



The 36th ICMA conference

The last edition of the conference of the International Cement Microscopy Association was held in Milan and co-sponsored by Mapei

With a speech on innovation in materials for the building industry (see the following article), Giorgio Squinzi, Mapei Group's CEO, opened the proceedings of the thirty-sixth edition of the "ICMA" (International Cement Microscopy Association) conference held in Milan (Italy) from the 14th to the 17th of April 2014, co-sponsored by Mapei.

ICMA is a non-profit organisation founded in 1981, with a mission to provide a more in-depth understanding of the relationship between the microstructure and performance of cementitious materials, from manufacturing to application, using the most innovative analytical techniques.

ICMA holds a meeting every year where discussions are held on practical applications in cement production plants, new analytical techniques and approaches and the very latest research in the field of construction materials.

Speakers and participants are generally chemists, sector specialists, petrologists, technicians, engineers and managers from the industry, universities, consultancy companies and government institutions from all over the world.

The convention was traditionally held on the American continent until 2012 when, for the first time, it was organised in Europe, in Halle, Germany.

During the 35th edition of the conference

held in Chicago, Mapei, after 15 years of active participation and 18 scientific papers presented, joined the European Advisory Board and was offered the chance to become co-sponsor of the event for the second European edition.

Thanks to the firm conviction of Giorgio Squinzi and the whole Mapei Group's Board that a close collaboration between the scientific community and industry is necessary to develop new materials and improve performance and reduce costs, the project was accepted and organised thanks to the intense participation of the entire Mapei staff.

Twenty countries took part at the event (Albania, Australia, Austria, Belgium, Canada, China, England, France, Germany, Holland, Italy, Japan, Kuwait, New Zealand, Philippines, Portugal, Russia, Switzerland, Tunisia and USA) and more than forty papers were presented.

A research team from the University of Padua (Italy), working in close contact with Mapei researchers, made a significant contribution in the field of new technology and innovative analytical methods. The subjects discussed regarded the application of X-ray micro-tomography to the characterisation of the 3D microstructure in cement pastes, the use of nano-dispersion of silicate hydrate for the solidification and stabilisation of waste

and the use of advanced techniques for the micro-chemical and micro-mineralogical characterisation of clinker relics from aged cement composites.

In the session dedicated to practical applications in cement manufacturing plants, Mapei presented a paper on the investigation of the effects of chemical grinding aids on cement milling and separation efficiency.

Mapei's contribution to new research in the field of materials for the building industry discussed the effect of fluorides on the mechanical strength development of mortar admixed with alkali-free accelerators, a microscopic analysis of cementitious tile adhesives and a comparison among hydraulic binders commonly used in commercial products used in the repair of historical buildings.

The programme for the conference included three days of presentations and a whole day spent visiting Mapei Corporate Research and Development Centre and Mapei's manufacturing plant in Robbiano di Mediglia, near Milan, where the 130 participants were given the chance to discover the vast range of Mapei products and the various steps that take them from raw material analysis, formulation right through to manufacturing.

The event was rounded off with a speech by Giorgio Squinzi and other members of the Mapei Group's Board during a gala dinner held at Mapei SpA's headquarters.



LEFT. The ICMA's Executive Board at the 36th Congress in Milan, together with some members of Mapei Group's Board.

BELOW. Giorgio Squinzi (CEO of the Mapei Group) and Arturo Nispero, ICMA's General Chairman.

