

50TH NATIONAL CONGRESS ON MAGNETIC RESONANCE

ROMA 06-08 SEPTEMBER 2023

SCIENTIFIC PROGRAM

Wednesday September 06th

9:00-14:00	Registration	
10:00-11:30	Bruker satellite meeting	
11:30-13:00	Jeol satellite meeting	
13:00-14:00	Bruker/Jeol Lunch	
14:00-14:30	Opening	
	Plenary session	
	Chair: C. Airoidi and M.R. Chierotti	
14:30-15:20	GIDRM/GIRM gold medal award	
	P. Turano (University of Florence) SPANNING THE PERIODIC TABLE BY NMR: A BIOINORGANIC VIEW	
15:20-16:05	Plenary Lecture 2	
	S.B. Engelsen (University of Copenhagen) QUANTIFICATION OF BLOOD PLASMA METABOLITES AND LIPOPROTEINS FROM ¹H NMR SPECTRA USING SIGNATURE MAPPING (SIGMA) APPROACH	
16:05-17:00	Coffee break + Poster session (ODD abstract numbers)	
	Parallel session A	Parallel session B
	Chair: S. Geninatti	Chair: P. Turano
17:00-17:30	D. Delli Castelli - ³¹ P-PARACEST: ³¹ P MR-CEST IMAGING BASED ON THE FORMATION OF A TERNARY ADDUCT BETWEEN INORGANIC PHOSPHATE AND Eu-DO3A	V. Di Tullio - PROBING WATER DYNAMICS IN POROUS CULTURAL HERITAGE MATERIALS USING UNILATERAL NMR
17:30-17:50	M. Inglese - MULTIMODAL TEMPORAL MRI AND PET DATA ANALYSIS FOR THE CLASSIFICATION OF LOW- AND HIGH-GRADE GLIOMAS	C. Mengucci - INSIGHTS ON NUTRITIONAL QUALITY AND SHELF LIFE ESTIMATION OF FISH PRODUCTS (SPARUS AURATA) THROUGH ¹ H NMR METABOLOMICS AND DATA INTEGRATION
17:50-18:10	A. Nucera - RELAXOMETRIC INVESTIGATION OF FE(III) COMPLEXES AND THEIR SUPRAMOLECULAR ADDUCTS	V. Gallo - RELIABILITY AND ERROR SOURCES OF AN NMR METHOD FOR THE ANALYSIS OF WHEAT AND PASTA
18:10-18:30	S. Elkhanoufi - NEW CLASS OF CONTRAST AGENTS FOR OVERHAUSER MRI, BASED ON NITROXIDE RADICALS AND RESPONSIVE TO SPECIFIC ENZYMATIC ACTIVITY.	V. Maestrello - NMR-METABOLOMIC STUDIES ON BLUEBERRIES STORED UNDER DIFFERENT CONDITIONS
	Plenary session	
	Chair: L. Mannina	
18:30-18:45	Sponsorship Lecture (Stelar): Silvio Aime	
	FIELD CYCLING RELAXOMETRY, A TOOL TO ASSESS TUMOUR METABOLISM	

Thursday September 07th

	Plenary session Chair: G. Parigi and M.R. Chierotti	
8:45-9:30	Plenary Lecture 3 G. Musco (San Raffaele hospital, Milan) PHARMACOLOGICAL TARGETING OF CHEMOKINE-CHEMOKINE INTERACTIONS: THE STRANGE STORY OF HMGB1-CXCL12 HETEROCOMPLEX	
9:30-9:45	Sponsorship Lecture (Bruker): F. Benevelli BENCHTOP AND FLOOR STANDING NMR IN BIOPRODUCTION	
9:45-10:15	Under 35 GIDRM: F. Nardelli (University of Pisa) UNVEILING MOLECULAR STRUCTURES AND DYNAMICS WITH NMR SPECTROSCOPY: APPLICATIONS FROM BIOMEDICINE TO MATERIALS	
10:15-10:30	Sponsorship Lecture (Extrabyte): G. Selva LIVE OVERVIEW OF THE RELAXOMETRY SOFTWARE WINREX	
10:30-11:20	Coffee break + Poster session (EVEN abstract numbers)	
	Parallel session A Chair: S.B. Engelsen	Parallel session B Chair: L Russo
11:20-11:50	V. Righi - APPLICATIONS OF HIGH-RESOLUTION MAGIC ANGLE SPINNING NMR IN BIOMEDICAL STUDIES	G. Pileio - SINGLET-ASSISTED DIFFUSION NMR (SAD-NMR) TO PROBE TRANSLATIONAL DYNAMICS IN SPACE-AND-TIME HETEROGENEOUS MEDIA
11:50-12:10	G. Ciufolini - FUNCTIONAL METABOLISM IN BLADDER CANCER CELLS: NMR BASED EXO-METABOLOMICS COMBINED WITH SEAHORSE DATA	R. Lamanna - DEEP LEARNING APPLICATION TO COMPOUND QUANTIFICATION IN NMR SPECTRA OF MIXTURES
12:10-12:30	G. Valentino - HIGH-RESOLUTION NMR METABOLOMICS FOR ANTICANCER RESEARCH	A. Rotondo - FISHING MOLECULES: THE TALE OF HOW ART JOINED SCIENCE ON THE WAY OF STRUCTURAL ELUCIDATION
12:30-12:50	P. Solovyev - NMR SPECTROSCOPY IN ANALYSIS OF ORGANIC SAUERKRAUT FERMENTATION	L. Querci - NMR OF PARAMAGNETIC PROTEINS: NEW ROUTES FOR ¹³ C DIRECT DETECTION IN CHALLENGING IRON-SULPHUR PROTEINS
12:50-14:10	Lunch + Poster session (ODD abstract numbers)	
	Plenary session Chair: A. Randazzo	
14:10-14:55	Plenary Lecture 5 J. Plavec (National Institute of Chemistry, Ljubljana) NMR AS THE METHOD OF CHOICE FOR REVEALING THE POLYMORPHISM OF DNA AND ITS LIGAND INTERACTIONS	
14:55-15:10	Sponsorship Lecture (Jeol): P. Bowyer TRIPLE RESONANCE MEASUREMENTS USING ECZ LUMINOUS SPECTROMETER	
15:10-15:50	Segre-Capitani Fellowships	
15:10-15:30	G. Di Matteo KOMBUCHA: AN NMR-BASED METABOLOMICS STUDY TO MONITOR ITS COMPLEX FERMENTATION PROCESS	
15:30-15:50	F. Nerli A SOLID-STATE NMR INVESTIGATION OF THE INFLUENCE OF RESINS ON THE STRUCTURE AND DYNAMICS OF SBR ELASTOMERIC COMPOUNDS	
15:50-16:05	D. Mammoli ERC SESSION 1: AVAILABLE SCHEMES & EVALUATION PROCESS	
16:05-16:15	Book Presentation: L. Mannina LA RISONANZA MAGNETICA NELLA SCIENZA DEGLI ALIMENTI	
16:15-17:30	Coffee break + Poster session (EVEN abstract numbers)	
16:40-17:30	GIRM assembly	
17:30-19:30	GIDRM assembly + announcement of poster competition winner	
20:30	social dinner	

	Plenary session Chair: M.R. Chierotti	
8:45-9:30	Plenary Lecture 6 M. Geppi (University of Pisa) A GLIMPSE ON THE MULTIFACETED WORLD OF POROUS MATERIALS BY HIGH- AND LOW-RESOLUTION SOLID STATE NMR TECHNIQUES.	
	Parallel session A Chair: G. Musco	Parallel session B Chair: S. Borsacchi
9:30-10:00	M. D'Onofrio - UBIQUITIN PATHWAY OF TAU PROTEIN: INSIGHTS INTO FUNCTIONAL INTERACTIONS	L. Calucci - SOLID STATE NMR INVESTIGATION OF MATERIALS FOR GAS SEPARATION
10:00-10:20	S. Fabbian - A NOVEL PROTEIN-PROTEIN INTERACTION PROTECTS CANCER CELLS FROM APOPTOSIS: NMR ANALYSIS OF THE OSCP-IF1 BINDING PROCESS	S. Bracco - ROTOR DYNAMICS AND LIGHT-DRIVEN MOTORS IN NANOPOROUS ARCHITECTURES BY SOLID STATE NMR
10:20-10:40	M. Della Valle - UBIQUITIN/NANO-POLYSTYRENE INTERACTION STUDY BY USING AN INTEGRATED IN VITRO APPROACH FOR PREDICTING IN VIVO BEHAVIOUR	M. Boventi - NMR STUDY OF MORPHOLOGY AND POROUS STRUCTURE OF MOLECULARLY IMPRINTED POLYMERS
10:40-11:10	Coffee break	
11:10-11:25	D. Mammoli ERC SESSION 2: PRACTICAL ADVICE & Q/A SESSION	
	Parallel session A Chair: J. Plavec	Parallel session B Chair: M. Geppi
11:25-11:55	F. Arnesano - INTERFERENCE OF PLATINUM DRUGS AND ZINC IONS IN COPPER TRAFFICKING HIGHLIGHTED BY NMR SPECTROSCOPY	M. Lelli - DESIGN BIRADICALS FOR HIGH-FIELD AND HIGH-TEMPERATURE DNP
11:55-12:15	A. Tino - NMR-BASED INVESTIGATION OF INTRINSICALLY DISORDERED REGIONS OF MODULAR PROTEINS FOR TAILORED DESIGN OF INTERACTING	M. Spano - APPLICATION OF NMR ANALYSIS FOR MONITORING THE MALTING EFFECT ON LEGUME SEEDS
12:15-12:35	C. Zucchelli - A TETRACATIONIC PORPHYRIN WITH DUAL ANTI-PRION ACTIVITY	A. Cecon - IMPROVED DETECTION AND QUANTIFICATION OF CYCLOPROPANE FATTY ACIDS (CPFAS) BY ¹ H NMR SPECTROSCOPY USING A COMBINATION OF HOMONUCLEAR DECOUPLING WITH DOUBLE IRRADIATION METHODS
	Plenary session Chair: L. Ragona and M.R. Chierotti	
12:35-13:10	Poster competition winner lectures	
13:10-13:25	Closing	
13:25-14:30	Lunch	
14:30	Social Event : visit of the Botanical Garden of Rome	