

Poster Session
Saturday, October 26, 6:00 - 9:00 PM
Empire Ballroom, Salons A, B, and C

P1: Solid-state CP/MAS ^{13}C and ^{15}N NMR Spectroscopic Characterization of *Sepia* melanin, *Sepia* Melanin Free Acid, and Human Hair Melanin in Comparison with Several Model Compounds

Bhavin B. Adhyaru, Novruz G. Akhmedov, Alan R. Katritzky, and Clifford R. Bowers
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P2: Lipid Nanotube Arrays- a Spin-labeling EPR Study

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P3: First Photooxidized Intermediate During Assembly of the Photosynthetic Water Oxidizing Complex: Parallel-Mode EPR Study of Mn^{3+}

S.V. Baranov(1), A.M. Tyryshkin(2), R.K. Watt(3), and G.C. Dismukes(2)
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P4: Interaction of Singlet Oxygen with Fluorescent Spin Sensors Based on Redox Nitroxide Radical Formation

P. Bilsk(1), K. Hideg(2), T. Kálai(2), M. A. Bilska(1), and C. F. Chignell(1)
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P5: Transient-EPR Of Fullerene C_{60} Bisadducts: High-Field Data

Marco Bortolus(1), Johan Van Tol(1), and Anna Lisa Maniero(2)
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P6: Hydrogen Bonds in Rubredoxins from Thermophilic and Mesophilic Organisms

Catherine M. Bougault, Marly K. Eidness, and James H. Prestegard
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P7: Balanced RF Probes for Solid State NMR

William W. Brey, Peter L. Gor'kov, and Changlin Tian
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P8: Effect of Crystallinity on Q- and X- Band EPR Spectroscopy of CO₂⁻ and CO₃³⁻ Radicals of Synthetic Carbonated Apatites

A.Brik(1), G.Kenner(2), K. Moribe(2), E.Kalabukhova(3), S.Lukin(3), O.Sherbina(1), A.Kalinichenko(1), and W.Higuchi(2)

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- (3) Institute of Semiconductor Physics of NAS Ukraine, Kiev, Ukraine

P9: Diffusion NMR Studies of Hyperbranched Polyesters

Jason P. Burgess(1), Anthony L.Andrady(2), and W. Scott Burnside (2)

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P10: Temperature Dependence of Electrically Detected ESR at $\nu=1$ in a Two-Dimensional Electron System in GaAs Quantum Wells in the QHE Regime

Eugene Olshanetsky(1), Joshua D. Caldwell(1), Shu-chen Liu(1), Manyam Pilla(1), Clifford R. Bowers(1), Jerry A. Simmons(2), and John L. Reno(2)

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P11: Structure of the Co^{II}- Product Radical Pair State of B₁₂-Dependent Ethanolamine Deaminase Investigated by using Orientation-Selection ESEEM Spectroscopy

Jeffrey M. Canfield and Kurt Warncke

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P12: Residual Dipolar Couplings as an Aid to Resonance Assignments in Large, Structurally Characterized Proteins

Michael G. Ford, Laura C. Morris, Robert J. Woods, and James H. Prestegard

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P13: NMR Structure of the Targeting Domain of the Focal Adhesion Kinase (FAK) in Complex With a Paxillin Peptide

Guanghua Gao(1), Kirk C. Prutzman(1), Michelle King-Brantley(2), Eugene F. DeRose(4), Robert E. London(4), Michael D. Schaller(2,3), and Sharon L. Campbell(1,3)

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P14: Solid State ^{29}Si NMR as a Complementary Analytical Tool for Characterizing Reversed-Phase Liquid Chromatography Stationary Phases

J. David Sunseri, Thomas E. Gedris, Albert E. Stiegman, and John G. Dorsey

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P15: Investigation of Enhanced Free Volume in Nanosilica-Filled Poly(1-trimethylsilyl-1-propyne) by ^{129}Xe NMR Spectroscopy

T.C. Merkel(1), L.G. Toy(1), L.Andrady(1), H. Gracz (2), and E. Stejskal (3)

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P16: Photochemical Reduction Of Tirapazamine (3-amino-1,2,4-benzotriazine 1,4-dioxide) And Related Di-N-oxides to Nitroxide Free Radicals

J.J. Inbaraj, A.G. Motten, and C.F. Chignell

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P17: Calibrating Spin Diffusion Coefficients in Amorphous Polymers and Their Blends Using Solid-State NMR

Xin Jia, Justyna Wolak, Stan Toporek, Xingwu Wang, and Jeffery L. White

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P18: Spectral Assignments and Molecular Geometry of Membrane-Associated Phosphoinositides using Variable Angle Sample Spinning (VASS)

Anita I. Kishore, and James H. Prestegard

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P19: Cross Polarization Schemes in Polarization Inversion Spin Exchange at the Magic Angle (PISEMA)

Riqiang Fu(1), Hyeongnam Kim, Conggan Li, Changlin Tian, and Timothy A. Cross

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P20: Spin Relaxation Dynamics In Diamagnetically Diluted Perovskite Manganites

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P21: An EPR Method for Probing Surface Magnetic Fields, Dipolar Distances, and Magnetization Fluctuations in Single Molecule Magnets

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P22: Solid-State EPR Studies on Low-Spin Cobalt(II) Doped into Ni(II) and Zn(II) Octaethylporphyrin Complexes and Their Fullerene Adducts

Andrew Ozarowski(1), Hon Man Lee(2) and Alan Balch(2)

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P23: Two-Dimensional NMR Spectroscopy of Semiconductors Under Optical Pumping Conditions

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P24: Study of the Spin Density Distribution in the P₇₀₀ Special Pair by High-Frequency EPR Spectroscopy

Oleg G. Poluektov(1), Lisa M. Utschig(1), Sandra L. Schlesselman(1), Marion C. Thurnauer(1), K. V. Lakshmi(2), Gary W. Brudvig(2), and Gerd Kothe(3)

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P25: NMR Structure and Dynamics of the Focal Adhesion Targeting Domain of Focal Adhesion Kinase

Kirk C. Prutzman(1), Guanghua Gao(1), Michelle King-Brantley(2), Vidhya V. Iyer(2), Geoffrey A. Mueller(4), Michael D. Schaller(2,3) and Sharon L. Campbell(1,3)

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P26: LC/ESR, LC/MS, and MS/MS Characterization of Lipid-Derived Radical Adducts from *in vitro* and *in vivo* Peroxidations of Polyunsaturated Fatty Acids

Steven Qian(1), Maria Kadiiska, Qiong Guo, Gui-Hua Yue, Kenneth Tomer, and Ronald P. Mason

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P27: Fluorine Hyperfine Splittings in the ESR Spectra of Some Simple Aromatic Radicals. An Experimental and Theoretical Investigation

Anton Rakitin, David Yff, and Charles Trapp

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P28: ^{19}F , ^{13}C NMR Analysis of a Perfluorocarbon Oxygen Carrier

Anthony A. Ribeiro, and Keiko Umayahara

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P29: EPR Spectroscopic Investigation of Radical Pair Separation Reactions in B_{12} -Dependent Ethanolamine Deaminase Following Low Temperature Photohomolysis of Methyl- and Adenosylcobalamin

Kristen L. Rogers, Jeffrey M. Canfield, and Kurt Warncke

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P30: Aqueous Sample Heating at X- and W-band: Towards a Microwave T-jump EPR Experiment

Andres Ruuge, Ali M. Alaouie, Yevgeniy Degtyarev, and Alex I. Smirnov

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P31: Site-Directed Spin-Labeling with a pH-sensitive Nitroxide

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P32: Effect of Molecular Oxygen on Continuous Wave EPR Spectra of Mn^{2+} in Aqueous Solutions - a High Field EPR Experiment to Probe Ion Microenvironment

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P33: Triplet Energy Transfer in Purple Photosynthetic Reaction Centers Observed by Transient CW ESR

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P34: Cross Polarization Schemes in Polarization Inversion Spin Exchange at the Magic Angle (PISEMA)

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P35: Clean Fuels Chemistry: Fundamental Mechanistic Investigations of Alkylate Formation by Solid State NMR

Xin Jia, Stan Toporek, Matt Truitt, Xingwu Wang, Justyna Wolak, and Jeffery L. White

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P36: High Field EPR Investigation of Photosynthetic Reaction Center Ions

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P37: Further Adventures in Fully Automated First Order Multiplet Analysis

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P38: Miscibility, Packing, and Local Dynamics in Polyolefin Blends

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P39: 2D DOSY Investigations of Rotaxanated Polymers: PMMA-rotaxa-cycloPDMS

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P40: 240 GHz EPR Studies of Intrinsic Defects in as-grown 4H SiC

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