



*Structured Materials Industries, Inc.*

## **Carbides:**

Structured Materials Industries, Inc. has released its new induction heated Chemical Vapor Deposition tool for Very High Temperature and Low Pressure Operation – the Dragon CVDTM tool. Designed to operate at deposition process temperatures through 2200 degrees Centigrade at low pressures, the Dragon CVD tool presents researchers with a significant new tool to research high temperature deposition processes. This tool was designed and built in collaboration with Penn State University Electro-Optics Center and addresses both high temperature CVD and PVT. This same platform can easily be converted to a high temperature annealer for Carbides and related materials.



The system features a double walled chamber with water flowing between the walls, a 50 KWatt induction heater system with tuned capacitor, wet or dry pumping, turbo pumping, fully automated process control with redundant safety features including spread sheet programming, real time monitoring and trend analysis among other features, gas and metal organic source capabilities and a compact footprint – all at an economical cost.

- This system compliments a growing line of oxide, nitride and carbide tools offered by Structured Materials Industries, Inc. SMI also specializes in custom systems, reactors and other components for CVD and related technologies.