

Research Infrastructure

The research infrastructure of the laboratory in its two basic research directions is such that allows the independent conduction of applied scientific research not only in material synthesis and characterization but also in application testing of prototype devices made by the materials under investigation.

Research Direction A: Ceramic Membranes:

Besides classical instrumentation and glassware for membrane synthesis the laboratory possesses controlled climate chambers for the reproducible synthesis of the sensitive nanoporous or microporous structures, a complete gas separation unit with gas chromatography as well as two pilot-scale units for liquid treatment membrane experiments.

a



c



b



e



d



Figure 11.03 shows the DFBF setup used for measuring the gas sorption of polymers. (a) Gas sorption apparatus (b) Gas sorption cell (c) Gas sorption cell (d) Gas sorption cell (e) Gas sorption cell



Figure 1.2.5: The powder technology lab is available for testing



Figure II.3.5:

Laboratory's own characteri