

# NMR, MS AND SCXRD STUDIES OF MOLECULAR CAPSULES

Kari Rissanen

## <sup>1</sup>H DOSY NMR - POWERFULL TOOL IN METALLOSUPRAMOLECULAR CHEMISTRY

Ondřej Jurček, Pia Jurček, Elina Kalenius, Kari Rissanen, Radek Marek

## NMR STUDY OF COMPLEX OF CHOLESTEROL WITH HEPTAKIS(2,3,6- TRI-O-METHYL)- $\beta$ -CYCLODEXTRIN

Karolína Kučáková, Tereza Navrátilová, Bohumil Dolenský

## BINDING OF ZWITTERIONIC RUTHENIUM(III) COMPLEXES WITH CUCURBIT[7]URILS IN SOLUTION

Sanaz Malali, Jan Chyba, Michal Knor, Jan Novotný, Radek Marek

## POLYMORPHIC TRANSFORMATIONS OF DRUGS LOADED INTO GLYCOPOLYMERIC MICELLES

Eliška Procházková, Cheng Cao, Aditya Rawal, Martin Dračínský, Saroj  
Bhattacharyya, Ivana Císařová, James M. Hook, Martina H. Stenzel

## VERSATILE RECEPTOR MOIETIES FOR ANION RECOGNITION AND STRUCTURAL FEATURES THEREOF

Petra Cuřínová, Karolína Salvadori

## UNPRECEDENTED ENANTIODISCRIMINATION OF INHERENTLY CHIRAL CALIXARENE DERIVATIVES USING RDCS

Markéta Tichotová, Tomáš Landovský, Pavel Lhoták, Sharon Jeziorowski,  
Christina M. Thiele, Hana Dvořáková

**INTERMOLECULAR INTERACTIONS STUDIED BY NMR  
SPECTROSCOPY**

**Jakub R. Štoček, Lucie Čechová, Michal Šála, Martin Dračínský**

MAGIC ANGLE SPINNING AND PROTON LINEWIDTH:

HOW FAST IS FAST ENOUGH?

Zdeněk Tošner

HERMES – A SOFTWARE TOOL FOR PREDICTION AND ANALYSIS OF  
MAGNETIC FIELD-INDUCED RESIDUAL DIPOLAR COUPLINGS IN  
NUCLEIC ACIDS

Ilektra-Chara Giassa, Andrea Vavřinská, Jiří Zelinka, Jakub Sebera, Vladimír  
Sychrovský, Rolf Boelens, Radovan Fiala, Lukáš Trantírek

MULTI-FACES OF DISHEVELLED PROTEIN

Jitender Kumar, Jakub Harnoš, Marek Kravec, Vítězslav Bryja, Konstantinos  
Tripsianes

A GTP-DEPENDENT SWITCH THAT CONTROLS G-QUADRUPLEX  
MULTIMER FORMATION

Sofia Kolesnikova, Pavel Srb, Lukáš Vrzal, Michael S. Lawrence, Václav  
Veverka, Edward A. Curtis

HEDGEHOG IN THE CAGE II: DYNAMIC PARAMAGNETIC EFFECTS  
IN PROTEIN NMR SPECTRA

Pavel Srb, Michal Svoboda, Ladislav Benda, Martin Lepšík, Ján Tarábek,  
Václav Šícha, Bohumír Grüner, Klára Grantz-Šašková, Jiří Brynda, Pavlína  
Řezáčová, Jan Konvalinka, Václav Veverka

WITH THE LITTLE HELP FROM MY FRIENDS: ON THE  
INTERACTIONS OF RECQ4 HELICASE WITH DNA AND DNA-  
BINDING PROTEINS

Anna C. Papageorgiou, Lumír Krejčí, Konstantinos Tripsianes

TARGETING CYTOSOLIC PURINE 5'-NUCLEOTIDASE II  
USING SMALL FRAGMENTS

Vítězslav Brinsa, Lukáš Vrzal, Pavel Srb, Michael Kugler, Milan Fabry,  
Václav Veverka

UNRAVELLING DIMERIZATION OF THE EPIGENETIC READER  
LEDGF/P75

Vanda Lux, K. Čermáková, M. Fábry, M. Hořejší, M. Mádlíková, T. Brouns, F. Christ, J. Demeulemeester, Z. Debyser, P. Řezáčová, V. Veverka

COUPLING TRANSCRIPTION TERMINATION TO mRNA  
PROCESSING / DEGRADATION

Tomasz Kabzinski, Jana Laláková, Andrea Fořtová, Tomáš Klumpler,  
Karel Kubíček, Štěpánka Vaňáčová, Richard Štefl

PETR SEDMERA PRIZE AWARDED BY THE CZECH J. M. MARCI  
SPECTROSCOPIC SOCIETY

Radovan Fiala & Viktor Kanický

## APPLICATION OF NMR-BASED METABOLOMICS FOR MICROBIAL COMETABOLITES EVALUATION

Martina Čermáková, Helena Pelantová, Marek Kuzma

## NMR METABOLOMICS STUDY OF THE ASSOCIATION BETWEEN PANCREATIC CANCER AND DIABETES MELLITUS

Lenka Michálková, Štěpán Horník, Jan Sýkora, Lucie Habartová, Vladimír Setnička

## NMR AEROSOLOMICS AS A TOOL TO DISTINGUISH VARIOUS TYPES OF AEROSOL SAMPLES

Štěpán Horník, Jaroslav Schwarz, Vladimír Ždímal, Jan Sýkora

## PREDICTION OF WINE'S TASTE BIOMARKERS THROUGH NMR AND CHEMOMETRICS

Alberto Juan Ruiz, Antonio Chorques, Jaroslav Havlik

**JEOL NEWS 2019**

**Michal Maloň**

**BRUKER NEWS 2019**

**Matúš Durec and Pavel Kessler**

**WORKSHOP – ASK AN EXPERT**

(Bruker representatives will answer your questions or try help to solve your problems in 1 to 1 discussions. If you wish, you may send your question in advance to [pavel.kessler@bruker.com](mailto:pavel.kessler@bruker.com))



## STRUCTURAL INTERPRETATION OF THE $^{31}\text{P}$ NMR CHEMICAL SHIFT IN PHOSPHOROTHIOLATE AND PHOSPHATE

Jiří Fukal, Ondřej Páv, Miloš Buděšínský, Ivan Rosenberg, Jakub Šebera, Vladimír Sychrovský

## DETERMINATION OF THE FULL $^{207}\text{Pb}$ CHEMICAL SHIFT TENSOR OF THE NATURAL MINERALS PHOSGENITE ( $\text{Pb}_2\text{Cl}_2\text{CO}_3$ ) AND WULFENITE ( $\text{PbMoO}_4$ ) BY SINGLE-CRYSTAL NMR SPECTROSCOPY ONLY

Otto E. O. Zeman, Jennifer Steinadler, Rupert Hochleitner, Thomas Bräuniger

## $^{15}\text{N}$ , $^{13}\text{C}$ AND $^1\text{H}$ NMR STUDY OF TAUTOMERISM IN 3-METHYL-1-PHENYL-4-[(*E*)-4-SUBSTITUTED-PHENYLDIAZENYL]-1*H*-PYRAZOL-5-AMINES

Antonín Lyčka

## SOLID- AND LIQUID-STATE NMR: A FRUITFUL SYMBIOSIS FOR PARAMAGNETIC COMPLEXES

Jan Blahut, Kevin J. Sanders, Arthur L. Lejeune, Ladislav Benda, Guido Pintacuda

## PARAMAGNETIC ACETYLACETONATE RUTHENIUM(III) COMPLEXES - ORBITAL AND HYPERFINE CONTRIBUTIONS TO THE NMR CHEMICAL SHIFTS

Lukáš Jeremias, Jan Novotný, Michal Repiský, Stanislav Komorovský, Radek Marek

## PHOTOREDOX CATALYSIS OF AEROBIC BENZYLIC OXIDATION BY ETHYLENE-BRIDGED FLAVINIUM. TOWARDS A DEVELOPMENT OF AN ARTIFICIAL METAL-FREE "FLAVOENZYME"

Jan Zelenka, Eva Svobodová, Ján Tarábek, Irena Hoskovcová, Veronika Boguschová, Sarah Bailly, Marek Sikorsky, Jana Roithová, Radek Cibulka

# CONFORMATION OF TRIMANNOSIDE BOUND TO CYANOVIRIN-N

Radek Pohl

## **JOSEF DADOK PRIZE**

Radovan Fiala