

## 1. SEMINAR

### organized within the project „ATCZ190 SAFEBRIDGE“

Date: Thursday, 31. 10. 2019

Location: University of Natural Resources and Life Sciences, Institute of Structural Engineering (IKI), IKI Computer Room (CAD)

Address: Wilhelm Exner Haus (1. Floor), Peter-Jordan-Straße 82, 1190 Vienna, Austria

**Target Groups:** Infrastructure operators-owners, bridge inspectors, structural designers and analysts involved in the inspection, assessment and recalculation of existing structures.

**Organisation of the Course:** During the seminar, the participants will be informed about the methods of determining the level of reliability of existing structures and the non-linearity of existing bridge structures. A training through practical applications will follow. The methods of Levels III of the B4008-2 will be discussed, focusing specifically on reliability index calculation, stochastic models and non-linear methods. The support in model developments and training on the existing tools is the main focus of this seminar. The seminar will conclude with the discussion of the systematic application of Level III control according to B4008-2.

#### Time Schedule:

##### **Morning Block for those interested in reliability from management and structural analysis point of view**

**08:30 – 09:30 Registration of Participants**

09:30 – 09:45 Content and targets of the project ATCZ190: SAFEBRIDGE

09:45 – 10:30 Reliability calculation of systems  
*by hand calculation and simple numerical methods*

**10:30 – 10:45 Coffee Break**

10:45 – 11:30 FREET a tool for the reliability calculation  
*in daily practice*

11:30 – 12:15 Basic variables und Limit State Functions  
*Formulation and characterisation*

**12:15 – 13:15 Lunch Break**

##### **Afternoon Block for those interested in the modeling of structures**

13:15 – 14:00 Reliability Shell SARA für FEM applications *and safety formats*  
*FEM reliability calculation of bridges in daily practice*

14:00 – 14:45 Non linear FEM modeling, analyses and interpretation  
*selected bridge details from the SAFEBRIDGE Guidelines*

**14:45 – 15:00 Coffee Break**

15:00 – 18:00 Non linear FE-Modeling of selected structural systems

18:00 – 18:30 Closing, Discussion und Future Topics

Please confirm your participation until **15.10.2019** by sending your registration form to the email address:  
[H87500\\_safebridge@boku.ac.at](mailto:H87500_safebridge@boku.ac.at) and [safebridge@vut.cz](mailto:safebridge@vut.cz).