

From Paramagnetic Imidazolines to Biocompatible Molecular Magnets Based on Metal Complexes with Spin-labeled Ligands

Victor I. Ovcharenko

International Tomography Center, 3a Institutskaya st., Novosibirsk 630090, RUSSIA

fax: +7(3832) 331399, e-mail: ovchar@tomo.nsc.ru

Stable nitroxides attract the increased attention due to their intrinsic paramagnetism. They display in solution a characteristic ESR spectrum that is widely used in molecular biology, biophysics, polymer chemistry, analytical chemistry and other fields.¹ Stable nitroxides are also increasingly used as «building blocks» in the design of molecular ferromagnets.² The potential possibility of their using as biocompatible molecular magnets is under discussion.

1. L. B. Volodarsky, V. A. Reznikov, and V. I. Ovcharenko, *Synthetic Chemistry of stable Nitroxides*, CRC Press, Inc., Boca Raton, Florida, 1994.
2. Kahn, O. *Molecular magnetism*; VCH: New York, 1993.