

Brillouin Scattering

We can measure longitudinal and transversal acoustical phonons in liquid samples as a function of temperature (-20°C to 80°C) and pressure (1bar to 2kbar) by means of dynamic laser light scattering. We access $S(q,\omega)$ using a tandem Fabry-Perot interferometer in a frequency range between 5GHz and 100GHz. Three different scattering angles can be realized especially also in back-scattering geometry. Simultaneously $S(q,t)$ is obtained by means of photon correlation spectroscopy in a time range between 20ns and 100s.



The “black box “in the rear is the tandem interferometer and on the right a high pressure can be seen.

Responsible scientist : Dr. Gerhard Meier

e-mail : g.meier@fz-juelich.de

http://www.fz-juelich.de/iff/staff/Meier_G/