

Materials Testing of metallic materials at very low temperatures

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The world is changing in terms of energy sources and mobility. Hydrogen will play a decisive role in this.

Metallic materials in contact with hydrogen must have a corresponding tolerance, e.g. with regard to hydrogen embrittlement. The transport and storage of liquid hydrogen also requires sufficient ductility at correspondingly low temperatures, which is provided by certain rust- and acid-resistant steels, for example. Within the lecture new testing possibilities are presented, which show the determination of mechanical properties of newly developed materials for this field of application.