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Qualification

M. Sc. (Honors School), Ph.D., Postdoctorate

Research Publications, Presentations

- N. Kaur, J.H. Christian, J. S. Kinyon, V. Ramachandran, S. Nellutla, N. S. Dalal, Y. H. Kim, J.H. Park, C. Meehan, Y. Takano, "***Magnetic field driven quantum criticality of the Ising class square lattice Cr(dien)$(O_2)_2$.H_2O and the orientation dependence of its spin flop transition***", Phys. Rev. B 99, 214434, 2019.

- Y. H. Kim, N. Kaur, B. M. Atkins, N. S. Dalal and Y. Takano, "***Fluctuation-Induced Heat Release from Temperature-Quenched Nuclear Spins near a Quantum Critical Point*** ", Phys. Rev. Lett. 103, 247201, 2009.

- S. S. Mal, M. H. Dickman, U. Kortz, A. M. Todea, A. Merca, H. Bögge, T. Glaser, A. Müller, S. Nellutla, N. Kaur, J. V. Tol, N. S. Dalal, B. Keita, L. Nadjo, "***Nucleation Process in the Cavity of a 48-Tungstophosphate Wheel Resulting in a 16-Metal-Center Iron Oxide Nanocluster***", Chem. Eur. J. 14, 1186-1195, 2008.

- V. Mereacre, D. Prodius, A. M. Ako, N. Kaur, J. Lipkowski, C. Simmons, N. Dalal, I. Geru, C. E. Anson, A. K. Powell, C. Turta, "***Synthesis, Structure and Magnetic Properties of Unsymmetrical Dodecanuclear Mn-Ln Clusters***", Polyhedron 27, 2459-2463, 2008.

- R. D. Adams, E. M. Boswell, B. Captain, S. Miao, C. Beddie, C. E. Webster, M. B. Hall, N. S. Dalal, N. Kaur, D. Zipse, "***Disulfido iron-manganese carbonyl cluster complexes: Synthesis, structure, bonding and properties of the radical $CpFeMn_2(CO)_7(\mu_3\text{-}S_2)_2$***", J. Organomet. Chem. 693, 2732-2738, 2008.

- J. F. Berry, E. Bill, E. Bothe, F. A. Cotton, N. S. Dalal, S. A. Ibragimov, N. Kaur, C. Y. Liu, C. A. Murillo, S. Nellutla, J. M. North and D. Villagrán, "***A Fractional Bond Order of ½ in Pd_2^{5+} -Formamidinate Species; The value of Very High-Field EPR Spectra***", J. Am. Chem. Soc. 129, 1393-1401, 2007.

- J. A. Cissell, N. Kaur, S. Nellutla, N. S. Dalal and T. P. Vaid, "***Synthesis, Structure and Magnetic Properties of $[(CH_3CN)_5V\text{-}O\text{-}V(CH_3CN)_5][BF_4]_4$***", Inorg. Chem. 46(23), 9672-9677, 2007.

- Y. H. Kim, N. Kaur, B. M. Atkins, N. S. Dalal, and Y. Takano, "***Fluctuation-Induced Heat Release from Temperature-Quenched Nuclear Spins near a Quantum Critical Point*",** APS, 2010.

- N. Kaur, A. Kumar, S. Nellutla, Y. Kim, L. Balicas, Y. Takano, N. S. Dalal, "***Magnetic-Field-Driven Ising Quantum Criticality of Two-Dimensional Square-Lattice Antiferromagnet $Cr(dien)(O_2)_2.H_2O$***", APS, 2009.

- N. Kaur, S. Nellutla, R. J. Aparicio, F. A. Cotton, C. A. Murillo, N. Dalal, "***EPR Probing of S=1/2 and S=3/2 Fractions in a Ru_2^{5+} Complex***", FAME, 2008.

- N. Kaur, O. G. Sen, A. Harter, R. Vasic, J. Brooks, N. Dalal, T. Autrey, A. C. Stowe, "***Dielectric and Heat Capacity Measurement of the 225 K Transition of Ammonia Borane (NH_3BH_3)***", APS, 2007.

- N. Kaur, S. Nellutla, Y. J. Jo, L. Balicas, J. V. Tol, N. S. Dalal, "***Torque Magnetometry and Heat Capacity Studies on a 2-d Cr^{4+} (S=1) Antiferromagnet***", APS, 2007.

- N. Kaur, S. Nellutla, N. S. Dalal, "***Quantum phase transitions in a Cr(IV) diethylenetriamine diperoxo compound***", FAME, 2007.

- N. Kaur, S. Nellutla, N. S. Dalal, "***Cr(IV) complexes as possible models of Bose-Einstein Condensates***", FIMS, 2007.

- N. Kaur, R. J. Clark, S. Nellutla, N. Dalal, J. F. Berry, E. Bill, E. Bothe, F. A. Cotton, S. A. Ibragimov, C. A. Murillo, J. M. North and D. Villagran,

"***Synthesis, Structure and High Field EPR study of a Paddlewheel Compound having Pd_2^{5+} Core***", SEMRC, 2006.

- N. Kaur, V. Mereacre, D. Prodius, C. Turta, C. Simmons, I. Geru, N. S. Dalal, "***Incorporation of Lanthanides in high Nuclearity Mn Complexes: Synthesis and Magnetic Characterization of $[Mn_{10}Pr_2O_9(C_6H_5COO)_{20}]$*** ", FAME, 2006.

- N. Kaur, S. Nellutla and N. S. Dalal, J. Cissell, T.M. Vaid, "***Magnetic characterization of a newly synthesized $[(CH_3CN)_5V\text{-}O\text{-}V(CH_3CN)_5](BF_4)_4$. $2CH_3CN$, V-O-V compound***", FAME, 2006.

- N. Kaur, R. Vasic, B. Roberts, J. S. Brooks, N. S. Dalal, "***Possible Magnetic Field Effect on the ac Dielectric response of the single molecule Magnet $K_6[V_{15}As_6O_{42}(H_2O)].8H_2O$, V_{15}***", PPHMF-V, 2005.