

Conference Announcement

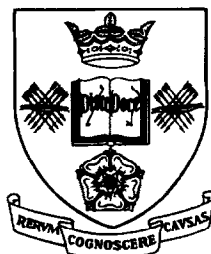
INTERNATIONAL CONFERENCE ON
INFRASTRUCTURE REGENERATION AND REHABILITATION

IMPROVING THE QUALITY OF LIFE THROUGH BETTER CONSTRUCTION

A VISION FOR THE NEXT MILLENNIUM

to be held at
UNIVERSITY OF SHEFFIELD
Centre for Cement and Concrete
Structural Integrity Research Institute

28 June - 2 July, 1999



PRELIMINARY ANNOUNCEMENT AND CALL FOR PAPERS

THE CONFERENCE

The state of the infrastructure in a country is a reflection of its economic progress and stability, and indeed, of the quality of its peoples' lives. Over the decades, time, environment, neglect and sadly, human conflict, has reduced the Infrastructure in many countries to a condition of disrepair, and sometimes, non-existence. The organization of this Conference arises from a deep conviction and commitment that a good Infrastructure is the key to the enhancement of the quality of life of all peoples of the world.

This is not another "Conference" for its own sake. This is a highly focused conference on five inter-related themes, concerned with Construc-

tion Technology of the Future. The overall emphasis of the Conference is on Reliability and Durability, Long-term and Field Performance, New and Advanced Materials Technologies, Conservation of Energy, Material Resources, and Environment, and Design Strategies for Durable Performance. Only original, unpublished contributions are solicited. All papers will be reviewed, and only papers to be presented will be accepted for publication.

Theme 1 Durable Cement-Based Materials Durability with

Cement replacement materials, low-energy cements, DEF, Thaumasite
New cement replacement materials, crushed brick, pozzolans, metakaolin, rice husk ash
Blended cements, aluminous cements, lime-

stone cements, cements with laterite, bentonite

Chemical admixtures, Innovative corrosion resistant admixtures, corrosion inhibitors

Polymer modification of cement matrix

Crack-resistant concrete, fibre concrete, natural fibres in concrete, bamboo reinforcement

Recycled materials, lightweight aggregate concretes

Durable concrete for

Aggressive environments

Extreme environments

Desert conditions

Low temperature environments

Theme 2 Corrosion and Corrosion Protection of Steel

Corrosion mechanisms, cracking and corrosion

Corrosion in practice

Epoxy coated steel

Galvanized steel

Stainless steel, new types of corrosion-resistant steel

Non-metallic reinforcements

Case studies

Theme 3 Protection of Concrete

Barrier and surface coatings/membranes/sealers

New water-proofing systems

Water resistant and water impermeable concretes

Protection through microstructure

Permeability controlled formwork liners

Case studies

Theme 4 Repair and Rehabilitation

Durability of repair materials, sprayed concrete

Electro-chemical methods, chloride removal, realkalisation

Cathodic Protection

New types of sprayed concrete

Plate bonding technology with steel and non-metallic plates/woven fabrics

Structural rehabilitation of earthquake damaged structures

Fibre wrap systems

External prestressing

Strengthening with ferrocement, fibre concrete, polymer grids

Theme 5 Design for Durability

Mechanisms of chloride penetration: environment, corrosion, durability

Specifications for durable concrete

Service life prediction, Modelling, failure probability, remaining life

Condition/damage assessment, structural rating, Intelligent materials and structures

Design for corrosion resistance, maintenance management, optimising

Case studies

Deadline dates:

Abstracts 31 January 1998

Draft papers: 30 June 1998

Final papers: 31 January 1999

For further details please contact:

Norma Parkes, Conference Secretariat, Department of Mechanical Engineering, University of Sheffield, Mappin Street, Sheffield S1 3JD, UK

Tel: 44 114 222 7702; Fax: 44 114 222 7890;

Email: nparkes@sheffield.ac.uk