

Nutation Spectra of Nuclear Quadrupole Resonance in Off-Resonance Conditions

Nicolay Sinyavsky and Mariusz Mackowiak^a

Baltic State Academy, Molodiozhnaya str. 6, 236029 Kaliningrad, Russia

^a Institute of Molecular Physics, Polish Academy of Sciences,
Smoluchowskiego 17, 60-179 Poznan, Poland

Reprint requests to Prof. M. M.; Fax: 48-61-8684-524; E-mail: mackow@ifmpan.poznan.pl

Z. Naturforsch. **59a**, 228 – 234 (2004); received January 22, 2004

The modes of recording the multidimensional NQR nutation spectra have been analyzed using different off-resonance methods. A method of recording the nutation spectra in off-resonance conditions, based on optimal filtration, has been proposed. For the first time, an experimental spectrum of $^{3D-35}Cl$ NQR nutation of chloral hydrate is presented.

Key words: 2D Spectroscopy; NQR; Nutation; Exchange:Off-resonance Irradiation.