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## MATERIALS PROCESSING USING SOLAR ENERGY

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### **Abstract**

The main aspects refer to metals and refractory materials behaviour, at high temperature, to materials purifying and to achieve some chemical syntheses.

The main technological parameter of the heating is temperature, heating obtained by focusing Sun's rays. The heating can be used inside the furnace to produce metallic material into a crucible, without any complementary power source.

For the future, a bigger interest presents some other metals melting, more expensive than steel, such as titanium, zirconium and molybdenum. In this case it must be ensured an inert atmosphere and thereby it must be taken into account the complications and expenses related to these.

*Key words:* furnace, heating, metallic material, solar energy

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