



# GIDRM NMRDay: NMR of porous systems: applications to building materials and cultural heritage

June 7<sup>th</sup> 2016, Department of Chemistry and Industrial Chemistry, University of Pisa



## PROGRAM

**9:15 - 10:00 Registration**

**10:20 - GIDRM BOARD: Opening**

**10:40** - "Structure and fractality in materials for construction and preservation in cultural heritage"

**PIERO BAGLIONI** *University of Florence and CSGI*

**11:20** - "Magnetic resonance for fluids in porous media: a multi-faceted tool to characterize porous materials of different natures and applications"

**PAOLA FANTAZZINI** *University of Bologna*

**12:00** - "NMR cryoporometry as a powerful tool for structural characterization of porous solids"

**RUSTEM VALIULLIN** *Leipzig University, Germany*

**12:40 - 14:20 Lunch**

**14:20** - "NMR in the study of porous materials of interest in cultural heritage"

**DONATELLA CAPITANI** *IMC-CNR Rome*

**15:00** - "Solid State NMR spectroscopy and relaxometry for the investigation of innovative cements"

**SILVIA BORSACCHI** *ICCOM-CNR Pisa*

**15:40** - "Latest advances in Solid State NMR"

**SATOSHI SAKURAI** *JEOL Ltd*

**16:10** - "New developments of the Virtual Multifrequency Spectrometer: fully ab-initio simulations of NMR spectra in condensed phases"

**VINCENZO BARONE** *Scuola Normale Superiore*

**16:50 - 17:00 Concluding Remarks**

## AIMS

This NMR Day is dedicated to illustrate NMR techniques useful for investigating porous systems of interest as building materials and in cultural heritage. Different aspects of high and low resolution methods, such as MAS NMR spectroscopy,  $^1\text{H}$  NMR relaxometry, unilateral NMR and cryoporometry, will be covered. Key lectures on subjects complementary to NMR will also be given by experts in materials science and computational methods.

## SCIENTIFIC COMMITTEE

### GIDRM board:

Henriette Molinari

Fabio Arnesano

Lucia Calucci

Michele Chierotti

Stefano Mammi

Luisa Mannina

Paola Turano

## ORGANIZING COMMITTEE

Silvia Borsacchi, ICCOM-CNR Pisa

Lucia Calucci, ICCOM-CNR Pisa

Marco Geppi, Department of Chemistry and Industrial Chemistry, University of Pisa

## INFORMATION

**Venue:** Aula F, Department of Chemistry and Industrial Chemistry, University of Pisa, via G. Moruzzi 13, 56124, Pisa.

**Registration fee:** The registration fee is of 50 € (including subscription to GIDRM for 2016) for non GIDRM members and of 30 € for GIDRM members.

**Deadline** for registration is May 31st.

Registration can be performed on the GIDRM website: [www.gidrm.org](http://www.gidrm.org).

**Contact:** [pisa2016@gidrm.org](mailto:pisa2016@gidrm.org)