

Measurement of the Seebeck coefficient at intermediate temperature (80–800 K)

Measured values

- Seebeck coefficient

Description of facility

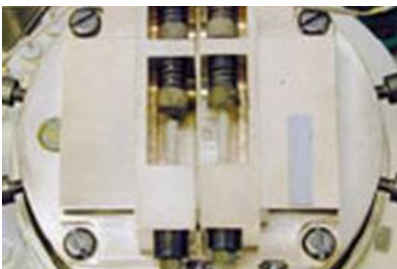
Temperature dependent determination of the Seebeck coefficient on plate-shaped specimens is done between the temperature of liquid nitrogen and about 500 °C. A facility was developed at DLR for a quick and reliable Seebeck measurement on specimens of variable geometry. The set-up allows for a simple and quick exchange of specimens without a lot of time-consuming preparation. Movable blocks of the sample holder allow for examination of irregular plate-like specimen of a length between 12 mm and 30 mm. Highest accuracy of measurement is achieved for very thin and narrow specimens. The measurement of thermo-voltages and temperature differences is performed via thermocouples pressed to the sample by spring pressure.

Application

- Temperature dependent determination of the Seebeck coefficient
- Measurement on specimens of variable geometry
- Plate-like specimen of a length between 12 mm and 30 mm

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This handout, and cross-references to related measurement techniques and facilities are available at: <http://messtec.dlr.de/link-286-en>.