



POLITECNICO  
MILANO 1863

**GIDRM NMR day**



## HR-MAS NMR, metabolomics and multivariate analysis

June 6, 2017

Politecnico di Milano, Department of Chemistry, Materials and Chemical Engineering "G. Natta"  
Aula Giulio Natta, P.zza Leonardo da Vinci 32, Building 6, 20133, Milano

The combination of  $^1\text{H}$  High Resolution and  $^1\text{H}$  High Resolution Magic Angle Spinning (HR-MAS) NMR with sophisticated computational methods allows the study of the metabolic profiles of complex systems such as tissues, cells, food, and biofluids. This event aims at assessing the current state of NMR-based metabolomics and envisioning its future potential.

### PROGRAM

#### Registration

**9.30-10.00**

**10-10.10** Marco Geppi (GIDRM board)  
Opening remarks

#### Scientific Session 1

**10.10-10.40** Cristina Airoldi (University of Milano-Bicocca)  
"Metabolomics and molecular recognition studies by combining liquid state and HR-MAS NMR"

**10.45-11.15** Franca Castiglione (DCMIC-Politecnico di Milano)  
"HR-MAS NMR metabolic profile of Aspergillus species"

**Coffee Break** **11.15-11.40**

**11.40-12.10** Adele Mucci (University of Modena e Reggio Emilia)  
"Ex-vivo HR-MAS NMR contribution to the diagnosis of brain tumours"

**12.15-12.45** Luisa Mannina (University of Roma "La Sapienza")  
"NMR Spectroscopy and food fingerprinting"

**Lunch** **12.50-14.25**

#### Scientific Session 2

**14.25-14.55** Paola Turano (CERM-University of Firenze)  
"The NMR-detectable metabolome of tissues."

**15.00-15.30** Francesco Savorani (DSAT-Politecnico di Torino)  
"Forecasting breast cancer from a single blood analysis"

**15.35-16.05** Giovanna Musco (Ospedale S. Raffaele HRS, Milano)  
"Assessing heterogeneity of osteolytic lesions in multiple myeloma by  $^1\text{H}$  HR-MAS NMR metabolomics"

**16.10-16.30** Francesca Benevelli (Bruker Italia)  
"New Hardware to address Inhomogenous Materials"

**16.30-17** Panel discussion and concluding remarks

### Info

- ❖ Deadline for registration is May 31<sup>st</sup> 2017.
- ❖ Registration MUST be done at the GIDRM website: [www.gidrm.org](http://www.gidrm.org)



### Registration fee:

50 € for non-GIDRM members  
30 € for GIDRM 2017 members

**Contacts:** milano2017@gidrm.org

### Scientific Board

Marco Geppi, Lucia Calucci, Donatella Capitani, Michele Chierotti, Mariapina D'Onofrio, Giuseppe Pileio, Paola Turano Andrea Mele (Polimi), Franca Castiglione (Polimi), Monica Ferro (Polimi), Andrea Pugliese (Polimi)