



## THE 3<sup>RD</sup> ALL-RUSSIAN CONFERENCE ON CONCRETE AND REINFORCED CONCRETE

ussian Academy of Sciences, Russian Engineering Academy, Research Center «Stroitel'stvo», National Research University «MGSU», RAACS and other organizations supported by the Ministry of Construction and the Ministry of Education have planned to hold the 3<sup>rd</sup> All-Russian (International) on Concrete and Reinforced Concrete in May 2014.

Due to the technical and economic characteristics reinforced concrete is considered to be the main structural material in contemporaneity, and it dominates in the overall structure of the world production of building products. The world scope of application of concrete and reinforced concrete is annually more than 4 billion cubic meters, and that is more than 300 billion dollars in value terms. It is obvious that reinforced concrete will keep its leading role in construction in XXI century too.

The aim of the coming conference which slogan is «Concrete and Reinforced Concrete – Glance at Future» is scheduled to discuss the state of and prospects for the use of concrete and reinforced concrete in Russia, as well



as international experience accumulated in recent years. The conference is sponsored by the specialized international associations: International Union of Laboratories and Experts in Construction Materials, Systems and Structures (RILEM) and the International Federation for Structural Concrete (*fib*), and it is included in schedule of their main events.

## Nowadays the general problems to be considered at the conference are of great importance. The conference programme includes:

- General problems of materials science
- The theory of structural concrete
- Concrete technology problems
- Binders and admixtures for concrete
- Special concrete and composites, nanomaterials and nanotechnologies in concrete
- Ready mix concrete in construction
- Precast concrete and factory technology
- Reinforced concrete structures of buildings and constructions, analysis and design methods
- Steel and non-metal composite reinforcement: tendencies and prospects
- Reinforced concrete in bridges and transport construction
- Concrete and reinforced concrete in the architecture
- Reinforced concrete in seismic construction and development of underground space
- Problems of structural concrete durability
- Restoration and rehabilitation of reinforced concrete buildings and structures
- Testing methods for materials, systems and structures
- Development of standardization and certification
- Environmental aspects of application of concrete and reinforced concrete
- Reinforced concrete use as the factor of sustainable development in construction

Organizing Committee of the 3<sup>rd</sup> All-Russian (International) Conference on Concrete and Reinforced Concrete «Concrete and Reinforced Concrete – Glance at Future» which will be held in Moscow on 12–16 May 2014,



received more than 460 abstracts from 45 countries and 35 Russian regions. International and National Scientific Committees have chosen 350 reports to be presented at the conference. Due to that 18 sessions have been formed including the session «Nanomaterials and nanotechnologies».

The nanotechnological session will present interesting papers concerning the influence of different nanoparticles (first of all nanosilica and photocatalytic titanium nanodioxide) and carbon nanomaterials (nanotubes, fullerens, astralens) on the structure and properties of cement concretes, new research related to the use of nanodispersed clays in cements and concretes, experience of applying nanostructured silicate polymer concrete and concretes reinforced by nanofibers. Undoubtedly one should also pay attention to the reports about new investigation methods including the method of nanoindicating of contact zone between cement stone and filler with determination of its structural and mechanical properties.

All that proved once more that current progress in the field of nanotechnologies places the concrete with high-tech materials, whose structure may be «designed» for specific functional criteria: strength, durability, reduced environmental impact. This will allow the concrete to remain the main structural material in the foreseeable future.

The conference materials are to be published in electronic and printed form. They will be included into the Scientific electronic library (eLibrary. ru) and Russian Science Citation Index. VINITI will publish the abstracts of the papers in its abstractive scientific journals. The most interesting papers will be issued in Russian and foreign periodical editions including «Nanotechnologies in Construction».

The official website - www.concrete2014.mgsu.ru

Vice-chair of Organizing Committee, Member of Bureau and the Head of the National Delegation of Russian Federation in fib

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