### PROF Karen SCRIVENER LMC, IMX EPFL Station 12 1015 Lausanne Switzerland

#### Venue

`Partners

Park Inn Copenhagen Airport Engvej 171, DK - 2300 København S www.copenhagen.parkinn.dk



Øresund Bridge © Danish Teknological Institute

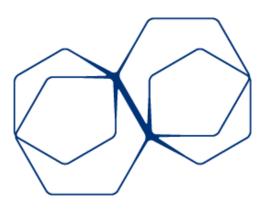
# EMPA Coult POENTECHNIQUE EDERALE DE LAUSANNE EMPA Coult Poente Poente Children Coult Poente Poente Children Elikem Materials UNIVERSITAT POLITÈCNICA DE CATALUNYA COULT POENTE POE

DANISH TECHNOLOGICAL SALONIT

## OPEN MEETING NANOCEM

Role of Nano and Micro processes in the performance of Cement and Concrete

April 25<sup>th</sup>, 2006 Park Inn, Copenhagen Denmark





http://www.nanocem.org

Despite being the most widely used building material in the world, the fundamental mechanisms underlying the behaviour of concrete are very poorly understood, because of its chemical and physical complexity. New techniques to characterise materials at the nanoscale has provided a unique opportunity to apply such methods to the study of cement and related materials.

A European Research Network known as Nanocem, has been established to generate basic knowledge on the nano- and microscale phenomena which affect the essential characteristics of cement and concrete. It is anticipated that the understanding generated in this way will enable technological breakthroughs and innovation in this field and will provide added value for the whole industry.

Nanocem comprises 33 academic and industrial partners with an interest in cementitious materials. There are some 120 academic researchers in the team who between them are in the process of preparing some 60 theses in the area of fundamental research. The members of Nanocem collectively have access to a large range of state of the art equipment for the study of cementitious materials. The Network consists of centrally financed Core projects each involving several partners, and partner projects contributed by every academic partner.

At this open meeting the partners and research of the network will be presented. This will be of interest to a wide range of personnel throughout the construction sector. There will be a fee at 500 DKK (75 €) for attending the meeting.

#### Programme -

10:00	REGISTRATION AND COFFEE
10:30	Welcome Mette Geiker, Tech. Univ. of Denmark (DTU)
10:35	<b>Presentation of Nanocem</b> Karen Scrivener, Ecole Polytechnique Fédérale de Lausanne (EPFL)
10:50	<b>The society's needs</b> Peter Lundhus, Femern Bælt A/S

11:20	Industrial perspectives on need for Nanocem network
	Jesper Sand Damtoft, Aalborg Portland A/S
11:40	Increasing political awareness through European Construction Technology Platform Jesus Rodriguez, Dragados, Chairman of Support Group (ECTP)
12.10	Questions and discussion
12:30	BUFFET LUNCH
14:00	Innovation by chemical nanotechnolgy Stephan Altmann, BASF AG
14:40	Questions and discussion
15:00	CORE PROJECTS Workability, effect of admixtures and cement Henri Van Damme, Ecole supérieure de Physique et de Chemie de la Ville de Paris (ESPCI) Robert Flatt, SIKA Technology AG
15:20	<b>Hydration of blended cements</b> Karen Scrivener, EPFL Winnie Matthes, Holcim Group Support Ltd
15:40	Break
16:10	Pore structure characterisation by magnetic resonance techniques Peter McDonald, Uiversity of Surrey Alain Capmas, L'Association Technique de l'Industrie des Liants Hydrauliques (ATILH)
16:30	Mineralogy of hydrated cements Fred Glasser, University of Aberdeen Ellis Gartner, Lafarge, Lab. Central de Recherche
16:50	Questions and discussion
17.00	PARTNER PROJECTS Characterisation of guest ions in cementitious materials by solid-state NMR Jørgen Skibsted, Aarhus University
17.15	<b>Binding of moisture in concrete</b> Lars-Olof Nilsson, Lund University (LTH)
17:30	CLOSE

#### REGISTRATION / INDICATION OF INTEREST

#### Please forward before March 7<sup>th</sup> 2006 by post, e-mail (saira.mohamed@epfl.ch) or fax (+41 21 693 5800)

- $\ \square$  I will attend the Nanocem Open Meeting on April  $25^{th}$ , 2006
- ☐ Unfortunately I cannot attend the meeting, but am interested to receive announcements of future events

Name:
Affiliation:
Address:
e-mail address:

#### The meeting is organised by

Mette Geiker, Technical University of Denmark Mette Glavind, Danish Technological Institute Jesper Sand Damtoft, Aalborg Portland, A/S

Further information may be obtained from karen.scrivener@epfl.ch, +41 21 693 5843 mette.glavind@teknologisk.dk, +45 7220 2220