



Photocatalytic and Biologically Active Materials in Construction

Thursday 16 May 2013

SCI HQ, London, UK

Organised by SCI's Construction Materials Group



- 10:00** Registration and refreshments
- 10:35** **Creating a European standard for photocatalytic activity**
Claire Hill, Cristal Global, UK
- 11:10** **Using TioCem in concrete products**
Andrew Stalker and Ian Nicolson, Marshalls, UK
- 11:45** **Colouring concrete with photocatlytic pigments**
Christian Egger, Rockwood Pigments, Italy
- 12:20** **Ultrafine TiO² products in concrete, NOX reduction and self cleaning**
Julie Kerrod, Cristal Global, UK
- 12:55** Lunch and networking
- 14:15** **The Eoxolit solution**
Marc Lambrecht, Eoxolit, Belgium
- 14:50** Refreshment break
- 15:25** **A manufacturer's experience of producing NOX removing paving**
Peter van Mierloo, Struyk Infra, Netherlands
- 16:00** **Ultrafine TiO² products in internal applications, specifically killing bacteria in hospital and like applications**
Junji Kameshima, Hydrotect, Toto Europe, Germany
- 16:35** Closing remarks

Organiser

John Fifield, Forticrete Ltd

Supporter

Institute of Concrete Technology



Synopsis

Ultrafine TiO₂ acts as a photocatalyst in the presence of ultraviolet light that initiates the reaction with atmospheric pollutants. Some ultrafine TiO₂ grades show activity also in the visible spectrum, albeit at a reduced level compared to UV irradiation. Ultrafine TiO₂, when suitably incorporated into formulated products, provides a photocatalytic reaction at the surface where the material is incorporated or applied. Depending on the formulation parameters, de-polluting performances (degradation of airborne pollutants such as nitrogen oxides – NO_x) and self-cleaning performances (destabilization of the organic components of the particles of dirt sticking on the exposed surfaces) can be achieved. Other additional benefits can also be realized, such as control of mildew and bacterial levels, thanks to optimized formulations and choice of photocatalytic TiO₂. Companies, represented by our speakers, supply the active ingredients that can be formulated into or onto various surfaces, such as concrete, building facades, paving blocks, tiles and many others.

The SCI is proud to bring together experts who will explain the exciting possibilities and benefits of photocatalysis for construction both external and internal, specifically - **Self-cleaning properties** – The organic interface between the surface and the adsorbed species is broken down. The adsorbed species can then be more easily washed away by rinsing or rain.

Depollution properties – Pollutants and VOCs (Volatile Organic Compounds) are altered once they contact the surface, to form less harmful molecules.

Deodorizing – Toxic and unpleasant odours can be neutralized.

Who should attend

The symposium will be of interest to everyone involved in construction, the environment, and health.

Information on SCI

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