

The Features of Mössbauer Spectra of Hemoglobin in Relation to the Quadrupole Splitting and Heme Iron Stereochemistry*

M. I. Oshtrakh

Division of Applied Biophysics, Ural State Technical University,
Sverdlovsk, 620002, Russian Federation

Z. Naturforsch. **53 a**, 608–614 (1998); received January 26, 1998

Mössbauer spectra of various human ferrous hemoglobins in different ligand forms demonstrated some features such as non-Lorentzian line shape for oxyhemoglobins, narrower line width for carbonmonoxide, and variations of quadrupole splitting for different hemoglobins. These features were considered in relation to the variations of quadrupole splitting and heme iron stereochemistry in different hemoglobins as well as in non-equivalent subunits of hemoglobin tetramer.

Key words: Mössbauer Spectroscopy; Human Hemoglobins; Quadrupole Splitting;
Heme Iron Stereochemistry.

Reprint requests to Dr. M. I. Oshtrakh; Fax: 7-3432-74-38-84, E-mail: oshtrakh@soek.erl.e-burg.su