

COMPETITIVE ADVANTAGES

- A **simple and free of constraint procedure** on the material shape, possible in situ;
- A **rapid measurement** (<2min);
- No constraint on the temperature gradient;
- A **precise measurement** (ATP maximum resolution: 0.02 $\mu\text{V/K}$, usual resolution: 0.2 $\mu\text{V/K}$)

APPLICATIONS/MARKETS

- Non destructive characterization and control of materials;
- Aging study and quality control (impurities, precipitates...);
- Conformity control of a material, post incident expertise;
- Evolution control of a material under the influence of an external parameter (phase transformation for example).

INTELLECTUAL PROPERTY

- Patent delivered: FR 1257261

LABORATORY

- Laboratoire LCP-A2MC

CONTACT

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PRESENTATION

This new device can measure the ATP (Absolute Thermoelectric Power) of conductor and semiconductor materials. It enforces electronic transport as a non-destructive characterization and control tool.

The process is simple and can be applied to every conductor and semiconductor along a large temperature range. A light and portative device is fixed on the objet being tested. **By creating a temperature difference at its surface, the constituting material ATP can be measured.** The measurement device is made of two probes that are put in electrical contact with the analyzed material surface.

