

## BIOGRAPHICAL SKETCH

<b>Rizwan Ahmad</b>	<b>Research Scientist</b>
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INSTITUTION AND LOCATION	DEGREE	YEAR(S)	FIELD OF STUDY
University of Eng. and Tech., Lahore, Pakistan	B. S.	1996-00	Electrical Engineering
Ohio State University, Columbus, OH	M. S.	2001-04	Electrical Engineering
Ohio State University, Columbus, OH	Ph. D.	2004-07	Electrical Engineering
Ohio State University, Columbus, OH	Postdoc. Researcher	2007-	Signal Processing

### A. Positions and Honors

- 2001 – 04      Graduate Research Assistant, Chemical Eng. Dept., Ohio State University, Columbus, OH  
 2004 – 07      Graduate Research Assistant, Medical Center, Ohio State University, Columbus, OH  
 2007 –          Postdoctoral Researcher, Medical Center, Ohio State University, Columbus, OH

- Among top ten students in the department of electrical engineering at UET, Lahore, Pakistan
- Travel award EPR 2007 Conference, Breckenridge, CO

### B. Peer-reviewed Publications

#### In Submission

1. Som, S., Potter L. C., **Ahmad R.**, Kuppusamy P., EPR oximetry for sparse probe distribution. (Submitted Mar. 2008 to *J. Magn. Reson.*)
2. **Ahmad, R.**, Potter, L. C., Kuppusamy, P., Multi-resolution uniform sampling for 3D tomography (Submitted to *IEEE*, under revision)
3. **Ahmad, R.**, Vikram, D. S., Potter, L. C., Kuppusamy, P., Decomposition of composite EPR lineshape, (Accepted Feb. 2008 to *J. Magn. Reson.*)
4. Vikram, D. S., **Ahmad, R.**, Pandian, R., Petryakov, S., Kuppusamy, P., Evaluation of response time of particle-based EPR oximetry probes (Submitted Jan. 2008 to *J. Magn. Reson.*)

#### Published

5. **Ahmad, R.**, Vikram, D. S., Clymer, B., Potter, L. C., Deng, Y., Srinivasan, P., Zweier, J. L., Kuppusamy, P., Uniform distribution of projection data for improved reconstruction quality of 4D EPR imaging. *J. Magn. Reson.* 187, 277-287, (2007)
6. Som, S., Potter, L. C., **Ahmad, R.**, Kuppusamy, P., A Parametric Approach to Spectral-Spatial EPR Imaging. *J. Magn. Reson.*, 186, 1-10, (2007)
7. Vikram, D. S., Bratasz, A., **Ahmad, R.**, Kuppusamy, P., A Comparative Evaluation of EPR and OxyLite Oximetry Using a Random Sampling of pO<sub>2</sub> in a Murine Tumor. *Radiat Res.*, 168, 308-315 (2007)
8. **Ahmad, R.**, Clymer, B., Vikram, D. S., Deng, Y., Hirata, H., Zweier, J. L., and Kuppusamy, P., Enhanced resolution for EPR imaging by two-step deblurring. *J. Magn. Reson.*, 184, 246-257 (2007)
9. **Ahmad, R.**, Deng, Y., Vikram, D., Clymer, B., Srinivasan, P., Zweier, J. L., Kuppusamy, P., Quasi Monte Carlo-based isotropic distribution of gradient directions for improved reconstruction quality of 3D EPR imaging. *J. Magn. Reson.*, 184, 236-245 (2007)

10. Deng, Y., Pandian, R. P., **Ahmad, R.**, Kuppusamy, P., Zweier, J. L., Application of magnetic field over-modulation for improved EPR linewidth measurements using probes with Lorentzian lineshape. *J. Magn. Reson.* 181, 254-261 (2006)
11. **Ahmad, R.**, Vikram, D. S., Petryakov, P., Deng, Y., Zweier, J. L., Kuppusamy, Clymer, B., Automated on-the-fly detection and correction procedure for EPR imaging data acquisition. *Magn. Reson. Med.*, 56, 644-653 (2006)
12. **Ahmad, R.**, Clymer, B., Deng, Y., He, G., Vikram, D.S., Kuppusamy, P., Zweier, J. L., Optimization of data acquisition for EPR imaging. *J. Magn. Reson.*, 179, 263-272, (2006)