

SPIN CHEMISTRY MEETING 2022

Spin Chemistry: Poster Presentations

Poster presentations will be held from 8-10pm Monday and Tuesday in the Northshore Ballroom at the Hilton Garden Inn, 1818 Maple Ave, Evanston, IL 60201.

If you are a poster presenter and have not received instructions on presenting your work, email Ms. Corey Drennon at wasielewski-ofc@northwestern.edu.

Presentation Group A: Monday 08/29

Alvarez, Pedro	Simulating radical pair magnetoreception in IBM's quantum computer
Attwood, Max	Using Chemistry to Design and Synthesize New Maser Gain Media
Benjamin, Phillip	TBA
Bertran, Arnau	New light-induced Pulsed ESR Dipolar Spectroscopy methodologies for the elucidation of molecular

	conformation
Chen, Kuan-Cheng	Concept and experimental demonstration of using a cold load to improve the SNR of an EPR spectrometer
Dejean, Victoire	Anisotropic Magnetic Field Effects in Cryptochrome Crystals
Dowker, Emily	Effects of hydrophobic modification and electrostatic interactions on sensitivity of riboflavin-ascorbic acid radical pairs to weak magnetic fields
Gruning, Gesa	The influence of dynamical degrees of freedom on compass sensitivity: A comparison of plant and migratory bird cryptochromes
Henbest, Kevin	Magnetic Field Effects in Avian Cryptochrome Proteins
Jimbo, Chiho	Fluorescence-based magnetic field effects on a protein-flavin complex
Kim, Yunmi	Determination of ^{13}C CSA tensor of selective labelled on photosynthetic heliobacterial reaction center by solid-state photo-CIDNP MAS NMR SUPER experiment
Kopp, Sebastian	Investigation of the Polaron Delocalization in Edge-Fused Porphyrin Oligomers by EPR and Optical Spectroscopy
Maylander, Maximilian	Design guidelines for optimising triplet formation in PDI-radical systems
Nagashima, Hiroki	Time-resolved EPR studies on two types of radical pairs in the BSA-AQDS complex under frozen

	conditions
Park, Suhyun	Red-shifted Radical Exciplex on Peptoid Scaffold
Piligkos, Stergios	Molecular Lanthanide Complexes for Quantum Technologies
Prisner, Thomas F.	Spin Counting by Pulsed EPR Methods
Redman, Ashley J.	Room temperature magnetic sensing using a molecular compass – a magnetic resonance and field effect study
Smith, Luke D.	Elucidating quantum coherence in the complex system of the avian compass
Tateno, Akihiro	Coherent Control of Radical Species
Xu, Xiaotian	Up Close and Personal: Micro-mechanical Resonators as EPR Cavities. Going Beyond the Quasi-static Approximation to Simulate Electromagnetic-Acoustic Coupling in Piezoelectric Devices with Commercial FEM Software
Weaver, Ivan	Spin Trapping Reactive Oxygen Species Produced by X-ray Scintillating Nanoparticles
Yurkovskaya, Alexandra	Reduction of thymine radicals by Tryptophan: A study of CIDNP kinetics

Presentation Group B: Tuesday 08/30

Antill, Lewis	Magnetic field effect-based fluorescence fluctuation spectroscopy
Avalos, Claudia	Pentacene Bi-radical Nitroxides studied via Transient EPR and Transient Absorption Spectroscopy
Berdinskiy, Vitaliy	Theory of Nuclear Spin Dependent Enzymatic Synthesis of ATP in vivo in Strong Magnetic Fields
Braun, Felix	Probing quenching of triplet excitons by charge carriers in dual-emitter OLEDs by phase-sensitive magnetic resonance
Cubbin, Daniel	Sensitive Detection of Magnetic Field Effects in Avian Cryptochromes
Demetriou, Harry Michael	Designing Magnetic Superstructures in Vacuum Deposited Phthalocyanine Thin Films
Gehrckens, Angela S.	What comes after the radical pair mechanism? - Understanding the protein conformational changes that allow avian navigation
Gravell, Jamie	Detection of Magnetic Field Effects in Cryptochrome Proteins using Confocal Microscopy
Hergenbahn, Janko	Electron spin delocalization in radical anions of porphyrin molecular wires
Kay, Christopher W. M.	Pulsed and Continuous-Wave, Solid-State, Room-Temperature Masers
Kohmura,	Influence of photodegradation on magnetic field

Mizuki	sensitive protein-ligand photochemistry
Kurle, Patrick	^{13}C solid-state photo-CIDNP on a flavoprotein embedded in glassy sugar matrix
McHorse, Andrew	The role of quenching and diffusion in tuning the magnetic sensitivity of micellar thionine-aniline radical pairs
Newns, Michael	Enhanced Quantum Cooling of Microwave Cavities Using the Photoexcited Triplet State of Pentacene Doped p-Terphenyl
Panter, Sabrina	Disproportionation Reaction of 6,7,8-Trimethylumazine Investigated by photo-CIDNP
Pazera, Gediminas	Isotope substitution effects on the magnetic compass properties of cryptochrome-based radical pairs
Pitcher, Tommy L.	Spin-Correlated Radical Pairs in Avian Cryptochromes
Qin, Ruonan	Selective isotope labelling of tyrosine in flavoproteins for ^{13}C solid-state photo-CIDNP effect
Smirnov, Alex I.	Photonic Band-Gap Resonators for High Field EPR and DNP NMR of Thin Film Spintronic Materials
Stuhec, Ana	Elucidating Intrinsic Flavin Magnetic Field Effects
Tao, Coraline	TBA
Yago, Tomoaki	A Vector Model for Spin State Mixing in Triplet Pairs

Zadrozny, Joseph	Rare-Earth Magnetic Control of Photolysis Reactions
Zhukov, Ivan	Spin dynamics simulation package for fixed-geometry charge-separated systems
