SPONSE INTERNATIONAL ASSOCIATION FOR THE SEISMIC PERFORMANCE OF NON-STRUCTURAL ELEMENTS

Research Organization:

DEPARTMENT OF ENGINEERING FOR INNOVATION – UNIVERSITY OF SALENTO

Short Description of the Organization:

The Department is devoted to promote and to disseminate technology innovation. Many prestigious results and awards have been and are currently obtained by the Department research staff in several research areas.

About 100 of staff people teaching in Engineering faculty and Science faculty and an average of 100 of PhD students and Postdocs. On a regional basis our Department in the last years was capable to win about 30% of all supported research projects, competing against other 3 Universities (two in Bari and one in Foggia).

The department plays a key role in the local economy, supporting most of the technological innovation of the local industry; it is responsible of high qualified teaching at Master and PhD level. Furthermore, it promotes employment of high qualified engineers and contributes to the wealth of Salento.

The Structural Engineering research group, headed by Prof. Maria Antonietta Aiello, conducts several research activities. The main topics are listed below:

- Structural strengthening and retrofitting of RC, masonry and plywood buildings with innovative technologies (FRP, FRM); Structural behaviour of fiber-reinforced concrete in ordinary and aggressive environmental conditions; Experimental bond analysis of fiber-reinforced masonry and concrete structures; Buckling of laminated composite plates and sandwich panels.
- Seismic vulnerability assessment of existing RC and masonry structures, evaluation of the influence of masonry infills on seismic behaviour of RC frames, and seismic vulnerability assessment of non-structural components.
- Rapid visual screening methods development for the seismic vulnerability assessment of hospitals; numerical modelling of infilled frames for the conduction non-linear static and dynamic analyses; evaluation of the influence of the masonry infill panels on the dynamic behaviour of RC buildings.
- Experimental testing of piping systems' components in conjunction with Italian, European and American Universities; numerical analysis of medical gas and fire-fighting piping systems layouts for the seismic vulnerability assessment.

Website: https://www.dii.unisalento.it/home_page