

Ceramics: Consumer of Energy and Enabler of New Energy Technologies

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Abstract

Ceramics and fire (energy) are almost synonymous. The ceramic manufacturing sector is indeed energy intensive. The global commitment of achieving net zero emission by 2050 is driving world-wide efforts to transform the energy scenario – its production, use and management. The response of the ceramic sector to this transformation can be discussed from two perspectives: 1) ceramic manufacturing industry as consumer of energy, 2) ceramic products and component as enablers of new generation of efficient, green and renewable energy technologies. Ceramic manufacturing industry across the globe are making efforts to address the energy issues in different ways which can be grouped into 1) improving energy efficiency, 2) using alternative energy, 3) implementing process/materials innovation to reduce energy consumption. In parallel, advanced ceramic components and ceramic based devices are proving crucial to the emergence of new energy technologies in different areas, such as, alternative energy production (solar, wind power etc.); energy storage (battery, supercapacitors etc.); energy harvesting; as well as in conventional energy industry for improved energy efficiency. This presentation provides a brief overview of the response and contributions of the ceramic industry world-wide to the energy issues. The presentation will also touch upon Bangladesh scenario towards the end. This talk is intended to provide a backdrop for the subsequent panel discussion by industry experts.



The poster for Ceramic Expo Bangladesh 2022 features a collage of ceramic products on the left, including a teacup, tiles, a sink, and a factory. The central text reads "SAVE THE DATE" in large red letters, followed by the "CERAMIC EXPO BANGLADESH" logo and the dates "24-26 November 2022" in a red box, with the location "@ ICCB, Dhaka, Bangladesh" below. The right side lists "2022 FEATURES" in a red-bordered box: Seminar, Job Fair, B2B & B2C Meeting, Raffle Draw, Business Networking, Lifetime Achievement Award, Best Pavilion & Stall Design Award, and Exciting Gifts for Visitors and Many More... Below this is a red banner that says "FREE ENTRY FOR ALL" and a QR code with the text "Please Scan to Register". The organizer, BCMEA (Bangladesh Ceramic Manufacturers & Exporters Association), is listed at the bottom left.

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