Workshop
Cement and Concrete for Africa

The workshop highlights recent developments in the field of cement and concrete research with impact on the local and global economy. Challenges, future developments and opportunities for the African construction industry are in the focus. Today concrete is not yet well established in Africa, which offers the unique opportunity to build up a cement and concrete market based on the highest available state of technology. As this industry needs high level expertise, a central issue in implementation of skilled technology is cross-linking research institutions and laboratories. It should not be neglected that concrete is a product with low transport ranges. This means that an improved concrete market mainly supports the local economy without exceeding financial drains to the international market. Thus it fosters the fight against poverty, which is an urgent need in most African countries.

The workshop takes place within a technical week of the international research network SPIN, which is acronym for Spearhead network for Innovative, Clean and Safe Cement and Concrete Technologies. SPIN aims to cross-link experts with industry and policy making bodies, aiming to establish sustainable cement and concrete construction in Africa.

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Date 17th August 2011
Venue BAM Federal Institute for Materials Research and Testing
Unter den Eichen 87
12205 Berlin
Germany
Ludwig-Erhard-Saal
House 5, Room 234

Cost This workshop is cost free.
Programme

08:30 Reception
09:00 Welcome Notes and Introductions
   Hans-Carsten Kuehne (BAM)
09:10 Introduction to BAM
   Andreas Rogge (BAM)
09:20 Sustainable Concrete for Developing Countries
   Boudewijn Piscaer
   (Guest Speaker-UNIVERDE)

Session I
Low-Cost Housing Development in Africa

Moderator Birgit Meng

09:40 Low-Cost Thin Shell Structures
   Mitchell Gohnert (WITS)
10:00 Low-Cost Housing Technology with Environmental Aspects
   John Makunza (UDSM)
10:20 LightSHIP II – Inorganic Binder Systems for Innovative Panel Technology in East Africa
   Gregor Gluth (BAM)
10:35 Tea/Coffee/Press Communication

11:00 Low-Cost Housing Development in Africa

Moderator Herbert Uzoegbo

11:20 The State of the Art of Cement Industry and Challenges for Infrastructure Development in Mozambique
   Antonio Jose Cumbane (EMM)
11:40 Concrete and Infrastructure Development in Rwanda and its Challenges
   G. Senthil Kumaran (KIST)
12:00 The State of the Art of Cement Plant and Concrete Use in Burundi
   Paul Nicasumba (UBB)
12:20 Energy and Environmental Challenges to the African Cement Industry
   Jean Bosco Kazirukanyo (ACTP)
12:40 Challenges of the African Environmental Conditions for Concrete Mixture Composition
   Wolfram Schmidt (BAM)
13:00 Lunch Break

Session II
Challenges in the Cement and Concrete Industry

14:00 From Prescriptive Towards Performance-Based Durability Design of Concrete
   Dubravka Bjegovic (IGH) and Irina Oslakovic (IGH)
14:20 Cement and Steel Industry in Uganda
   Ruth Nassingwa (DGSM)
14:40 Cement in Democratic Republic of Congo: From Production to Environmental Aspects
   Ndala Ilunga (UNILU)
15:00 Recipes for Porous Building Materials, More with Less
   Jos Brouwers (TU/e)
15:20 Closing Remarks
15:30 Tea/Coffee/Communication

Session III
Building Materials in Concrete

Moderator Wolfram Schmidt

14:00 From Prescriptive Towards Performance-Based Durability Design of Concrete
   Dubravka Bjegovic (IGH) and Irina Oslakovic (IGH)
14:20 Cement and Steel Industry in Uganda
   Ruth Nassingwa (DGSM)
14:40 Cement in Democratic Republic of Congo: From Production to Environmental Aspects
   Ndala Ilunga (UNILU)
15:00 Recipes for Porous Building Materials, More with Less
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15:20 Closing Remarks
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SPIN Partner Institutions

BAM Federal Institute for Materials Research and Testing, Germany
University of the Witwatersrand (WITS), South Africa
University of Burundi (UBB)
Kigali Institute of Science and Technology (KIST), Rwanda
University of Dar es Salaam (UDSM), Tanzania
Dept. of Geological Survey and Mines (DGSM), Uganda
University of Lubumbashi (UNILU), D R Congo
Eduardo Mondlane University (EMM), Mozambique
Advanced Cement Training and Projects cc (ACTP), South Africa
Eindhoven Technical University (TU/e), The Netherlands
Institut IGH d.d (IGH), Croatia