

TopChim signs research agreement with IWT and Ghent University for developing polymer nanoparticles

ANTWERP, Belgium, 20 October, 2008: To extend its research and development projects on polymer nanoparticles, TopChim n.v. has signed an agreement with the "Institute for the promotion of Innovation by Science and Technology in Flanders" (IWT) and the "Centre for Materials Science and Engineering" (CMSE) of Ghent University.

Over the past 6 years TopChim has been developing SMI (Poly Styrene Maleimide) nanoparticles as a coating component for the paper, cardboard and packaging industry. After a successful market release of the first range of patented NanoTope 26 SMI nanoparticles, TopChim decided to invest in a more in-depth fundamental research programme for SMI nanotechnology.

The "Institute for the promotion of Innovation by Science and Technology in Flanders" (IWT) decided last July to grant the consortium of TopChim n.v. and the "Centre for Materials Science and Engineering" (CMSE) an important governmental funding to start up a three-year research and development project for SMI nanoparticles. This project, starting in September 2008, has a total budget of 900,000 Euro and aims for a better understanding of the chemistry and physics at the nano level of the SMI nanoparticles. The main aspect of the program is to broaden insight into the physical characteristics of the nanoparticles such as shape, size and uniformity. Interaction with minerals and substances from renewable sources is another focus.

TopChim has two objectives for the scientific results gathered after the completion of this research programme. The first objective is to enable further development of coatings for paper, cardboard and packaging, to improve printability, brightness, barrier performances and ecological impact. The second objective is to start searching for new applications in other industries where SMI nanoparticles may improve performances for surface treatment, material reinforcement and material interaction.

"The resulting knowledge will allow TopChim to assure its steady economic growth, as well as its scientific developments. TopChim will translate the acquired scientific results into new innovation opportunities for the industry to produce better products", says Henk Van den Abbeele, President - Director R&D of TopChim.



PRESS RELEASE

About TopChim

TopChim is an established **research-driven chemical company**, specialising in paper and cardboard coating technology, based in Belgium and Brazil, operating in Europe and Latin America. The company applies the latest technologies in chemical science to develop high-performance **ecological coating solutions** for the paper and cardboard industry. Its pioneering work is the result of active collaboration with European institutes and universities involved in fundamental research in chemistry. TopChim is committed to continuing its search for solutions for optimal paper and paper coating production that are both environmentally friendly and economically attractive. The research efforts of TopChim's **Nanoscience department** have been translated amongst other things into the industrial-scale production of nano-hybrid pigments.

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About CMSE

The Centre for Materials Science and Engineering is a coordinating organisation of departments and research groups of Ghent University.

CMSE **aims** at **cooperation** in the field of materials science and the further **development** of this domain at Ghent University via activities on different levels. These activities include: education, research in the field of materials science and the industrial applications as well as services to the industry.

The research activities assigned to CMSE within this project will be primarily carried out by the Department of Textiles and the Department of Metallurgy and Materials Science, supervised by Prof. Dr. ir. Gustaaf Schoukens, Department of Textiles.

About IWT

The Institute for the promotion of Innovation by Science and Technology in Flanders (IWT) was established in 1991 by the Flemish government as a regional public institution to provide R&D and innovation support in Flanders. For this purpose IWT has several financial tools and an annual budget of 288 million EUR (in 2007) available to support projects. In addition to **direct funding**, a variety of **services** is provided to local industry in the field of technology transfer, partner search, information about international subsidy options, etc. IWT has also an important **coordination** mission, aiming at a strong cooperation between all organisations in Flanders, offering technological innovation services to companies.

Over the years IWT has expanded into the **knowledge center** for R&D and innovation in Flanders.