



10th Year

# GLOBAL LEAKAGE SUMMIT 2019

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## Professor Bruno Brunone

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**Bruno – At the Summit you will share with delegates your innovative technology for detecting leaks and defects in transmission mains. This works by introducing ‘safe’ transients into the pipeline. Most people think of transients as causing hydraulic shocks - can you explain how you create a ‘safe’ transient?**

‘Safe’ transient means the injection in the pipe system of a small amplitude pressure wave (i.e., a pressure wave with an entity of few meters of water column).

**You have tested the technology in the laboratory – how successful has the field testing been? Did you manage to do a test on a live transmission main? And how did the results compare with using more conventional technologies for leak detection in large pipes?**

The proposed transient test-based technology was firstly examined by means of numerical tests; then it was checked in the lab. Several tests have been executed in live transmission mains with very good results (we localized anomalies in Milan and Trento pipe systems). To be sincere: in the field of large transmission mains technology is in progress and then, in my opinion, the term ‘conventional’ does not apply properly.

**Research and Development by universities and joint ventures is an essential component of innovation, and all emerging technologies need a sponsor or joint venture company to move**

**from a prototype to a commercially available product. What are the next steps for marketing this technology?**

Marketing of the proposed technology is taking place within a University of Perugia and Technical University of Bari joint spin-off company. A EU project focused on leak detection in real pipe systems would help a lot the dissemination of the technology.

**Without revealing the full details of your full presentation, with 50-100 words can you describe your presentation and how it will help your fellow colleagues?**

The presentation at the 10th Global Leakage Summit, prepared by Silvia Meniconi and me, will show the possibility of using safe transient tests as a powerful tool for detecting anomalies in real transmission mains. The results of the field tests will be discussed in terms of the time needed to prepare the experiments, their repeatability, and effectiveness of the injected pressure waves.

**What are you looking forward to at the 10th Global Leakage Summit in June?**

To discuss with colleagues of water supply companies about reliable techniques for fault (leak) detection in long transmission mains.

At the 10th Global Leakage Summit in June, Bruno will be speaking at an exclusive session on the **Reliability of Transient Test-Based Techniques for Fault Detection in Transmission Mains**

[www.global-leakage-summit.com](http://www.global-leakage-summit.com)