

# HIGHLIGHTS

FACULTY OF ENGINEERING - UNIVERSITY OF PORTO 2016



**BERD FEUP  
WIBEPRIZE**  
WORLD INNOVATION IN BRIDGE ENGINEERING 2017

**U. PORTO**  
FEUP ENGINEERING





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# FEUP e BERD launch world prize for innovation in bridge engineering

It is a kind of a nobel prize for bridges and was announced last July 28<sup>th</sup>, at a public joint session of the Faculty of Engineering of the University of Porto (FEUP) and BERD, a portuguese company specialized in equipment with prestressing systems for bridge construction.

With the announcement of this prize both entities want to share internationally the success of the research and development model that BERD and FEUP have been applying in recent years and to keep both institutions in contact with the vanguard of international bridge engineering, while at the same time contributing to its improvement.

At the awards session, Pedro Pacheco, CEO of BERD, said that "Portuguese bridge engineering is in a position to take a leading role on the international map of civil engineering", arguing that "the organization of a prize of such relevance is an enormous responsibility and a great challenge, given the objective of contributing to a leadership position for Portuguese bridge engineering".

The Director of FEUP, João Falcão e Cunha, also emphasized the importance of the award: "This is the first prize launched at national and international level focused on innovation in bridge engineering" and should therefore from now on be considered the "Nobel Prize for bridges", thus highlighting the innovative capacity of national and international engineers. This is an excellent opportunity "to promote internationally the excellent skills which exist in the field of bridge engineering", said João Falcão e Cunha.

The connection between BERD - a company specialized in equipment with prestressing systems for building bridges - and FEUP for this triennial prize worth \$50,000 (46,000 euros) dates back to 1994, when BERD appeared on the market as a spin-off of FEUP, following Pedro Pacheco's doctoral thesis. At the time, the very basis supporting his thesis research was considered innovative: to apply to bridge structure concepts and principles that are commonly associated with human muscle. This was how the OPS system appeared - the Organic Prestressing System, a kind of artificial muscle used in falsework (temporary support structures), to build bridges, already patented worldwide, and the M1, which is construction equipment that only became viable with this technology. M1 is a falsework that allows the construction in situ of bridges and viaducts with spans up to 120 meters making it the largest self-launchable falsework today, which thanks to the OPS system, makes it possible to reach new limits in the construction of bridges and viaducts.

The company is based in Porto and occupies the top 3<sup>rd</sup> rank worldwide in the area of solutions for bridge engineering. It employs 40 workers and is exporting 100% of its production. In Portugal, they were involved in the Corgo viaduct, but they have since been dedicated to the foreign market, and currently they have about 15 projects underway all over the world. ●

[www.feup.pt/wibe](http://www.feup.pt/wibe)