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Who Should Attend?

NICOM symposia were instituted to exchange ideas and results in the field of nanotechnology for construction materials. These events facilitated the integration of scientific research obtained in laboratories and in field applications from around the world.

The world's leading researchers in the field of nanotechnology in construction will be brought together by NICOM5. This offers a special opportunity for participants to gain exposure to many of the top investigators in the field and the cutting-edge research conducted in Europe, the U.S., and other countries.

Attendance of engineers, scientists, and students from different countries is vital for the success of NICOM5 symposium: it will bring research results to the world community and allow engineers and scientists to evaluate the results of investigations performed elsewhere. These global connections are likely to lead to new ideas, active collaborations, and greater interactions.

CALL FOR PAPERS

5th International Symposium on Nanotechnology in Construction

NICOM-5

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May 2015 Chicago, USA

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CALL FOR PAPERS

Nanotechnology has already demonstrated surprising potential for improving the performance of construction materials, and many of these recent developments were facilitated by NICOM symposia. NICOM5 will bring together international leaders to discuss the emerging opportunities and future of the use of nanotechnology in construction.

Potential topics for the NICOM5 symposium illustrate the broad potential for application of nanotechnology to challenging problems involving construction materials:

- Production, functionalization and performance of nanomaterials: nanoparticles, nanotubes and novel polymers;
- Investigation of the internal structure and properties of construction materials at the nanoscale and relation of these parameters to materials performance at the macroscale;
- Instrumentation, techniques, and metrology for nanoscale investigation of construction materials;
- Nanomodification of construction materials, including functional films and coatings;
- Nanotechnology for high-strength and highperformance materials;
- Nanotechnology developments in ultra-high performance concrete;
- Nanotechnology in ceramics, glass, fiberreinforced composites and metals;
- Nanomaterials for ultimate improvement of durability;
- Self-repairing, smart and intelligent nanostructured materials;
- Photocatalysis, air-purifying and self-cleaning materials;
- Biomimetic and nano-composite materials;
- Nano-assembly and "bottom-up" design in construction materials;

- Modeling and simulation of nanostructure of construction materials;
- Nanotechnology and nanomaterials for energy efficient construction;
- Nanotechnology-enabled green materials and by-product utilization for new levels of sustainability;
- Application of nanomaterials in real world construction projects;
- Nanotechnology and nanomaterials for advanced transportation infrastructure;
- Health, safety and environmental effects related to nanomaterials application.

These subjects will be discussed during the keynote, plenary and regular sessions.

A post-symposium workshop at Northwestern University will provide hands-on experience on nanoscale investigation of cement based materials.

SYMPOSIUM DEADLINES

Submission of 250-word abstract: **January 15, 2014**

Notification of acceptance:

June 1, 2014

Submission of draft manuscript:

September 15, 2014

Early Registration by:

March 5, 2015

ABSTRACT

Submit abstract to:

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When sending abstracts please provide the following information:

- Author(s) Name(s) and Author(s) Affiliation.
- Complete mailing address, e-mail and fax number of all authors (if more than one).
- Either fax or e-mail abstract(s).

SYMPOSIUM LOCATION

Chicago, USA May 2015

SYMPOSIUM LANGUAGE

The language of the Conference will be English, with no simultaneous translation.