



Transport properties from 300 K to 20 mK

Keywords	Transport, cryogenics (^4He -flow, ^3He , ^3He - ^4He), high magnetic fields, electrical conductivity, resistivity, Hall effect, ac-susceptibility, thermal conductivity, thermopower, calorimetry, specific heat, hexaborides, chains, ladders.
Function	Different experimental setups to measure transport and thermal properties over a large temperature range and as a function of magnetic field.
Present use	Investigations on hexaborides and materials with low-dimensional structural elements (chains, ladders).
Specifications	<p><i>^4He-flow cryostat</i></p> <ul style="list-style-type: none">• temperature range 1.3 - 300 K• magnetic fields up to 7 T <p><i>^3He cryostat (right figure)</i></p> <ul style="list-style-type: none">• temperature range 300 mK - 30 K• magnetic fields up to 7 T <p><i>^3He-^4He dilution cryostat (left figure)</i></p> <ul style="list-style-type: none">• cooling power 200 mW• temperature range 20 mK - 1.2 K• magnetic fields up to 7 T



Contact Prof. H.R. Ott, Laboratorium für Festkörperphysik, ETH-Hönggerberg, CH-8093 Zürich, T +41 (0)1 633 23 11, F +41 (0)1 633 10 77, ott@solid.phys.ethz.ch, www.solid.phys.ethz.ch