



Pavia, 4-6 February 2026

Conference Programme

University Central Building – Aula A. Volta, C.so Strada Nuova 65

Wednesday, February 4th

13:00 *Registration*

14:00 *Opening Ceremony*

Session 1 Chair: P. Sassi

14:30	Applications of Tip-Enhanced Raman Spectroscopy for nanoscale chemical imaging	R. Zenobi	I1
15:15	Full vibrational spectroscopy for simultaneous mechanical, structural and chemical analysis	M. Behrouzitabar	T1
15:30	Resonance Raman spectroscopy with infrared lasers: novel insights into 2D materials	L. Baldassarre	T2
15:45	Rotational disorder and sulfide binding in neuroglobin: a spectroscopic view	F. Sebastiani	T3
16:00	In-operando spectroelectrochemistry applied to molecular semiconductors: the case of odd [n]Cumulenes	M. Agozzino	T4
16:15-16:45	<i>Coffee Break</i>		

Session 2 Chair: M. Patrini

16:45	Aggregation dynamics in globular proteins: the infrared spectroscopy point of view	A. Lapini	I2
17:30	Vibrational selection rules and charge order pattern in BEDT-TTF -phase salts	A. Girlando	T5
17:45	Mid-infrared dielectric antennas on epsilon-near-zero materials	P. Biagioni	T6

18:00	Non-invasive, accessible multi-analytical ink analysis for improving the legibility of compromised historical handwriting	C. Delle Donne	T7
18:15	Advanced instruments and applications - I	Bruker Italia srl	C1
18:30	Advanced instruments and applications - II	Optoprim srl	C2
18:45-20:15	<i>Aperitif at the Rectorate</i>		

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Thursday, February 5th

Session 3 **Chair: M. Tommasini**

9:00	AI-enabled Raman spectroscopy for precision diagnosis and therapy	J. Popp	I3
9:45	Development of a Raman-based method for the diagnosis of people with obstructive sleep apnea syndrome	M. Bedoni	T8
10:00	Spectroscopic insights into the molecular basis of cardiorenal syndrome	P. Sassi	T9
10:15	Polarized Raman spectroscopy as a probe of polymorphism and molecular orientation in TIPS-pentacene	F. Stancari	T10
10:30- 11:00	<i>Coffee Break</i>		

Session 4 **Chair: G. Spaggiari**

11:00	Spectroscopic profiling of extracellular vesicles as emerging biomarkers for sepsis-associated ICU-acquired weakness	V. Mangolini	T11
11:15	Advanced instruments and applications - III	Metrohm Italiana srl	C3

11:30-13:00 **Poster Session**

13:00-14:30 *Lunch*

Session 5 **Chair: C. Morasso**

14:30	Raman spectroscopy techniques for intra-operative diagnosis in cancer surgery	I. Notingher	I4
15:15	Label-free Raman imaging for treatment response monitoring inpatient-derived head and neck tumor slice cultures	C. Agrimi	T12
15:30	Integrating Raman micro-spectroscopy and Machine Learning to uncover biochemical signatures of hypertensive nephropathy in human kidney tissue	M. Alunni Cardinali	T13
15:45	Bimodal and multiscale 19F-MRI-Raman detection of fluorinated nanoparticles for the in-situ detection of tumoral lesions	B. Gavazzoni	T14
16:00-16:30	<i>Coffee Break</i>		

Session 6 **Chair: R. Vanna**

16:30	The Baseline Harmonization Algorithm: a dataset-level strategy for robust Raman spectroscopy classification in liquid biopsy Analysis	E. Grassi	T15
16:45	The Raman fingerprint of salivary extracellular vesicles for the differential diagnosis of neurodegenerative diseases	A. Gualerzi	T16
17:00	Morphology-dependent compositional differences in breast microcalcifications revealed by Raman spectroscopy	M. Aranda Palomer	T17
17:15	Raman-based biochemical fingerprinting of plasma extracellular particles in breast cancer	A. Bonizzi	T18
17:30	Advanced instruments and applications - V	Renishaw spa	C4
17:45-19:15	<i>University of Pavia Museum visit</i>		
20:00	<i>Social dinner</i>		

COLLEGIO CAIROLI - Aula Magna, Piazza F.lli Cairoli 1**Friday, February 6th****Session 7** **Chair: M. Cococcioni**

9:00	Vibrational spectroscopy under an accessible computational microscope	L. Bastonero	I5
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9:45	SEMISOFT: a web-platform interface for vibrational spectroscopy calculations	M. Ceotto	T19
10:00	Bridging molecular and periodic models: a theoretical study of the spectroscopic properties of pristine and doped P3HT	C. Saporiti	T20
10:15	Unveiling CO ₂ -derived species adsorbed on TiO ₂ through the synergistic combination of Density Functional Theory (DFT) and Vibrational Spectroscopy	M. Speziani	T21
10:30-11:00	<i>Coffee Break</i>		
Session 8		Chair: A. Taglietti	
11:00	Designing a SERS Substrate: from Colloidal Synthesis to Plasmonic Metamaterials	L. Scarabelli	I6
11:45	Polydopamine-based SERS substrates for detection of food contaminants	B. Cerea	T22
12:00	Polydopamine functional interfaces for nanoplastics capture and Raman-based detection	S. Schiavi	T23
12:15	Advanced instruments and applications - IV	Anton Paar Italia srl	C5
12:30	Advanced instruments and applications - IV	Horiba Italia srl	C6
12:45-14:15	<i>Lunch</i>		
Session 9		Chair: I. Alessandri	
14:15	Structure and properties of polystyrene-grafted natural fibers for biomedical applications	M. Di Foggia	T24
14:30	Essential-oil-driven self-assembly of Diphenylalanine: a new platform to biofunctional peptide nanomaterials	S. Stefani	T25
14:45	At Marcantonio Ghislina's workshop: restoration in support of knowledge	M. Musa	T26
15:00	<i>VISPEC general assembly</i>		
15:45	<i>Closing ceremony</i>		