

## Fractal Geometry Used for Evaluation of Corrosion Resistance of Fe-14Al-6Cr Wt. % against Molten Glass

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**Corrosive attack of metals and alloys by molten glass can be described by parameters of surface roughness. Fractal geometry and statistic tools were used for surface roughness quantification. The obtained parameters of fractal geometry and statistics were determined on boundary curves between alloys and glass which had been generated from the digital photography of sample cross-section. This methodology was successfully used for quantification of surface changes of iron aluminides Fe-14Al-6Cr and austenitic steel during corrosion test in molten soda-lime glass at 1200°C.**

**Keywords:** Fractal geometry, corrosion, molten soda-lime glass, iron aluminide, austenitic steel

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