Approaches to structure and dynamics of biological systems by electron-paramagnetic-resonance spectroscopy

Scarpelli, F.

List of Publications

Scarpelli F., Guzzi R., Bartucci R., Sportelli L. – ***Pulsed EPR Study of Spin Labeled Hemoglobin*** – to be submitted.

Scarpelli F., Drescher M., Meijneke T., Holt A., Rijkers D., Killian J.A., Huber M. – ***Aggregation of Transmembrane Peptides Studied by Spin-Label EPR*** – Journal of Physical Chemistry B, submitted.

Milikisyants S., Scarpelli F., Finiguerra M., Ubbink M., Huber M.,– ***A pulsed EPR method to determine distances between paramagnetic centers with strong spectral anisotropy and radicals: The dead-time free RIDME sequence*** – Journal of Magnetic Resonance, submitted

Scarpelli F., Gast P., Milikisyants S., Murphy M.E.P., Arrieta A.L., Groenen E.J.J., Huber M. – ***A 95 GHz single crystal EPR study of the type 2 copper site of the M150E mutant of the nitrite reductase of Alcaligenes faecalis*** – in preparation

Scarpelli F., Volkov A., Bashir Q., Ubbink M., Huber M., – ***Dynamics of spin labels at surface sites of cytochrome c peroxidase by EPR***– in preparation

Curriculum Vitae

of Francesco Scarpelli, born in Cosenza (Italy), on April 3, 1976.

In 1996, after I received the diploma from Liceo Scientifico G. B. Scorza in Cosenza, I joined the Department of Physics at the Università degli studi della Calabria. I spent the last two and a half years of my studies working on my graduation thesis in the group of Prof. L. Sportelli at the Department of Molecular Biophysics. My thesis project concerned the study of a spin-labeled hemoglobin by pulsed EPR. In July 2004, I graduated in Physics, with a specialization in Molecular Biophysics, at the Università degli studi della Calabria.
In March 2005, I started a PhD project at the Department of Molecular Physics of Leiden University, under the supervision of dr. M. Huber and prof. dr. E.J.J. Groenen. In this research project, I was involved in methodological developments and the application of EPR in the study of dynamics and structure of systems that involve transition metal ions and nitroxide spin labels. During my PhD I assisted in the physics courses for 1st and 3rd year biology students. In July 2005, I attended the "Advanced EPR methods in Biophysics" school in Wiesbaden (Germany). In March 2006, I followed the "EasySpin, spectral simulation and data analysis in EPR spectroscopy" school at the ETH in Zurich. I have presented the results of my research at the 16th Benelux EPR society meeting (May 2008, Gent) and the "Advanced Paramagnetic Resonance in Molecular Biophysics" meeting (September 2008, Siena).

Nawoord

The last four years have been a great experience on both professional and personal level. During my PhD I had the opportunity to meet a lot of interesting people without whom this thesis would not be written now.
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