

SCIENTIFIC COMMITTEE

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ORGANIZING COMMITTEE

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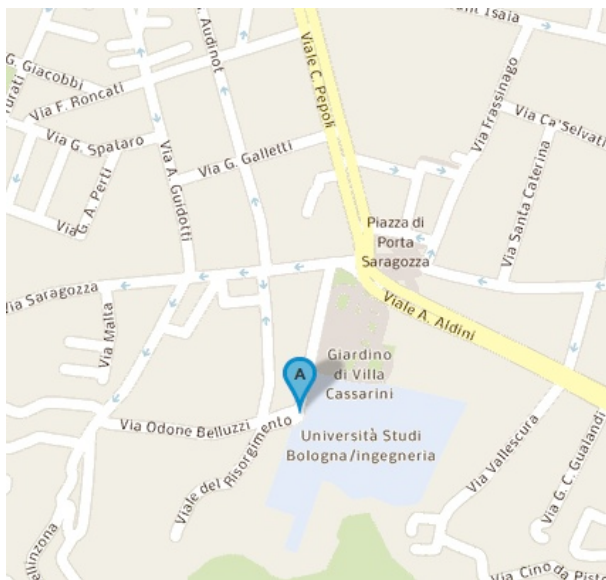
Please fill in the REGISTRATION FORM and send your personal data

before November 15th to:

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NAME.....
SURNAME.....
AFFILIATION.....
CONTACT INFORMATION:
e-mail.....
Telephone.....
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Please note that participation is free of charge, but registration is mandatory.



HOW TO REACH THE WORKSHOP

BY BUS

from the railway station: line 33
from downtown: line 20 (direction Casalecchio)
Bus stop: Porta Saragozza

BY CAR

Parking meter areas in the surrounding streets

DIPARTIMENTO

INGEGNERIA CIVILE, CHIMICA, AMBIENTALE
E DEI MATERIALI - DICAM



INTERNATIONAL WORKSHOP

ALKALI-ACTIVATED MATERIALS AND GEOPOLYMERS: INNOVATIVE SOLUTIONS FOR CIVIL ENGINEERING

DECEMBER 4th, 2013

AULA MAGNA

SCHOOL
OF
ENGINEERING AND ARCHITECTURE
UNIVERSITY OF BOLOGNA

VIALE RISORGIMENTO 2
40136 BOLOGNA, ITALY



CONSTRUIAMO INSIEME IL FUTURO

AIM

The Workshop is targeted at both the academia and industry in order to highlight the performance and potential of alkali activated materials (AAM) in the civil engineering field.

AAMs can be exploited as a new type of binder for mortar and concrete as well as for new ceramic products. The alkali activation process represents a low cost and sustainable technology, especially if compared with those normally used for building materials.

Scientific research is currently on-going on this topic, however these materials and their potential applications are not yet well known by European companies.

The aim of the workshop is to combine the efforts of academia and companies in the field of civil engineering in order to catalyse a common interest in this strategic material and align with the research and innovation programme of Horizon 2020.

The workshop is sponsored by the Department of Civil, Chemical, Environmental and Materials Engineering [DICAM] of the University of Bologna and supported by the Italian Ceramic Society. Moreover the Inter-Departmental Centre for Applied Research on Buildings & Construction [CIRI-EC] endorses the event, thus recognizing the primary role of alkali activated materials/geopolymers towards the sustainability of the building and construction industry.

SCIENTIFIC PROGRAM

Morning session

9.30 Welcome and opening address

Francesco Ubertini, Head of the Department of Civil, Chemical, Environmental, and Materials Engineering [DICAM], University of Bologna, Italy

Paolo Zannini, President of the Italian Ceramic Society
Maria Chiara Bignozzi, Chair of the Workshop, DICAM, University of Bologna, Italy

10.00 Sustainability issues in buildings & construction

Marco Savoia, Head of the Inter-Departmental Centre for Applied Research on Buildings & Construction [CIRI-EC], Italy

10.30 Fly ash geopolymers and their applications: an Australian perspective

Arie van Riessen, Geopolymer Research Group, Curtin University, Perth, Western Australia

11.00 - 11.15 Coffee Break

11.15 Geopolymers for new sustainable building materials

Cristina Leonelli, Department of Engineering "Enzo Ferrari", University of Modena and Reggio Emilia, Italy

11.45 Hydration of alkali activated slag - influence of activator and slag composition

Frank Winnefeld, Empa, Laboratory for Concrete and Construction Chemistry, Dübendorf, Switzerland

12.15 Durability: corrosion resistance of rebars in fly ash geopolymers

Cecilia Monticelli, Corrosion and Metallurgy Study Centre "Aldo Daccò", University of Ferrara, Italy

12.45 Durability of alkali activated materials: Italian round robin proposal programme

Raffaele Cioffi and Francesco Messina, Department of Engineering, University of Napoli "Parthenope", Italy

13.15 - 14.30 Lunch

Afternoon session

14.30 Cement-free binders based on alkali activation of Italian and Australian fly ash

Maria Elia Natali et al., DICAM, University of Bologna, Italy

14.45 Recovery of waste as building materials via geopolymerization

Isabella Lancellotti et al., Department of Engineering "Enzo Ferrari", University of Modena and Reggio Emilia, Italy

15.00 Thermally treated clay sediments as geopolymer precursors

Claudio Ferone et al., Department of Engineering, University of Napoli "Parthenope", Italy

15.15 Chemical consolidation of vegetal and animal derived biomass ashes: a case study

Annalisa Natali Murri et al., CNR ISTEC, Faenza (RA), Italy

15.30 Iron containing aluminosilicates as raw materials for geopolymer bricks

Elie Kamseu et al., Department of Engineering "Enzo Ferrari", University of Modena and Reggio Emilia, Italy

15.45 Hybrid organic-geopolymer materials: a novel approach

Giuseppina Roviello et al., Department of Engineering, University of Napoli "Parthenope", Italy

16.00 Ceramic waste as innovative material for geopolymerization

Omar Fusco et al., DICAM, University of Bologna, Italy

16.15 Concluding remarks

Maria Chiara Bignozzi, DICAM, University of Bologna, Italy