

## About Belfast City

Northern Ireland's capital, Belfast, combines the vibrancy of a major city with a world-renowned reputation for hospitality. The city has undergone a renaissance in recent years and entertainment arenas changing its distinctive skyline. Belfast is teeming with a multitude of stylish restaurants and social venues as well as some of the best shopping opportunities in the UK or Ireland, and it offers a cultural experience out of proportion to its compact size. With a famous industrial history, Belfast is a city steeped in culture, portrayed through major tourist attractions such as the Ulster Museum, City Hall and Titanic Quarter. The city's many parks, gardens and galleries offer a perfect haven to relax. Today, Belfast remains a centre for industry as well as the arts, higher education and business. Located at the mouth of Belfast Lough, the city is a perfect location from which to explore the rest of Northern Ireland, a region which offers spectacular scenery, a fascinating history, and a famously warm welcome.



## Key dates

Submission of abstracts	23 March 2012
Confirmation of abstract acceptance	13 April 2012
Submission of papers (8 pages)	29 June 2012
Confirmation of paper acceptance	31 July 2012
Submission of final manuscript and slides for review	17 August 2012
Registration deadline	17 August 2012
Submission of final set of slides	10 September 2012

## International Organising Committee

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Queen's University Belfast

SCHOOL OF  
Planning, Architecture  
and Civil Engineering

We are exceptional

**ICDCS 2012**  
3rd International Conference on  
Durability of Concrete Structures

First announcement and call for abstracts

Queen's University Belfast  
Northern Ireland, UK  
17-19 September 2012

### Co-organised by:

Queen's University Belfast, UK  
Zhejiang University, China  
Hokkaido University, Japan

## Background

Concrete is the most important structural material in human history and “man consumes no material except water in such tremendous quantities”. Concrete was once regarded as a durable material with no need of maintenance. However, it is now generally accepted that structural concrete does not have an indefinite life, i.e., it deteriorates with time. In developed countries, approximately 50% of the expenditure in the construction industry is spent on repair, maintenance and remediation of infrastructures. In some developing countries like China and India, there is an exponential growth in infrastructure and these newly-built structures such as bridges and dams requires more than 100 years service life. Therefore, the importance of the durability of infrastructure cannot be over-emphasised.

To bring together leading experts in this field from around the world in order to share the recent achievements, present the latest development as well as to discuss the current problems so that the future challenges on durability issues of concrete structures could be addressed. The conference is the third event on durability of concrete structures under the series of ICDCS. The first and second ICDCS was successfully held in Hangzhou, China in 2008 and in Sapporo, Japan in 2010, respectively.

## Exhibition

Companies and organisations are invited to exhibit their products and services during the conference. All the enquiries on exhibition should be sent to:  
**cber-events@qub.ac.uk**

## Correspondence

Carole Maslowski, Conference secretary  
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Email: cber-events@qub.ac.uk

## Call for abstracts

Authors are invited to submit one page abstracts (approx. 300 words without figures and tables). The abstracts must be written in English. All abstracts will be reviewed. The closing date for submission of abstracts is 23 March 2012.

Abstracts must be submitted electronically to:  
**cber-events@qub.ac.uk**

## Conference topics

- The general topics to be covered include:
- Influence of environments on durability
- Ionic/molecular transport and modelling
- Materials for durability enhancement
- Material deterioration mechanism
- Performance of deteriorated structures
- Durability design
- Life-cycle management of concrete structures
- Testing, inspection and monitoring methods
- Repair and maintenance
- Novel cementitious materials
- Practical applications



## Queen's University Belfast

Founded by Queen Victoria in 1845, Queen's University Belfast has a record of academic achievement for more than 150 years. It is a broadly-based, research-driven university with a dynamic, world-class research and education portfolio. As a member of the Russell Group of the UK's 20 leading research intensive universities, Queen's is recognised as one of the very best universities in the UK and Ireland.

Civil Engineering education in Queen's started in 1845 and currently the School of Planning, Architecture and Civil Engineering (SPACE) provides a higher education for those who primarily wish to train as professional Civil Engineers within the construction industry. It was rated as No. 3 for three consecutive years since 2003 in national league tables for high quality teaching and research in Civil Engineering. The Structures and Materials is one of the long-established research themes in SPACE and has been categorised as world leaders in a national Research Assessment Exercise in 2008 (RAE2008) undertaken by the UK Government.

## Conference Venue

The conference venue will be held within the main campus of Queen's University Belfast. The university is situated in South Belfast and is within walking distance of the city centre and tourist attractions.