

# Process-Defined Graphene: Engineering Commercial Success

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## **P S Jayan**

*Carborundum Universal Limited, Cochin Special Economic Zone, Kochi -682037, India*  
*PSJayan@cumi.murugappa.com*

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Graphene is often described as a breakthrough material, yet large-scale commercial success remains selective. The fundamental reason is clear: graphene is not a single material, but a spectrum of process-defined grades whose structure, performance, scalability, and cost are inseparable from the manufacturing pathway.

This talk argues that commercial success is determined not by pursuing the highest theoretical quality, but by engineering a reproducible process that aligns material architecture with application requirements and economic reality. Focusing on a process-specific graphene platform developed and scaled within our manufacturing facility, the session will demonstrate how disciplined process control, dispersion engineering, and cost-performance optimization have enabled successful deployment in applications such as coatings and high-performance composites.

For industry leaders, institutes, and inventors, this presentation reframes graphene commercialization as a manufacturing challenge — where the right structure, produced consistently and integrated intelligently, defines sustainable market impact.