

Fourth Conference on Smart Monitoring, Assessment and Rehabilitation of Civil Structures

SMAR 2017, Zurich Switzerland

13 – 15 September 2017 ETH Zurich CH

Topics for conference proceedings

Structural Health Monitoring

- Smart sensors
- Wireless sensor networks
- Implementation of structural monitoring
- Monitoring of off-shore structures and oil pipelines
- Monitoring of high rise buildings and bridges
- Advanced inspection and testing
- System identification and model updating

Performance and damage assessment

- Safety evaluation and reliability forecast

Shape memory alloys in civil structures

- Nickel-titanium, Copper or Iron-based SMA
- Application of SMA for civil structures using special properties such as Damping, Superelasticity
- Shape memory effect of Ductility

Damage control, repair and strengthening

- External strengthening using FRP composites
- Strengthening of concrete, timber and steel structures
- Confinement of concrete columns
- Near surface mounting reinforcement
- Seismic Safety Assessment, Rehabilitation and Monitoring

Durability issues as related to harsh environments

- Fire protection systems

Practical applications and case studies

Visionary Concepts

- Special Session:**
- Strengthening, Monitoring and Life-cycle Assessment of Metallic Structures
 - In honor of Professor Urs Meier's lifetime achievements:
 - 25 years of CFRP in construction - materials from aerospace make career in civil engineering
 - Vibration-based Structural Health Monitoring