

## Siliconated Pyrolytic Graphite : Part 2. The State of Silicon Present in Siliconated Pyrolytic Graphite

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journal or publication title	Science reports of the Research Institutes, Tohoku University. Ser. A, Physics, chemistry and metallurgy
volume	21
page range	207-207
year	1969
URL	<a href="http://hdl.handle.net/10097/27503">http://hdl.handle.net/10097/27503</a>

Siliconated Pyrolytic Graphite.  
Part 2. The State of Silicon Present in Siliconated  
Pyrolytic Graphite\*

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**Abstract**

By X-ray diffraction, surface oxidation, X-ray microanalysis, electron diffraction, and electron microscopy, the state of silicon present in siliconated pyrolytic graphite has been examined on several samples prepared under a variety of conditions.

In the siliconated pyrolytic graphite prepared at the deposition temperatures below 1730°C, the greater part of the silicon occurs as  $\beta$ -SiC. It does not segregate in the cone boundaries but disperses uniformly. It exists as flake-like single crystals, whose size increases with decreasing temperature. The (111) plane of  $\beta$ -SiC is parallel to the (001) planes of graphite.

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\* The 1440th report of the Research Institute for Iron, Steel and Other Metals. Published in the Journal of Materials Science, **4** (1969), 424.