

PRESS RELEASE

Atlanta, May 30, 2017

## **Innovations that will change the future of Building and Construction to be rewarded at JEC Innovation Awards in Chicago, June 20-22, 2017**

*The Future of Composites in Construction, McCormick Place, June 20-22, 2017 Chicago, IL*

Composites use in Building and Construction will be highlighted at JEC newest event dedicated to this specific Composites Industry next month in Chicago, IL, USA. The **numerous and diverse benefits that these innovative materials bring to the Building Industry will help overcome the coming challenges** such as, urbanization, increase of natural disasters (floods, storms, tsunamis, earthquakes...), along with the decrease of non-renewable raw materials and the high standard levels set by the society in terms of lightness and fluidity. Composites Materials bring answers and opportunities to tackle those issues in sustainable, durable and reliable manners. Solutions like **ease of fabrication** (Owens Corning), **structures durability** (Biteam), **anti-seismic reinforcement** (DowAksa), **use of end-of-life products** such as recycled bottles of water (Premier Composites Technologies), **aerial forms** (Optima Projects Ltd) or again **energy saving** (Armageddon Energy).

Following its strategy to address every Composites End-user, the JEC Innovation Awards will reward these 6 Composites Innovators in Building & Construction that will change the way we build.

If the majority of submissions relied on glass fibers, which is common in the Construction field, we see an increased interest in carbon fibers, especially for structural applications. And similarly to all sectors of the composite industry, thermoplastics are gaining in importance in Construction.

Therefore, to promote the growing use of composites as a construction material, 6 categories are awarded, covering a large panel of applications and possibilities.

## **The JEC Innovation Awards Chicago 2017 ceremony will take place at McCormick Place on Tuesday June 20, 2017 at 6pm**

With a network of 250,000 professionals, JEC Group is the largest composite organization in the world. It represents, promotes and helps develop composite markets by providing global and local networking and information services. For the past 20 years, JEC has achieved continuous growth and acquired an international reputation. It has opened offices in North America and Asia. The Company is entirely owned by the non-profit Center for the Promotion of Composites. JEC Group's policy is to systematically invest its profits in the creation of new services to benefit the industry. After successfully winning over the composites industry, JEC Group is now enlarging its scope to the next segment of the value chain, i.e. manufacturers and end-users.

Through Knowledge and Networking, JEC's experts offer a comprehensive service package: the JEC publications - including strategic studies, technical books and the JEC Composites Magazine - the weekly international e-letter World Market News and the French e-letter JEC Info Composites. JEC also organizes the JEC World Show in Paris – the world's largest composites show, five times bigger than any other composites exhibition - JEC Asia in South Korea and The Future of Composites in Construction in Chicago; the Web Hub [www.jeccomposites.com](http://www.jeccomposites.com); the JEC Composites Conferences, Forums and Workshops in Paris, Singapore and Atlanta and the JEC Innovation Awards program (Europe, Asia, America, India and China).


**The composite industry employs 550,000 professionals worldwide, generating 79 billion EUR worth of business in 2016.**

[www.jeccomposites.com](http://www.jeccomposites.com)

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**Category:** DESIGN

**Winner:** Optima Projects Ltd (United Kingdom) 

**Partners:** Janicki Industries (United States)

**Name of product or Process:** Free-form Structural FRP Roof without moulds

**Description:**



This innovative solution concerns a composite that is forming the finished inner and outer surfaces as well as the primary structure of a roof. The composite roof replaced nearly all the supporting steelwork with a self-supporting very thick FRP/foam cored sandwich structure.

The cores are produced from PET foam made from recycled water bottles, which are machined into complex forms and bonded together into very large subassemblies (the main structure is made in 26 pieces and is about 40m long). These are then laminated with structural FRP skins. **In highly loaded areas the resulting sandwich structure is over 800mm thick and in addition to structural integrity provides very high levels of thermal insulation. The individual parts of the roof are assembled onsite without any mechanical fasteners** to create a continuous shell structure and seamless visual appearance.

**The biggest advantages of the innovation are that the overall cost and build time were reduced, and that the lightweight, self-supporting nature of the roof enabled a significant reduction in supporting structure, providing a more open interior space.**