring» (SHM). The latter is a technique for collecting and analyzing information on the functional integrity of buildings and civil engineering structures, with the aim of identifying damage such as cracks or excessive deformation, so that countermeasures can be instituted before a catastrophic failure of the structure occurs.

Specialists from all over the world will shortly be gathering in Zurich to discuss progress in the field of building monitoring. The fourth SHMII Conference is being organized by Empa for the first time this year, and from July 22<sup>nd</sup> to 24<sup>th</sup> they will have the opportunity to sit in on over 150 expert lectures with speakers from 28 countries. Also on offer at «SHMII-4» are, among other topics, the latest information and know how on such subjects as “intelligent” sensors and wireless sensor networks, the recognition and localization of damage, monitoring historic buildings subject to preservation orders, the newest computer models for generating reliability predictions as well as renovation and reinforcement techniques for civil engineering structures. The leader of the organization committee, Empa researcher Urs Meier, is very pleased with the response from the specialists, which has been, in his words, “fabulous!” The conference, which is being held in English, is taking place in the auditoria in the north sector of the ETH Main Building in Zurich.

For more details see <http://shmii.empa.ch/>

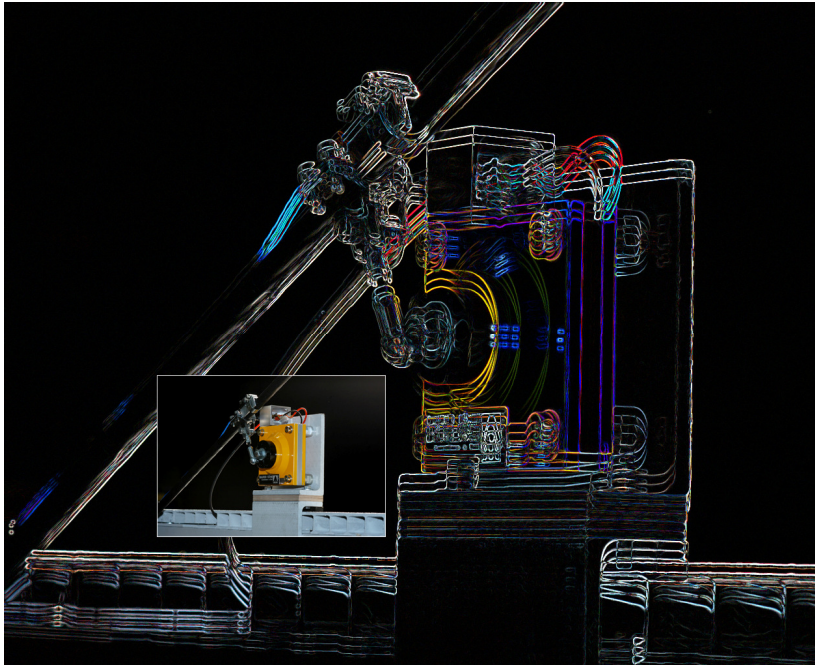
#### **Further information from:**

Prof. Urs Meier, Dept. of Civil and Mechanical Engineering, +41 44 823 41 00, [urs.meier@empa.ch](mailto:urs.meier@empa.ch)

Bernadette Havranek, Structural Engineering Laboratory, +41 44 823 44 33, [bernadette.havranek@empa.ch](mailto:bernadette.havranek@empa.ch)

**Editor / Media contact**

Dr. Michael Hagmann, Communication Dept., +41 44 823 45 92, [michael.hagmann@empa.ch](mailto:michael.hagmann@empa.ch)



Semiactive damping system for stayed cables used in the construction of bridges. The aim is to reduce bridge oscillations to a minimum.



Using a video system to measure the deformation of a bowstring bridge deck made of laminated timber. The deck is tensioned by carbon fiber reinforced polymer tensioning bands spanned across the lower surface of the deck. The bands were developed at Empa.

The images in print quality resolution and the text in electronic form are available from [redaktion@empa.ch](mailto:redaktion@empa.ch)