

XLV NATIONAL CONGRESS ON MAGNETIC RESONANCE
FRONTIERS OF NUCLEAR MAGNETIC RESONANCE: TRANSLATIONAL ASPECTS AND ADVANCED SOLUTIONS TO NEW
SCIENTIFIC, TECHNOLOGICAL, AND SOCIETAL CHALLENGES
 MODENA 5-7 SEPTEMBER 2016

SCIENTIFIC PROGRAM

Monday September 5th

10:00-13:00	Registration	
10:30-12:45	Bruker workshop (main, but not exclusive, focus on solid-state NMR)	
12:45-14:00	Bruker Lunch	
14:00-14:30	Opening	
14:30-15:30	Chair: V. Gallo and P. Turano GIDRM/GIRM gold medal award D. Capitani - Thirty years together with NMR: a long, enjoying, exciting, and sometimes hard walk	
15:30-15:50	Annalaura Segre Fellowship 2015 E. Carignani - Polymorphism and dynamics of glass forming alcohols studied by NMR spectroscopy and relaxometry	
15:50-16:35	Plenary Lecture 1 L. Emsley - DNP enhanced NMR crystallography	
16:35-17:40	Coffee break + Poster session	
	Parallel session A Chair: M. R. Chierotti	Parallel session B Chair: D. O. Cicero
17:40-18:10	A. Mucci - Conjugated polymers for photovoltaics: from solution to solid-state NMR	G. Parigi - NMR relaxation to monitor dynamic phenomena
18:10-18:40	C. Forte - NMR for environmental sciences: selected applications	L. Mollica - Exploring the conformational space of an intrinsically disordered protein (IDP) via enhanced sampling and NMR spectroscopy
18:40-19:00	F. Castiglione - Transport phenomena in hydrogel systems: HR-MAS NMR investigation and modeling the anomalous diffusion effects	C. Zucchelli - Sp140 SUMOylation and DNA binding
19:00-19:45	Plenary Lecture 2 Chair: L. Calucci K. Saalwächter - Solid-state NMR investigations of elastomeric materials: high-end science at low field	

Tuesday September 6th

8:45-9:30	Plenary Lecture 3 Chair: L. Schenetti M.L. Garcia Martin - Magnetic resonance in biomedical research	
9:30-10:00	Bruker Lecture S. Wegner - New opportunities for solid-state NMR using new technologies	
10:00-11:20	Coffee break + Poster session	
	Parallel session A Chair: A. Mucci	Parallel session B Chair: C. Marchioro
11:20-11:50	N. Proietti - Unilateral NMR in cultural heritage: a tool for studying new eco-sustainable cleanings	V. Righi - HR-MAS NMR contribution to the comprehension of metabolic disorders in inflammatory and neoplastic hyperproliferative disease
11:50-12:10	S. Mari - Improving prediction accuracy and spectral assignment in public repositories	A. Vignoli - Serum metabolomic profiles identify ER-positive early breast cancer patients at increased risk of disease recurrence in a multicentre population
12:10-12:30	D. Mammoli - Triplet-singlet imbalance in pairs of magnetically equivalent spins	G. Musco - Integrating a prospective pilot trial and patient-derived xenografts to trace metabolic changes associated with acute myeloid leukemia
12:30-13:00	GIRM assembly	
13:00-14:15	Jeol Lunch	
14:15-15:00	Plenary Lecture 4 Chair: F. Arnesano Y. Cohen - Single and double encoding diffusion MRS and MRI: from model systems to imaging of the CNS	
15:00-15:30	Jeol Lecture K. Yazawa - Applications of ultra-fast MAS NMR	
15:30-15:50	Latest news from Jeol	
15:50-17:00	Coffee break + Poster session	
17:00-20:00	GIDRM assembly + announcement of poster competition winner	
20:30	Social dinner	

Wednesday September 7th

8:45-9:15	<p style="text-align: center;">Lecture of Under 35 GIDRM prize 2016 Chair: S. Mammi E. Ravera - Practical considerations over biomolecular solid-state NMR</p>	
9:15-10:00	<p style="text-align: center;">Plenary Lecture 5 A. Piccolo - NMR-based metabolomics on agro-food products</p>	
	<p>Parallel session A Chair: M. Geppi</p>	<p>Parallel session B Chair: L. Mannina</p>
10:00-10:30	<p>M. Concistrè - High resolution ¹⁴N magic angle spinning SS-NMR</p>	<p>F.P. Fanizzi - NMR profiling as a tool for geographical origin assessment: the case of Italian extra virgin olive oil</p>
10:30-10:50	<p>M. Mauri - New travels of a noble explorer: ¹²⁹Xe in porous systems</p>	<p>V. Gallo - Validation of NMR fingerprinting methods: effects of processing on measure reproducibility and performance of the laboratories</p>
10:50-11:20	<p>Coffee break</p>	
	<p>Parallel session A Chair: C. Airoidi</p>	<p>Parallel session B Chair: D. Capitani</p>
11:20-11:50	<p>D. Valensin - Understanding the crucial role of metal ions in neurodegeneration by using NMR spectroscopy</p>	<p>C. Zuccaccia - Application of NMR in homogeneous organometallic catalysis: from olefin polymerization to water oxidation</p>
11:50-12:10	<p>L. Mauri - An automatic procedure for the HSQC quantification of heparin composition</p>	<p>S. Zanzoni - NMR footprints of upconverting nanoparticles mapped on the surface of transiently adsorbed proteins</p>
12.10-12.25	<p>Chair: H. Molinari Poster competition winner</p>	
12.25-13-10	<p>Plenary Lecture 6 C. G. Kalodimos – Molecular chaperones in action</p>	
13:10-13:30	<p>Concluding remarks</p>	
13:30-15:00	<p>Lunch</p>	