Webinar Series

Risk, resilience and sustainability informed integrity management of infrastructure systems

From Science to Practice: What Industry and Owners Need

Speaker： Dr. Helmut Wenzel, Wenzel Consult Time: 5th September, 2022 15:00 – 16:00 CET

Host： Prof. Da-Gang Lu, Harbin Institute of Technology



ZOOM Link:
https://aaudk.zoom.us/j/63078023317

Live on Bilibili:
https://live.bilibili.com/25855174

ZOOM Meeting

Bilibili

Lecture outline:

We have to bring sophisticated science into the asset management process. This requires applications asset managers, who often are not familiar with the latest technologies, can intuitively apply. SHM applications therefore have to offer semi-automatic routines that do the often-boring daily work. On the other hand, the system has to warn if this low-level technology is not sufficient to recognise minor changes in performance with eventual high consequences.

I will show and explain the implemented SHM system of the Osmangazi Bridge (1550m span, 440 sensors) and talk about the approach and feasibility of the system under implementation at the world record 1915 Canakkale Bridge in Turkey (2023m span, 1060 sensors). Every bridge is a prototype and contained many of the usual problems with SHM in practice.

About the speaker:

Helmut Wenzel currently operates the consulting firm Wenzel Consult in Austria. The scope covers mainly large bridges worldwide that deserve special attention. Current focus is on the 2 bridges in Turkey and a number of largen projects in India.

He previously managed VCE in Vienna where SHM technologies have been developed and brought into practice. He was the coordinator of the major research projects IRIS and SAMCO of the European Commission. Several research results finally have been introduced to EUROCODES and ISO.

JCSS Joint Committee on Structural Safety GLOBE