

Report on the International Conference on High Performance High Strength Concrete (HPHSC)

10–12 August 1998 in Perth, Australia

An international Conference on High Performance High Strength Concrete was recently organised by the School of Civil Engineering, Curtin University of Technology, Perth. Prof. Vijay Rangan, Conference Chairperson, welcomed the participants of the conference. Prof. Lesley Parker, Acting President of Curtin University of Technology delivered the inaugural address and officially opened the conference.

Ten Keynote papers were presented by eminent professors and practising engineers from USA, Canada, Denmark, Singapore, UK and Australia. Papers on the following topics were presented by the keynote speakers: Development of concrete mixes for a concrete gravity offshore platform, Use of high performance concrete, Application of high performance concrete in Hibernia offshore platform, Concrete and society – past, present and future, High-performance high-volume fly ash concrete, Australian perspective of HPHSC, Basic design methods for HSC structural elements, Performance of repaired concrete columns, Fatigue performance of high performance lightweight concrete and High performance concrete applications in North America.

Thirty four technical papers on a range of topics were presented by distinguished authors from around the world. The technical papers focused on the material properties, structural behaviour and field applications of HPHSC. The topics of the technical papers are as follows: Aggregate interlock shear, slag cement and slag aggregates, fly ash and silica fume concrete, fibre reinforced concrete, shotcrete, chloride ingress into con-

crete, rice husk ash concrete, tension stiffening in concrete, residual strength of concrete subject to high temperatures, long term durability, reinforcing steel-concrete bond, field performance of concrete admixtures, earthquake performance and strength of columns, serviceability of slabs, effect of aggregate type on concrete, volume stability performance of concrete, plasticity approach to design of shear walls, composite beams with corrugated steel webs, shear-friction based design of reinforced concrete beams, shear transfer strength of concrete, use of recycled glass as aggregate, horizontal shear strength of composite concrete beams, cylinder size effects on concrete strength, use of bacteria to repair cracks in concrete, durability of concrete in marine environment, FRP-repaired concrete elements, concrete with limestone modified cements and highway structures in marine environment.

The conference served as a forum to disseminate the current state-of-the-art information on material properties, structural behaviour and field applications of HPHSC. The conference proceedings containing all the papers has been published in a book entitled *High Performance High Strength Concrete* (Editor: B.V. Rangan and A.K. Patnaik), ISBN: 1 863 42 2846, 739 pages. Copies of the book may be obtained from the School of Civil Engineering, Curtin University of Technology, GPO Box U1987, Perth WA6845, Australia at a cost of AU\$75 per copy.

Dr Anil K. Patnaik
Conference Secretary