



SISM

Italian Society for Microscopy Sciences



Institute for
Microelectronics
and Microsystems

National Research Council of Italy

SCANNING ELECTRON MICROSCOPY IN MATERIALS SCIENCE

12-15 December 2017

CNR IMM Bologna

Via Gobetti 101, 40129 - Bologna, Italy

DIRECTOR

Vittorio MORANDI

TEACHERS

Aldo Armigliato, Roberto Balboni, Franco Corticelli
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Luca Ortolani - *CNR IMM Bologna*

Marco Vittori Antisari- *Nanoitaly*
Giancarlo Gazzadi- *CNR Nano Modena*
Giovanna Mura - *Uni. Cagliari*
Amelia Montone - *ENEA Casaccia, Roma*
Paolo Mengucci - *Uni. Poli. Marche*



<http://semschool.bo.imm.cnr.it>

REGISTRATION

Registration to the school is obtained by signing up before November 24th, 2017, directly on the SISM website <http://www.sism.it>

SISM Member 300€

Non Member 400€

The fee includes participation to the courses, education materials, coffee breaks and lunches to the local CNR canteen. Students and young researchers with a temporary position can claim an additional 30% discount on the fees (VAT excluded).

For any payment an invoice will be issued. Please note that, for employees of Italian public institutions, the fee is exempt from VAT (Article 10 of DPR 633/72).

Registration fees may be paid through:

Credit card

SISM website: <http://www.sism.it>

Bank transfer

S.I.S.M
IBAN: IT 43 Q 02008 02455 000103039142
BIC-SWIFT: UNCRITM1PM5
Address: Unicredit - Ag. Dante, Bologna
Reference: "Name of the participant + BOSEM2017"

VENUE

The school will take place at the *Institute for Microelectronics and Microsystems*, Bologna Section, located in the Bologna Research Area, in Italy.

ACCOMODATION

For information on accommodation and how to reach CNR-IMM Bologna, please refer to <http://www.bo.cnr.it> or contact:

Mrs. Giorgia Giovannini

CNR – IMM Sezione di Bologna

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PROGRAM OF THE WEEK

Tuesday 12th

10:00	REGISTRATION
11:30	SEM the Instrument and Working Principles <i>A. Montone</i>
12:30	Electron-Matter Interaction and Generated Signals <i>R. Balboni</i>
13:30	
14:30	Electron Sources, Optics, Lenses and Aberrations <i>P. Mengucci</i>
15:30	Detectors and Image Formation <i>V. Morandi</i>
16:30	COFFEE BREAK
17:00	SPONSORS PRESENTATIONS
18:00	

Wednesday 13th

09:00	EDX Microanalysis <i>A. Armigliato</i>
10:00	SEM Performances Optimization <i>M. Vittori Antisari</i>
11:00	COFFEE BREAK
11:30	Low-Energy STEM Image Formation and Detection <i>V. Morandi</i>
12:30	Introduction to Focused Ion Beam <i>G. Gazzadi</i>
13:30	LUNCH
14:30	Tomography in the SEM <i>M. Ferroni</i>
15:30	SEM Applications in Device Diagnostics <i>G. Mura</i>
16:30	COFFEE BREAK
17:00	SPONSORS PRESENTATIONS
18:00	

Thursday 14th

10:00	PRACTICAL SESSIONS <i>SEM, ESEM, FIB</i>
11:30	COFFEE BREAK
12:00	PRACTICAL SESSIONS <i>SEM, ESEM, FIB</i>
13:30	LUNCH
14:30	PRACTICAL SESSIONS <i>SEM, ESEM, FIB</i>
16:00	COFFEE BREAK
16:30	PRACTICAL SESSIONS <i>SEM, ESEM, FIB</i>
18:00	

Friday 15th

09:30	PRACTICAL SESSIONS <i>SEM, ESEM, FIB</i>
11:00	COFFEE BREAK
11:30	PRACTICAL SESSIONS <i>SEM, ESEM, FIB</i>
13:00	ROUND TABLE DISCUSSION
13:30	LUNCH