

Fabrication of Ultra Super Heart Resistant Material in the Next Generation



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Technical Support Skills	<ul style="list-style-type: none"> • Pulse Electric Current Sintering (PECS) • Mechanically Alloying • Material Testing 		

Research Contents

Many intermetallic compounds, for example silicides, have high melting points above 2000°C. Their silicides could be good candidates for high temperature structural applications in the next generation because they should be useable at temperatures as high as 1500°C.

Pulse electric current sintering (PECS) is a good method for powder sintering at low temperatures and for short times compare with conventional methods such as hot press and HIP.

PECS and Mechanically Alloying are applied to synthesis intermetallic compounds directly from raw powders of silicon and other metallic elements.



Photo. Pulse Electric Current Sintering at 1500°C

Available Facilities and Equipment

Pulse Electric Current Sintering (SPS 511S)	
Rockwell hardness tester	