Themes and Main Topics for ICCC 2019

Dear cement scientists, researchers and experts in production, technology and ecology of cement and concrete, as well as the creators and users of laboratory techniques and standards. Dear young researchers.

The Steering Committee of International Congress on Chemistry of Cement Prague 2019 in cooperation with the Scientific Committee and the Organizing Committee presents to you the Themes and Main Topics for ICCC 2019.

These Themes and Main Topics give an indication of areas in which we would like you to submit abstracts for posters and presentations. However, all innovative research results relating to cement and concrete are welcome.

1. Process Technology and Clinker Chemistry (including, but not limited to)
   - natural and alternative raw materials and meal composition
   - alternative fuels
   - preheater and kiln reactions and bypass operations
   - clinker formation chemistry and cooling processes
   - grinding and grinding aids
   - capture and reuse of greenhouse gases, control of other emissions

2. Hydration, Structure and Thermodynamics of Portland Cements (including, but not limited to)
   - hydration kinetics and hydration reactions modeling
   - C-S-H and other hydration phases
   - thermodynamics processes
   - new techniques for micro and nano structure characterization

3. Supplementary Cementitious Materials (SCMs) (including, but not limited to)
   - processing and reactivity and influences on hydration
   - new SCMs and its combination
   - control of workability
   - wastes and solid industrial residues as SCMs

4. Other Binders and their Application (including, but not limited to)
   - alkali-activated materials
   - calcium sulfoaluminate cements
   - belite-based cements and other low carbon binders
   - tailored made binders as rapid hardening, polymer modified etc.

5. Fresh and Hardened Concrete (including, but not limited to)
   - chemical admixtures
   - rheology and workability of fresh concrete
   - shrinkage, creep and thermal crack
   - recycled concrete

6. Concrete Durability (including, but not limited to)
   - alkali-aggregate reaction
   - sulfate attack
   - resistance to freeze and freeze/thaw attack
   - carbonation and chloride penetration resistance
   - resistance to marine exposure
   - leaching of hydrated products
   - methods to assess durability, service life modeling and evaluation
   - quality of concrete on site

7. Testing Methods – Standardization and New Approach

Steering and Organizing Committees
International Congress on the Chemistry of Cement Prague 2019

Prague, December 1st 2016