

**COMPARATION BETWEEN THERMAL TREATMENTS OF ITUTINGA METEORITE FRAGMENTS.**

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**Abstract:** The main mass of the iron meteorite Itutinga<sup>1</sup> IIIAB belonging to the group and the structural classification octahedrite medium (Om) has in collection of the Museum of Science and Technic of School of Mines of the Federal University of Ouro Preto, Minas Gerais state, Brazil. Fragments of the meteorite were subjected to thermals treatments in different temperatures, the usual technique in the field of Metallurgical and Materials Engineering. The first sequence of treatments used the heating temperature reached was 900°C and second 1350°C in different furnaces. Analysis of optical microscopy for the fragments which was subjected to the first treatment revealed the appearance of cracks. The identified cracks is compatible with the thermal treatments carried out particularly in the heating process at high temperatures<sup>2</sup>. The second sequence of thermals treatments produced more cracks and appearance of alterations in the microstructures<sup>3</sup>.

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