‘Engineering of carbon nanotubes and their applications’ discussed at webinar

Mechanisms and challenges of scaling up synthesis of Carbon nanotube (CNT), an exotic material having many attractive properties, were discussed at a webinar.

The webinar was organized by INAE Mumbai Chapter as part of the INAE Webinar Series titled ‘Engineering of Carbon Nanotubes and their Applications’ and moderated by Dr. R B Grover, Fellow of the Indian Academy of Engineering, Co-Convener, INAE Mumbai Chapter, Emeritus Professor, Homi Bhabha National Institute, Mumbai. Indian National Academy of Engineering (INAE), Gurgaon, an autonomous institute of the Department of Science & Technology, Government of India, conducts webinars organized by Local Chapters of INAE on topics encompassing all sectors and disciplines of engineering and technology.

Dr. Kinshuk Dasgupta, Head, Advanced Carbon Materials Section, G&AMD, Materials Group, Bhabha Atomic Research Centre spoke about the different techniques of synthesizing CNT like fluidized bed (FB) and floating catalyst (FC) chemical vapour deposition (CVD).

Fellows who attended the session were exposed to the rate-controlling steps and the overall rate of reaction and reaction mechanism and related aspects of CNT synthesis. They also understood how CNTs improved the performances of the materials with a special reference to Bhabha Kavach, an indigenous lightweight ballistic resistant jacket which has been transferred to the industries for large-scale deployment of the product to Indian Armed Forces.