



EXTERNAL USERS FEE SCHEDULE –  
MATERIAL ANALYSIS AND CHARACTERIZATION PLATFORM

INSTRUMENT CODE	TYPE OF INSTRUMENT	TYPE OF SERVICE	FEE (22% VAT excluded)	CONTACT
MAC01	Nuclear Magnetic Resonance - BRUKER AVANCE I 400 Mhz	n. 1 <sup>1</sup> H-NMR spectrum	60,00 €/analysis	Prof. Angelo Maspero - <a href="mailto:angelo.maspero@uninsubria.it">angelo.maspero@uninsubria.it</a>
		n. 1 COSY spectrum	160,00 €/analysis	
		n. 1 <sup>13</sup> C-NMR spectrum	130,00 €/analysis	
		n. 1 <sup>13</sup> C APT-NMR spectrum	170,00 €/analysis	
		n. 1 <sup>31</sup> P-NMR spectrum	60,00 €/analysis	
		HMBC or HSQC heteronuclear 2D spectra	160,00 €/hour	
		Daily use	700,00 €/day	
		Deuterated solvents	8,00 €/sample	
		For special or customized experiments, please contact the person in charge for a tailored quotation		
MAC02	GC-MS Perkin-Elmer	n.1 qualitative analysis with component identification by comparison with a spectral database	150,00 €/analysis	Dr. Nicola Schiaroli – <a href="mailto:nicola.schiaroli@uninsubria.it">nicola.schiaroli@uninsubria.it</a>
		n. 1 quantitative analysis for a single component (excluding the purchase of reference standards)	80,00 €/analysis	
		n.1 quantitative analysis for each additional component (excluding the purchase of reference standards).	10,00 €/analysis	
		Hourly fee for customized services	110,00 €/hour	



MAC04	CHN/S Elemental Analyzer – PERKIN ELMER 2400 SERIES II Elemental Analyzer	Determination of C, H, and N content (%)	35,00 €/analysis	Dr. Sonia Mosconi - <a href="mailto:sonia.mosconi@uninsubria.it">sonia.mosconi@uninsubria.it</a>
		Sample drying	10,00 €/sample	
		Duplicate analysis	20,00 €/analysis	
		Separation and quantification of compounds by reverse-phase chromatography using a diode-array detector (reference standards not included)	140,00 €/hour	
MAC06	IR Spectrometer – SHIMADZU IR PRESTIGE 21	n.1 spectrum in a matrix (please specify: Nujol, hexachlorobutadiene, KBr, or other)	80,00 €/analysis	Prof. Stefano Brenna - <a href="mailto:stefano.brenna@uninsubria.it">stefano.brenna@uninsubria.it</a>
		n.1 spectrum in solution (please specify the solvent)	90,00 €/analysis	
		Interpretation, processing, and optimization of experimental data	110,00 €/hour	
		Hourly rate for non-standard services	110,00 €/hour	
MAC07	Laser Ablation System – NEW WAVE UP-266	Elemental analysis of solid samples by laser ablation	100,00 €/hour	Dr. Davide Spanu - <a href="mailto:davide.spanu@uninsubria.it">davide.spanu@uninsubria.it</a>
MAC08	Simultaneous Thermal Analyzer TG-DSC – NETZSCH STA 409 PC	n.1 STA analysis up to 550°C, heating rate 10°C/min (STA1)	150,00 €/analysis	Dr. Cristina Corti - <a href="mailto:cristina.corti@uninsubria.it">cristina.corti@uninsubria.it</a>
		n.1 STA analysis up to 1100°C, heating rate 10°C/min (STA1)	300,00 €/analysis	
		n.1 preparative TG analysis up to 550°C, ramp or isothermal mode	150,00 €/preparation	



		n.1 preparative TG analysis up to 1100°C, ramp or isothermal mode	300,00 €/preparation	
		Hourly rate for non-standard services	110,00 €/hour	
<b>MAC09</b>	Environmental Scanning Electron Microscope (ESEM) – FEI (Philips) ESEM-FEG XL30	SEM imaging of conductive and non-conductive samples (high- and low-vacuum modes), with an elemental analysis microprobe	250,00 €/hour	Prof. Sandro Recchia - <a href="mailto:sandro.recchia@uninsubria.it">sandro.recchia@uninsubria.it</a>
		SEM imaging of conductive and non-conductive samples (high- and low-vacuum modes), without an elemental analysis microprobe	200,00 €/hour	
		Surface elemental mapping by SEM-EDS without operator assistance (hourly rate for hours beyond the first)	80,00 €/hour	
		SEM image processing (hourly rate)	100,00 €/hour	
<b>MAC10</b>	ICP-MS THERMO SCIENTIFIC iCAP Q + Accessories	n. 1 qualitative trace analysis of all elements, excluding H, C, N, O, Ar, and He	80,00 €/sample	Dr. Davide Spanu - <a href="mailto:davide.spanu@uninsubria.it">davide.spanu@uninsubria.it</a>
		n. 1 quantitative trace analysis of a single element, excluding H, C, N, O, Ar, and He (minimum of 2 samples required)	50,00 €/sample	
		n. 1 quantitative trace analysis for each additional element beyond the first	5,00 €/sample, element	
		n. 1 quantitative ultra-trace analysis for a single element	120,00 €/sample	
		n. 1 quantitative ultra-trace analysis for each additional element beyond the first	12,00 €/sample	



		n. 1 Cr(VI) determination by isotope dilution	180,00 €/sample	Prof. Sandro Recchia - <a href="mailto:sandro.recchia@uninsubria.it">sandro.recchia@uninsubria.it</a>
		n. 1 determination of the $^{63}\text{Cu}/^{65}\text{Cu}$ isotopic ratio	300,00 €/sample	
		n. 1 Determination of the $^{204}\text{Pb}/^{206}\text{Pb}$ , $^{207}\text{Pb}/^{206}\text{Pb}$ , and $^{208}\text{Pb}/^{206}\text{Pb}$ isotopic ratios	200,00 €/sample	
		Hourly rate for non-standard services or for analyses involving fewer than three samples	180,00 €/hour	
MAC11	X-ray diffractometer – SIEMENS D5000	n. 1 powder X-ray diffraction pattern (5–55° 2 $\theta$ )	150,00 €/analysis	Dr. Cristina Corti - <a href="mailto:cristina.corti@uninsubria.it">cristina.corti@uninsubria.it</a>
		n. 1 basic phase identification (crystalline phases)	75,00 €/analysis	
		Daily use	750,00 €/day	
		Hourly cost for non-standard services	110,00 €/hour	
MAC12	Spectrofluorometer- EDINBURGH INSTRUMENTS FS 5	Hourly rate for non-standard services	110,00 €/hour	Prof. Stefano Brenna - <a href="mailto:stefano.brenna@uninsubria.it">stefano.brenna@uninsubria.it</a>
MAC13	Spectrofluorometer PTI QUANTAMASTER QM 40	Hourly rate for non-standard services	110,00 €/hour	Prof. Luca Nardo - <a href="mailto:luca.nardo@uninsubria.it">luca.nardo@uninsubria.it</a>
MAC14	LC-MS - Waters ZQ 2000	Hourly rate for non-standard services	110,00 €/hour	Prof. Silvia Gazzola - <a href="mailto:s.gazzola@uninsubria.it">s.gazzola@uninsubria.it</a>
MAC15	LC-MS Spectrometer Orbitrap Exploris 120 Basic System w/IC	Hourly rate for non-standard services	110,00 €/hour	Prof. Silvia Gazzola - <a href="mailto:s.gazzola@uninsubria.it">s.gazzola@uninsubria.it</a> Prof. Elisa Terzaghi - <a href="mailto:elisa.terzaghi@uninsubria.it">elisa.terzaghi@uninsubria.it</a> Prof. Damiano Monticelli - <a href="mailto:damiano.monticelli@uninsubria.it">damiano.monticelli@uninsubria.it</a>



<b>MAC24+MAC25</b>	Optical amplifier - LIGHT CONVERSION TOPAS WHITE + Cl.4 amplified laser - AMPLITUDE TECHNOLOGIES TRIDENT	Hourly cost for services	200,00 €/hour	Dr. Ottavia Jedrkiewicz - <a href="mailto:ottavia.jedrkiewicz@uninsubria.it">ottavia.jedrkiewicz@uninsubria.it</a>  Prof. Matteo Clerici - <a href="mailto:matteo.clerici@uninsubria.it">matteo.clerici@uninsubria.it</a>
<b>MAC28</b>	Atomic Absorption Spectroscopy SOOLAR CF95-FS	n.1 quantitative analysis of a single element (for aqueous and non- aqueous solutions)	80,00 €/analysis	Prof. Enrico Caruso - <a href="mailto:enrico.caruso@uninsubria.it">enrico.caruso@uninsubria.it</a>
		Hourly cost for non-standard services	110,00 €/hour	

**FEE SCHEDULE FOR SAMPLE PREPARATION FOR SEM ANALYSIS**

	TYPE OF SERVICE	FEE (22% VAT excluded)	CONTACT
<b>SAMPLE PREPARATION</b>	Embedding in resin, cutting and polishing	100,00 €/sample	Dr. Cristina Corti - <a href="mailto:cristina.corti@uninsubria.it">cristina.corti@uninsubria.it</a>
	Mounting on stubs and metallization (coating)	50,00 €/cycle	
	Embedding in resin, cutting, polishing and metallization	120,00 €/sample	
	Mechanical grinding of samples using an agate ball mill	40,00 €/sample	

