

Special Issue on **Advancements in Design and Analysis of Protective Structures 2019**

CALL FOR PAPERS

A series of tragic accidents highlighted, in the last few decades, the need to build and retrofit structures and facilities, to better protect the occupants in the event of extreme loading conditions, including terrorist or mass-casualty attacks, natural hazards, and disasters. This is the case of critical civil infrastructure such as embassies, government buildings, airports and hospitals, or bridges, where continuous and effective protection tasks have a key role in preventing injuries and providing appropriate serviceability, even in case of emergencies. The definition of the so-called “soft targets” can then be generalized and extended to mostly open areas and spaces, accessible to the public and particularly vulnerable to attacks.

From a practical point of view, the design of protective structures or the definition of hazard mitigation systems requires multiple functions and reasonable safety criteria, according to the intrinsic features of possible target structures. To this aim, several research studies have been dedicated in the last years to the assessment, enhancement, and protection of civil engineering materials, components, and complex structural systems, including refined numerical simulations, experimental investigations, and analytical studies at the component and/or assembly level.

In this regard, this special issue aims at providing an insight on recent advancements in the design and analysis of protective structures, with careful attention to engineering applications. These may include buildings, infrastructures and bridges, defense facilities, and industrial plants, pipelines, offshore platforms, shipping, and offshore/underground structures.

Potential topics include but are not limited to the following:

- ▶ Analysis, design, assessment methods, and retrofitting techniques for “soft targets”
- ▶ Hazard sources, including classification, measurement methods, and analytical/numerical description
- ▶ Risk and failure analyses
- ▶ Design methods against terroristic and mass-casualty attacks, with careful consideration for hazard mitigation solutions
- ▶ Blast damage assessment
- ▶ Advanced numerical simulations
- ▶ Experimental investigation and performance assessment of materials, structural details, and assemblies

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/ace/adap19/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

Special Issue Editor in Chief

Chiara Bedon, University of Trieste,
Trieste, Italy
chiara.bedon@dia.units.it

Guest Editors

Michel Arrigoni, ENSTA Bretagne,
Brest, France
michel.arrigoni@ensta-bretagne.fr

Filipe Santos, New University of Lisbon,
Lisbon, Portugal
fpas@fct.unl.pt

Lucia Figuli, University of Žilina, Žilina,
Slovakia
lucia.figuli@fbi.uniza.sk

Submission Deadline

Friday, 22 February 2019

Publication Date

July 2019