AUGUST 18

Registration at the conference site from 10:00 until evening of August 19

10:20	**Spin Chemistry Tutorials: Opening**
10:30	**Konstantin Ivanov** (Novosibirsk, Russia), Spin dynamics and density matrix formalism
12:00	Coffee-break
12:30	**Peter Hore** (Oxford, UK), Magnetic field effects in chemistry
14:00	Lunch
15:30	**Hans-Martin Vieth** (Berlin, Germany), Chemically induced hyperpolarization of nuclear spins
17:00	Coffee-break
17:30	**Kiminori Maeda** (Saitama, Japan), Chemically induced hyperpolarization of electron spins
19:30	**Welcome party**

AUGUST 19

9:00 **Opening / K. Ivanov, L. Kulik, P. J. Hore**

Hyperpolarized EPR / M. Wasielewski

9:10 **Stefan Weber** (Freiburg, Germany), Something old, something new, something borrowed, something blue: EPR and NMR detection of spin-correlated radical pairs in blue-light photoreceptors

9:50 **Claudia Avalos** (Lausanne, Switzerland), Stable radicals tethered to pentacene studied using time resolved EPR and transient absorption spectroscopy

10:10 **Motoko Asano** (Gunma, Japan), Spin-polarization in the charge transfer excited state of Copper (I) complexes

10:30 **Matvey Fedin** (Novosibirsk, Russia), Electron spin polarization in compact chromophore dyads studied by time-resolved EPR

10:50 Coffee-break

Magnetic field effects / P. J. Hore

11:20 **Henrik Mouritsen** (Oldenburg, Germany), The quantum robin: biological evidence for radical-pair-based magnetic field effects in cryptochromes of migratory birds

12:00 **Victor Bezchastnov** (Heidelberg, Germany), Anisotropic response of cryptochrome radicals to a weak magnetic field

12:20 **Tatiana Domratcheva** (Heidelberg, Germany), Formation and decay of magnetosensory radical pairs in animal cryptochrome

12:40 **Christiane Timmel** (Oxford, UK), Demonstration of a chemical compass in microtesla magnetic fields: a proof of principle for radical pair magnetoreception in birds

13:10 Lunch until 14:30

Theory and spin dynamics / K. Ivanov

14:30 **David Manolopoulos** (Oxford, UK), Master equations for spin dynamics

15:10 **Thomas Fay** (Oxford, UK), Relaxation in radical pair reactions – improvements on phenomenological approaches

15:30 **Timothy Field** (Hamilton, Canada), Dynamical theory of spin noise and relaxation - beyond extreme narrowing

15:50 **Daniel Kattnig** (Exeter, UK), On magnetic field effects in triads of radicals

16:20 Coffee-break

Hyperpolarized NMR / R. Sagdeev

16:50 **Gerd Buntkowsky** (Darmstadt, Germany), Hyperpolarization with parahydrogen

17:20 **Olga Morozova** (Novosibirsk, Russia), Inter- and intramolecular reduction of transient histidine radical by tyrosine and tryptophan: TR CIDNP study

17:40 **Stephan Knecht** (Darmstadt, Germany), The role of low concentrated intermediates in Signal Amplification by Reversible Exchange (SABRE) hyperpolarization

18:00 **Kirill Kovtunov** (Novosibirsk, Russia), Parahydrogen based hyperpolarization in heterogeneous catalysis

18:20 **Ivan Skovpin** (Novosibirsk, Russia), NMR and MRI of SLIC-SABRE hyperpolarized biomolecules

18:40 **Hans-Heinrich Limbach** (Berlin, Germany), Bonding and mobility of hydrogen to and near transition metals

19:00 Dinner

20:30 **Poster session 1**

AUGUST 20

New experimental methods / Y. Kobori

9:00 **Michael Wasielewski** (Evanston, USA), Photodriven quantum teleportation of an electron spin state in a covalent donor-acceptor-radical system

9:40 **Mark Oxborrow** (London, UK), MASAR cooling of an electromagnetic mode using photo-excited pentacene dissolved in solid para-terphenyl

10:00 **Hao Wu** (London, UK), Room-temperature pulsed or continuous-wave pentacene maser?

10:20 **Jonathan Woodward** (Tokyo, Japan), Microspectroscopy of flavin-based radical pairs

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10:50 Coffee-break

Magnetic field effects / U. Steiner

11:20 **Tetsuro Kusamoto** (Okazaki, Japan), Magnetoluminescence in photostable radicals

11:50 **Malcolm Forbes** (Bowling Green, USA), To be announced

12:10 **Tomoaki Yago** (Saitama, Japan), Low magnetic field effects on triplet pairs

12:30 **Kiminori Maeda** (Saitama, Japan), Probing and controlling transient radical pairs by static and AWG based RF fields in low field regime

12:50 **Yoshio Teki** (Osaka, Japan), Photostable non-luminescent pentacene–radical derivative and luminescent radical-excimer: Counters in unique excited-state spin dynamics of pi-radicals

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13:20 Lunch until 14:30

Hyperpolarized NMR / J. Matysik

14:30 **Malcolm Levitt** (Southampton, UK), Entangling spins & space: Spin isomers, endofullerenes, hyperpolarization and long-lived states

15:10 **James Eills** (Mainz, Germany), Polarization transfer in [1-^{13}C]fumarate using constant-adiabaticity field sweeps

15:30 **Yuliya Mindarava** (Ulm, Germany), Hyperpolarization of ^{13}C nuclear spins with Nitrogen-Vacancy center in diamond

15:50 **John Blanchard** (Mainz, Germany), Nuclear spin hyperpolarization in zero to ultralow magnetic fields

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16:20 Coffee-break

Materials / S. Tarasenko

16:50 **Jan Behrends** (Berlin, Germany), Triplet and quintet states in disordered and crystalline singlet-fission materials

17:30 **Pritam Mukhopadhyay** (New Delhi, India), Synthesis and stabilization of arylenediimide-based planar and twisted radical anions

17:50 **Andreas Sperlich** (Würzburg, Germany), Optically and electrically excited intermediate electronic states in donor:acceptor based OLEDs

18:10 **Jean-Philippe Ansermet** (Lausanne, Switzerland), Probing spin-dependent charge transfer at electrodes using magnetic resonance

18:30 **Alexei Chepelianskii** (Paris-Saclay, France), Spin properties of bi-exciton state formed through singlet fission

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19:00 Dinner

20:30 **Poster session 2**

AUGUST 21

Prof. I'Haya memorial session / Y. Tanimoto

9:00 **Hisao Murai** (Shizuoka, Japan), Professor. Y. J. I'Haya Memorial lecture - Kick-off of 'Spin Chemistry Meeting'

9:30 **Ulrich Steiner** (Konstanz, Germany), Complete electronic repository of all Spin Chemistry Meetings

Hyperpolarized EPR / K. Möbius

9:50 **Marilena di Valentin** (Padua, Italy), Light-induced pulsed EPR dipolar spectroscopy: the spin-polarized triplet state probe

10:20 **Olesya Krumkacheva** (Novosibirsk, Russia), Triplet fullerenes as prospective spin labels for nanoscale distance measurements by pulsed dipolar EPR

10:40 **Rane Vinayak** (Mumbai, India), Designing covalently linked radical-chromophore dyads with a large magnitude of electron spin polarization

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11:00 Coffee-break

Hyperpolarized EPR / M. di Valentin

11:30 **Klaus Moebius** (Berlin, Germany), Protein machinery enabling Life without Water: High-field EPR studies of protein/matrix H-bond interactions

12:00 **Art van der Est** (St. Catharines, Canada), Triplet electron transfer and spin polarization in a Palladium porphyrin–fullerene conjugate

12:20 **Alexander Popov** (Novosibirsk, Russia), Out-of-phase ELDOR study of charge separation in organic photovoltaic composites

12:40 **Yasuhiro Kobori** (Kobe, Japan), Molecular geometries and motions driving quintet multiexcitons via singlet fissions

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13:00 Lunch until 14:30

Theory and spin dynamics / A. van der Est

14:30 **Kev Salikhov** (Kazan, Russia), Paradigm shift of spin exchange in solutions of paramagnetic particles

15:00 **Yuri Kandrashkin** (Kazan, Russia), EPR study of photoexcited orthogonal Bodipy dyads

15:20 **David Mims** (Würzburg, Germany), Extreme on-resonance quantum coherence effect on the charge recombination in rigidly linked radical ion pairs with predominant triplet spin gate

15:40 **Takeji Takui** (Osaka, Japan) Practical quantum algorithms for quantum chemical calculations on quantum computers

16:10 **Valerii Zapasskii** (St. Petersburg, Russia), Spin noise spectroscopy in progress

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16:50 Coffee-break

17:10 **Cultural program, boat trip**

20:00 **Conference banquet**

AUGUST 22

Hyperpolarized NMR / S. Weber

9:00 **Jorg Matysik** (Leipzig, Germany), The solid-state photo-CIDNP effect: New results and developments

9:40 **Yonghong Ding** (Leipzig, Germany), Field-cycling solution NMR reveals ^{1}H, ^{13}C and ^{15}N photochemically induced dynamic nuclei polarization in cysteine-lacking LOV domains

10:00 **Alexey Kiryutin** (Novosibirsk, Russia), Proton relaxometry of long-lived spin order

10:20 **Dennis Kurzbach** (Vienna, Austria), Signal-improved real-time NMR spectroscopy of proteins by hyperpolarized water

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10:40 Coffee-break

New experimental methods / L. Kulik

11:10 **Gurumurthy Rajalakshmi** (Hyderabad, India), Optical detection of spins

11:30 **Andrey Anisimov** (St.Petersburg, Russia), The ODMR of vacancy spin centers in silicon carbide

11:50 **Oksana Koplak** (Chernogolovka, Russia), Microwave remote reading of logic states of spin valve

12:10 **Stuart Mackenzie** (Oxford, UK), Optical cavity-based spectroscopy for the sensitive detection of magnetic field effects

12:30 **Gerd Kothe** (Freiburg, Germany), Creation and detection of scalable nuclear spin qubits in hyperpolarized molecular solids

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12:50 Lunch until 14:30

Magnetic field effects / G. Grampp

14:30 **Yoshifumi Tanimoto** (Hiroshima, Japan), Magnetic field effects in chemistry, physics and biology

15:00 **Kirill Baryshnikov** (St. Petersburg, Russia), Magnetic susceptibility of point crystal defects subjected to the Jahn-Teller effect

15:20 **Nikolay Polyakov** (Novosibirsk, Russia), Possibilities of spin chemistry in the study of chiral systems

15:40 **Dongkyum Kim** (Gwangju, Republic of Korea), Magnetic field effect of exciplex fluorescence on a highly designable peptoid scaffold

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16:00 Coffee-break

Materials / J. Behrends

16:30 **Anna Rodina** (St. Petersburg, Russia), Optical access to the surface spins in colloidal nanocrystals

17:00 **Mikhail Fonin** (Konstanz, Germany), Robust magnetism of prototypical Fe_4 molecular magnets on functional surfaces

17:20 **Roman Morgunov** (Chernogolovka, Russia), Spin controlled oxidation and dislocation mobility under hyperfine and/or external magnetic fields in the ^{29}Si enriched crystals

17:40 **Tomoaki Miura** (Niigata, Japan), Charge carrier and spin dynamics in organic semiconductor thin films studied by simultaneous measurement of transient optical absorption and photocurrent signals

18:00 **Vladimir Dyakonov** (Würzburg, Germany), Optically and electrically addressable spin states in 2D and 3D organic and inorganic semiconductors

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18:40 **Closing of the conference**
