

PRELIMINARY ANNOUNCEMENT & CALL FOR PAPERS



Compressed earth blocks

Introduction

The theme of the 1st International Conference on Non-conventional Materials and Technologies, held in 1984, was 'Low cost and energy saving materials' for construction. Continued population growth and economic globalization, combined with climate change, have ensured that these themes require even more urgent attention today. Providing sustainable housing and infrastructure development for all of humanity is a significant global challenge for the 21st century. Continued innovation in the production and use of building materials is essential if we are to meet this challenge without irreparable damage to our planet.

Non-conventional materials and technologies encapsulate innovation and sustainable use of novel technologies and new uses of more established materials. Many non-conventional materials in the 21st century have their roots in traditional vernacular construction, including earth (unfired clay), lime and natural plant based materials, such as bamboo, straw and reeds. For traditional materials and techniques to meet modern demands of construction, cost and performance requires further development and innovative solutions. Meanwhile materials of the industrial age, including steel and concrete, must also deliver more sustainable solutions. Innovations include manufacturing processes, lower carbon materials, greater reuse of components on end-use, greater recycling of materials, reduced waste and more prefabrication of components and buildings.

The 11th IC-NOCMAT follows previous events in Hanoi, Vietnam (2002), Bhubanewar, India (1997) and Rio de Janeiro (1984). Over the past 5 years IAC-NOCMAT conferences have also been held in Brazil (João Pessoa (2003); Pirassununga (2004); Rio de Janeiro (2005); Salvador (2006); and Maceió Alagoas (2007)) and most recently Cali in Colombia (2008).

Objectives

The 11th IC-NOCMAT 2009 will provide an international forum for information dissemination and exchange, discussions and debates on research and practice in a range of sustainable and innovative construction materials and technologies.

The conference is expected to attract a wide range of academics, scientists, researchers, students, builders, designers, NGO field-workers, specifiers and other industrialists from a wide variety of backgrounds, including fields of architecture, engineering, materials, sustainable and ecological technologies, biomaterials, materials sciences, and environmental engineering. The conference should also be of interest to specialists in geography, economists and administrators of natural resources.

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11th International Conference on Non-conventional Materials and Technologies Materials for sustainable and affordable construction (IC-NOCMAT 2009)

6th - 9th September 2009

Venue: University of Bath, Bath, UK

Organised by:
BRE Centre for Innovative Construction Materials
University of Bath, Bath, UK.



Straw bale cladding panels



LVL connection with bonded in rods

The conference themes can include papers and presentations on fundamental science and applied research, case study reports and dissemination of innovations in the themes of:

- Construction materials and technologies for climate change;
- Construction materials and technologies to deliver affordable housing;
- Innovations in development of low carbon materials and technologies;
- Low cost housing concepts, prototypes and applications;
- Standards and guidelines;
- Minimising water use in construction materials;
- Life-cycle assessment of materials;
- Sustainable, energy efficient construction;
- Seismic strengthening, flood mitigation and disaster prevention;
- Advances in research methodologies and materials testing;
- Infrastructure systems and materials;
- Durability and performance of construction materials;
- Applications in improving building health through materials and constructional development;
- Recycling of construction, industrial and other waste stream materials

The conference theme covers all construction materials, with the overall objective of reducing environmental impact (climate change impact) and providing safe affordable construction. Specific conference themes will include: natural fibres and plant based materials (bamboo, straw, hemp); timber materials and engineering; masonry construction; lower carbon cements and concretes; advanced fibre composites in construction; innovative use of metals; lime based materials; stone, unfired clay and earthen architecture; insulation materials; sealant and bituminous materials; glass; plastics; polymeric materials.



Bamboo

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In partnership with

NOCMAT; Pontificia Universidade Catolica (PUC-Rio);
Associação Brasileira de Materiais e Tecnologias Não Convencionais

Invitation to contribute

You are cordially invited to present a paper and or participate in this event. Contributors are requested to submit concise (max. one-page) abstracts in English by email: p.walker@bath.ac.uk, or through the conference web site: www.bath.ac.uk/ace/nocmat2009

Key dates

Submission of abstracts: 1st March 2009
Acceptance of abstracts: 1st April 2009
Submission of papers: 1st June 2009
Acceptance of papers (including revisions): 1st July 2009

Registration fee

(including attendance of technical sessions, proceedings, refreshments)

	<i>Before 1st July 2009</i>	<i>After 1st July 2009</i>
Delegate (non-presenting)	£325	£375
Presenting author	£250	£300
Concessionary rate (students)	£150	-

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