ABSTRACT

A CHEMICAL VAPOUR DEPOSITION SYSTEM AND PROCESS

A chemical vapour deposition system, including: a process tube for receiving at least one sample, the process tube being constructed of silicon carbide, impregnated with silicon, and coated with silicon carbide; a pumping system to evacuate the process tube to high vacuum; one or more gas inlets for introducing one or more process gases into the evacuated process tube; and a heater to heat the process tube and thereby heat the one or more process gases and the at least one sample within the process tube to cause a material to be deposited onto the at least one sample within the process tube by chemical vapour deposition.

Figure 2