



## 1<sup>st</sup> Winter School on Advanced Materials, Metrology and Standardisation 2-7 February 2020

### Topics

Advanced Nanomaterials have unique properties in relation to their reduced dimensionality. These materials are rapidly finding wide use in many technological areas, such as displays, energy conversion, energy storage and sensors. The accurate characterization of nanoscale materials by traceable dimensional and analytical techniques is essential for the development and quality control of innovative products. As the structures and the dimensions are 'nano' or even at the atomic scale, traditional analytical techniques are being pushed to their limits requiring new innovative approaches to face state of the art problems leading to international standardisation. The school is organized under the patronage of the Advanced Materials Metrology and Life Sciences Division of Istituto Nazionale di Ricerca Metrologica (INRiM, Italy), and VAMAS, the Versailles Project on Advanced Materials Standardisation.

It is a great pleasure to welcome you to the 1<sup>st</sup> Winter School on "Advanced Materials, Measurements and Standardisation". The school takes advantage from the free participation of prominent members of different scientific communities, Surface Science, Nanofabrication, Metrology and pre-standardisation, giving lectures on the state-of-the-art in their respective fields. The purpose of the school is to provide a friendly and stimulating environment where experts, students and young researchers are in close contact discussing about science and sharing mountain and ski experiences. We hope you enjoy your stay in Claviere!

### The Organising Committee

L. Boarino, N. De Leo, INRiM, Italy, I. Gilmore, NPL, UK.

### Senior Advisory Committee

L. Boarino (INRiM, Italy), N. De Leo (INRiM, Italy), I. Gilmore (NPL, UK), M. Laus (UPO, Italy),

C. Lobascio (Thales Alenia Space, Italy), P. Tiberto (INRiM, Italy), W. Vandervoort (Imec, Belgium).

### School format

The school format has been developed to provide a forum for discussion and debate.

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
	02/02/20	03/02/20	04/02/20	05/02/20	06/02/20	07/02/20
08:00		Breakfast	Breakfast	Breakfast	Breakfast	Breakfast
09:00		Morning Lecture	Morning Lecture	Morning Lecture	Morning Lecture	Morning Lecture
10:30		Free Time	Free Time	Free Time	Free Time	End of School
13:00		Lunch	Lunch	Lunch	Lunch	Lunch
14:00		Free Time	Free Time	Free Time	Free Time	
17:00		Afternoon Lecture	Afternoon Lecture	Afternoon Lecture	Afternoon Lecture	
18:00	Welcome	Afternoon Lecture	Afternoon Lecture	Afternoon Lecture	Afternoon Lecture	
19:30	Party	Dinner	Dinner	Dinner	Final Dinner	
21:00		Short Student ppt	Short Student ppt	Short Student ppt		

*Preliminary program of the school*

We also encourage school participants to briefly present their research activity: as a guide, typically 5 slides taking no more than 15 minutes may be appropriate. An informal evening reception will be held on Sunday 2nd February from 18:00.

### Possible Speakers

- I. Gilmore NPL, UK, Metabolic imaging & cellular heterogeneity
- M. Alexander Uni. Nottingham, UK, New Bio-instructive Materials
- W. Vandervoort IMEC Leuven, B, Metrology for confined volume analysis
- G. Lerondel Université de Troyes, Fr, Materials for Photonics
- C. Lobascio Thales Alenia Space, It, Materials in a challenging environment: space!
- M. Perego CNR IMM Agrate, It, Nanofabrication by DSA
- M. Laus University of Eastern Piedmont, It, Polymers for Quantum Technologies
- P. Tiberto INRiM, Turin, It, Nanomagnetism
- B. Beckhoff PTB Berlin, D, X-Rays Spectrometry
- F. Castro NPL, UK, Multiscale characterisation for nanoelectronics
- I. Fuentes Uni. Nottingham, UK, Quantum sensors for bio imaging
- L. Depero University of Brescia, It, Materials Standardisation
- J. Rodriguez Viejo UAB Barcelona, S, Thermal transport in low dimensional materials.
- F. C. Pirri PoliTo, It, Solid State Quantum Technologies

### Refuge "La Capanna" Claviere, Turin, Italy

The lodge is on the ski tracks of Claviere, on the 2006 Turin Winter Olympic Site.

### How to reach Claviere

From Turin airport (1.15h) and from Sauze d'Oulx (Turin) railway station (0.25h), shuttle buses will be available on the 2<sup>nd</sup> and on the 7<sup>th</sup> of February 2020.



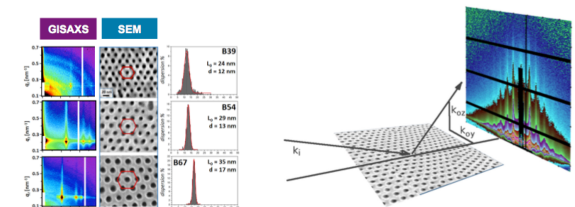
### Registration

The registration fee is 395 € and includes (spartan) refuge accommodation in shared rooms & bathrooms from the night of the 2nd to the 6th of February 2020, full board including breakfast, lunch and dinners (beverages excluded), blankets and sheets and motor sledge for carrying luggage. The number of attendees is limited to 40, subject to availability.

### Registration deadline: 15<sup>th</sup> of December 2019

The registration fee of 395 € both for participants and accompanying persons, is to be paid by the bank transfer using the attached registration form.

When paying, please specify the name of the participant(s) and send a copy of the bank transfer and of the registration form at the address: [winterschool.petaspin@gmail.com](mailto:winterschool.petaspin@gmail.com)



## Registration Form

**Name**

**Surname**

**Affiliation:** full name, land address, ZIP code, VAT number and e-mail address of the organisation to whom the registration fee has to be invoiced:


**Dietary requirements**

**Accompanying person** (Surname/Name)

**Accompanying person:** dietary requirements

Participant Fee: € 395

Number of participants \_\_\_\_\_

Accompanying person Fee: € 395

Number of accompanying \_\_\_\_\_

Total amount: € \_\_\_\_\_

Total persons: \_\_\_\_\_

The registration fee of € 395 is to be paid by bank transfer using the details below.  
When paying, please specify the name of the participant(s).

IBAN From Italy: U 01030 82530 000000434708

IBAN From abroad: IT 43 U 01030 82530 000000434708

BANK ADDRESS: Banca Monte dei Paschi di Siena, Filiale 9679, C/C n. 4347,08

OWNER: PETASPIN

POSTAL ADDRESS: Viale F. Stagno D'Alcontres 31 Dip. Scienze Matemat 98166  
Messina ME ITALY.