

*The 2023 World Congress on  
Advances in Structural Engineering and Mechanics (ASEM23)  
GECE, Seoul, Korea, August 16-18, 2023*

Keynote Paper

## **Suspension Bridges with Railway Crossing: Potentially-Innovative Options**

**Professor Fabio Casciati**

*Zhejiang University, China*

*Email: [fabio@dipmec.it](mailto:fabio@dipmec.it)*

### **ABSTRACT**

The ambitious project of a permanent link between the bottom of the Italian peninsula and the nearby Sicily island was left in stand-by from 2013 to 2023. The current political revival originates some thoughts on the update desired performance of suspension bridges, without immediate reference to that specific crossing, if not as a starting point. After an update on recent worldwide realizations, the author focusses their attention on four basic aspects: the span length, the girder scheme, the foundation technology and the bridge runability. Eventually, structural control and monitoring aspects are discussed.