

Announcement and call for papers for
The First
International Conference of Protective Structures
29 September – 1 October, 2010
Manchester, UK



THE UNIVERSITY OF WESTERN AUSTRALIA



MINISTRY OF DEFENCE



The International Journal of Protective Structures (<http://www.multi-science.co.uk/ijps.htm>) was successfully launched in the International Workshop on Structures Response to Impact and Blast (IWSRIB) in November 2009 in Israel. Many IWSRIB delegates recognized the necessity of forming an International Association of Protective Structures as a platform to bring academics, researchers and practising engineers together for better infrastructure protections against man-made and natural explosion and impact. With this latest development, the scheduled third International Conference on Analysis and Design of Structures against Explosion and Impact (3rd ADSEI) will be jointed with the second International Workshop on Structures Response to Impact and Blast (2nd IWSRIB) to form a new series of International Conference of Protective Structures (ICPS) and the first ICPS will be held from 29 September to 1st October 2010 in Manchester, UK. It is planned that the new International Association of Protective Structures will be formed and launched in the first ICPS. All persons interested in civil infrastructure protection are invited to participate in this exciting event.

ICPS focuses on civil infrastructure protection against man-made and natural explosion and impact, which is also the primary theme of the proposed International Association of Protective Structures, and is consistent with the scope of the International Journal of Protective Structures. With the increased global terrorist threat, the transfer of impact and blast mitigation technology from military applications to civil infrastructure protection becomes crucial. The topics of ICPS are complementary to the topics of another important conference, The 21st International Symposium on Military Aspects of Blast and Shock (MABS21), which will be held in Jerusalem from 3-8 October 2010. The first ICPS is therefore scheduled from 29 September to 1 October 2010 to provide a good opportunity for interested people to attend both conferences.

The organizing committee of the first ICPS is working hard to provide a high standard conference. The conference will not only provide a forum for participants to review, discuss and present the latest developments in the broad disciplines of structural protection against explosive and impact loads, but also provide opportunities for participants to renew and expand personal and professional friendships and contacts, and to witness the launching of the International Association of Protective Structures.

We warmly welcome your participation of these exciting events in the area of structural protection and look forward to meeting you in Manchester!

Chairman: Dr. Qingming Li

Co-chairmen: Prof. Hong Hao, Prof. Zhong-Xian Li, Prof. David Yankelevsky

Conference Theme

The conference will focus on protection of civil engineering infrastructure (building, bridge, pipeline, dam, etc.) against natural and man-made explosion and impact actions such as terrorist bombing, accidental gas explosion and vehicle (car, airplane, ship) impact with structures. Following the three panel discussions in IWSRIB, the conference will have three main theme areas: 1) Numerical methods and simulation of explosion and impact loading effects and structure response; 2) Strengthening and mitigation measures for civil infrastructure protection; and 3) Experimental studies and full scale tests. The aim is to discuss these theme areas from different aspects as well as the interactions between them (e.g. simulations and experimentation, strengthening and testing, etc.). Specific topics include but not limited to:

1. Shock and stress wave propagation in air and geomaterials and interaction with structures
2. Explosion and impact loads on structures

3. Design of structures to resist explosion and impact
4. Projectile Penetration and perforation
5. Behavior of structures and structural elements under explosion and impact
6. Numerical simulation and modeling
7. Experimental techniques
8. Material behavior at high strain rate
9. Vehicle impact with structures
10. Impact induced by earthquake and other natural disasters
11. Protective materials for construction and strengthening structures
12. Strengthening and retrofitting techniques and design
13. Safety, reliability and cost effectiveness analysis of structure design and strengthening

Contributions of original papers related to the above topic areas are invited. All the submitted papers will be peer reviewed for inclusion in the conference proceedings.

Selected extended papers will also be published in a special issue of the International Journal of Protective Structures.

Papers with the main author who is 35 years old and below will be considered for the Best Young Researcher's paper Award.

Key dates:

March 31, 2010: Deadline for submitting abstract (not exceeding one A4 page) (If you miss the abstract deadline, you may still submit your paper. Please inform the conference chairman, via qingming.li@manchester.ac.uk, the title and abstract of your intended paper as early as possible before April 31, 2010)

April 15, 2010: Invitation of full paper

June 15, 2010: Deadline for submitting full paper (format and page limit will be given in next announcement)

July 31, 2010: Notification of review results

September 15, 2010: Deadline for submitting final paper

Abstract should be submitted via conference e-mail to: ICPS-2010@manchester.ac.uk

To encourage wide participation of this conference, each registered person is allowed to submit no more than two papers.

Information will be continuously updated by further announcements and conference website <https://www.meeting.co.uk/confercare/icps2010>. If you have any inquiries about this conference, please contact one of the conference chairmen.

Registration fees: In order to minimize the registration fee according to individual's needs, there will be different levels offered, but as a guide, the full package including reception and tour is likely to cost £380 with £330 for students. The registration fee will cover admittance to all conference sessions, proceedings, refreshments, lunches and conference dinner. There will be a reception with buffet and drinks on the evening of 29 September. A post-conference tour will be arranged for 2 October and further details will be announced soon.

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