

POSTER LIST

Odd numbers will be presented on Monday, August 19th.

Even numbers will be presented on Tuesday, August 20th.

Posters with a ★ participate in the poster competition.

MR Microscopy

- P01 | Artifacts in UTE images reflect the differences in the eddy-current compensation between changing the applied shim currents versus shifting the rf frequency
Yang Xia, Farid Badar, Dieter Gross, Thomas Oerther
- P03 | Diffusion tensor distribution imaging of in vivo mouse brain at ultra-high magnetic field using spatiotemporal encoding
Daniel Topgaard, Maxime Yon, Lucio Frydman
- P05 | Multicomponent T2 relaxation analysis in the muscles of Zebrafish
Muhamed N.h. Eeza, N Nowik, Y Ding, Z Zuberi, J Matysik, H.p. Spaink, Alia Alia
- P07 | An in vivo Continuous Sequential 3D MRM Study of Honey Bee Metamorphosis
Ales Mohoric, Jani Božič, Kaja Tušar, Yining Ye, Ana Sepe, Ursa Mikac, Igor Serša
- P09 | 3D MR Microscopy with 6D Diffusion-Relaxation Distributions
Linn Thrane, Daniel Topgaard, Hong Jiang
- P11 | Wine Cork Evolution during Aging: Insights from MRI Measurements
Jeffrey Walton, Annegret Cantu, Michael Mackay, Greg Hirson, Andrew Waterhouse

Cellular & Molecular

- P13 | Site-resolved distribution and molecular dynamics of water within fibril aggregates: from plant cell-wall scale to atomistic resolution
Camilla Terenzi, Pan Chen, Jakob Wohlerl, Lars A. Berglund, István Furó
- P15 | In-situ NMR highlights structural change during apple heating
Sylvie Clerjon, Alexandre Leca, Catherine Reanrd, Jean-Marie Bonny, Amidou Traore

Engineering & Materials

- P17 | Deposit layer formation during protein filtration by 1D inverse Abel-transformation MRI
★ *Nicolas Schork, Sebastian Schuhmann, Hermann Nirschl, Dieter Gross, Gisela Guthausen*
- P19 | A low-cost, miniature Halbach magnet with adjustable homogeneity designed for accurate and immediate detection of blood glucose
★ *Qing Yang, Yi Chen, Rongsheng Lu, Zhonghua Ni, Hong Yi*
- P21 | Superhydrophobic Surfaces – Examination of the Chemical Composition of Sessile Droplets during Evaporation
Jonas Kind, Christina Thiele
- P23 | A solid echo T1-T2 method for enhancing hydrogen-containing solid NMR signal in hydrated cement paste
★ *Zhengxiu Wu, Xiaowen Jiang, Rongsheng Lu, Zhonghua Ni, Zonghai Xie*
- P25 | Magnetic Resonance Imaging as a Non-Destructive Method for the Characterization of Silicone Elastomer Chemistry In-Situ,
April Sawvel, Harris Mason, Jennifer Knipe, Sarah Chinn, Elizabeth Glascoe, James Lewicki, Robert Maxwell
- P27 | Can the coagulation process of cellulose be studied by MRI?
Maria Gunnarsson, Jenny Bengtsson, Leo Svenningsson, Diana Bernin
- P29 | In Situ Magnetic Resonance Imaging of Pharmaceutical Tablet Dissolution
Bruce Balcom, Bryce Macmillan, Heather Frericks-Schmidt, Mark Zell

Hardware

- P31 | Design of main control system for nuclear magnetic resonance LWD tool
Xu Yangyang
- P33 | Study on Evaluation of Vector Matching Effect between B0 and B1
Feixue Gong, Lizhi Xiao, Guangzhi Liao, Yan Zhang, Zhe Sun, Sihui Luo, Zhihao Long
- P35 | Study on RF coil design in LWD MRI tools with target field method
Zhihao Long, Guangzhi Liao, Lizhi Xiao, Yan Zhang, Zhe Sun, Sihui Luo, Feixue Gong
- P37 | An open PXIe based scalable MRI console
Robin Dykstra, Sergei Obruchkov, Andrew Ang, Guang Yang

Mobile & Low Feld

- P39 | Inside-out NMR with concentric ring magnets
Shin Utsuzawa, Yi-Qiao Song
- P41 | Effect of Radial Vibration on Logging While Drilling NMR T2 Distribution
Hu Lynn
- P43 | Studies of Biofilms in Yellowstone National Park and Violins of the Cremona Masters by Mobile NMR
Denis Jaschtschuk, Christian Rehorn, Michael Adams, Bernhard Blümich, Catherine Kirkland, Brent Peyton, Sarah Codd, Joseph Seymour, Claudia Invernizzi, Marco Malagodi, Valeria Gabrielli
- P45 | Mini Inside-Out Nuclear Magnetic Resonance Sensor Design for Soil Moisture Measurements
Jiamin Wu, He Yucheng, Xu Zheng
- P47 | Toward Inexpensive Magnetically Compensated Materials
Andrew Mcdowell, Fred Mcdowell
- P49 | CPMG measurement under motion
Shin Utsuzawa, Irfan Bulu, Tancredi Botto, Jeffrey Paulsen, Martin Hurlimann, Yi-Qiao Song
- P51 | Magnetic Particle Spectroscopy - MOBILE Universal Surface Explorer
★ *Patrick Vogel, Martin A. Rückert, Thomas Kampf, Volker C. Behr*

Biomedical

- P53 | Should we still fit quantitative MRI data to mathematical models in the age of AI?: A case study comparison of deep learning versus the Tofts model
Peter Lee, Alessandro Guida, Thomas Trappenberg, Chris Bowen, Steven Beyea, Jennifer Merrimen, Cheng Wang, Sharon Clarke (sciencesconf.org:icmrm2019:267086)
- P55 | Study on Electrical Properties under Magnetic Resonance with High Field
Xiaonan Li, Guoqiang Liu, Zilong Yuan, Jianfeng Qiu
- P57 | Spatially resolved relaxation analysis in bovine and human articular cartilage
Siegfried Stapf, Carlos Mattea, Andrea Cretu, Oleg Petrov
- P59 | Estimates of Blood Plasma Water Content Using Portable NMR Relaxometry
★ *Sophia Fricke, Joseph Pourtabib, John Madsen, Shahab Chizari, Johnny Phan, Nam Tran, Matthew Augustine*

Hyperpolarization

- P61 | Toward in vivo pH Sensing using Hyperpolarized ^{129}Xe MRI
Patrick Berthault, Estelle Leonce, Jean-Pierre Dognon, Delphine Pitrat, Jean-Christophe Mulatier, Thierry Brotin
- P63 | A Low-field NMR detector for probing in situ SABRE hyperpolarization
★ *Fraser Hill-Casey, Kieran Marsh, Matheus Rossetto, Meghan Halse*

Porous Media

- P65 | Analysis of 3-site T2- T2 exchange NMR
Yang Gao, Bernhard Blümich
- P67 | Using NMR to determine gas storage in shale formation
Boqin Sun
- P69 | Studying molecular diffusion in heterogeneous catalysts on different length scales simultaneously
Emma Thompson, Nikolaus Nestle, Matthias Kellermeier, Hannah Schreyer, Katja Graf, Max Pokrandt
- P71 | Identification of physical properties governing relaxation process in saturated rocks by matching experimental T2 distributions and CT-image based NMR simulation through surrogate-assisted particle swarm optimization
★
Rupeng Li, Igor Shikhov, Christoph Arns
- P73 | Data Processing and Software Research of Nuclear Magnetic Resonance Logging While Drilling
Dong Yu
- P75 | Correlation of magnetic resonance imaging and high-resolution X-ray tomography to characterise pore size distributions in polymeric open – cell sponges
★
Gabriele M. Cimmarusti, Melanie Britton, Abhishek Shastry, Matthieu Boone, Veerle Cnudde
- P77 | 2.5D spatially resolved 3D Laplace NMR for porous media
Yan Zhang
- P79 | MRI and NMR Studies of a Seawater Spray Ice Formation
Grant Wilbur, Bryce Macmillan, Igor Mastikhin
- P81 | The bending of 17th century panel paintings induced by moisture
Leo Pel
- P83 | Setting of geopolymer binders studied by NMR
Nikolaus Nestle, Jan Philip Merkl, Quang Hung Nguyen, Jean-Baptiste D'espinoise
- P85 | Liquid specific changes in magnetic susceptibility induced internal gradients during displacement experiments in porous media
Henrik Nicolay Sjørgård, John Georg Seland
- P87 | Monitoring Gas Hydrate Formation/Dissociation with Magnetic Resonance Imaging in a Metallic Core Holder
Bruce Balcom, Armin Afrough, Mojtaba Shakerian, Sarah Vashaee, Florin Marica, Yuechao Zhao

Flow & Diffusion

- P89 | The Clinical Application of Diffusion-Weighted Image for Differentiating Myeloma From Bone Metastasis in the Extremities
Seul Ki Lee
- P91 | Improved one-dimensional and two-dimensional permeability NMR models
Lin Wang, Lizhi Xiao, Yan Zhang, Guangzhi Liao, Wenzheng Yue
- P93 | Benchtop NMR spectroscopy and diffusion measurements to characterize enzymatic hydrolysis online and at-line
Evan Mccarney, Kate Washburn Washburn, Robin Dykstra
- P95 | Quantifying the mitochondrial content with diffusion MRI
Nicolas Moutal, Denis Grebenkov, Sylvie Clerjon, Guilhem Pages, Jean-Marie Bonny
- P97 | How MRI can assist Rheology?
Maude Ferrari, Mathieu Jenny, Sebastien Kiesgen De Richter, Sébastien Leclerc, Christel Métivier, Xiao Zhang, Philippe Coussot
- P99 | MRI flow cell development to monitor in-situ and in-real time dissolution of porous food products
Gjw Goudappel, Theo Blijdenstein, Adrian Voda

- P101 | 3D Imaging of flow pattern in soil – plant systems
Sabina Haber- Pohlmeier, Jie Wang, Andreas Pohlmeier, Petrik Galvosas
- P103 | Characterization of Anomalous Jet and Bubble Interaction in a Fluidized Bed
Chris Boyce, Alexander Penn, Maxim Lehnert, Klaas Pruessmann, Christoph Müller
- P105 | The limits of flow detection with PGSE MRI
N. H. Williamson, M. E. Komlosh, D. Benjamini, P. J. Basser
- P107 | Ultrafast diffusion exchange measurement
Otto Mankinen, Vladimir Zhivonitko, Anne Selent, Susanna Ahola and Ville-Veikko Telkki