

Nanoaugmented Materials Industry Summit 2018 paves the way to reinforce conductive composites

There's been an incredibly explosive growth in the development of new generations of reinforced and electrically conductive composites as a result of the resolution of several key challenges in graphene nanotubes' synthesis, industrial application and cost-efficiency. Distinguished speakers shared their insights and progress at the 2018 Nanoaugmented Materials Industry Summit (NAUM) – one of the largest events in the advanced materials industry.

Shanghai, China – More than 400 delegates from 22 countries around the globe gathered in Shanghai for the annual Nanoaugmented Materials Summit, where they networked with industry pioneers, learned from experts, and explored applications for graphene nanotubes, also known as single wall carbon nanotubes.

Competition is fierce in the world's largest developed markets, and manufacturers are constantly searching for the most innovative technologies, such as graphene nanotubes, to boost their materials' performance. "We're looking for the strongest, lightweight, multi-functional, energy-saving material – such as the combination of single wall carbon nanotubes and our aluminum product," said **Professor Hansang Kwon**, CEO of **Next Generation Materials**. A growing number of research and development projects in this field are rapidly transforming into highly competitive market products. "Nano materials such as single wall carbon nanotubes boost physical properties, increase impact strength, improve wear resistance, and more," said **Jim Chin I Lin**, general manager of **Zhongshan A&E Machinery Industry Company**.

Graphene nanotubes bring significant added value to composite applications, owing to their unique combination of superior conductivity and a potential for mechanical property improvement. "Nanotubes impart superior electrical conductivity and mechanical improvements to unsaturated polyester systems," said **Zhao Mi** from **Jiangsu Bi-gold New Materials**. "Single wall carbon nanotubes significantly increase abrasion resistance in SMC/BMC thermosets. They decrease crack growth and provide a significant increase in tensile strength and improvement in anti-corrosion resistance." As was stressed by **Diego A. Santamaria Razo** Director Innovation at the **Centre for Sustainable Construction (CRH)**, carbon nanotubes can be also used to enhance mechanical properties in concrete.

The Nanoaugmented Materials Summit 2018 concluded on a high note, as participants headed to their homes across the globe knowing they'd been a part of something special. Their work on expanding nanotechnologies to more industries is creating value for people the world over. Summing up the results presented in Shanghai, graphene nanotubes are leading a significant shift in the automotive, aerospace, construction, wind energy, marine, engineering and electronics industries.