

**WATLab SERVICE**

Last Name	Given Name	Email	Affiliation	Date
User	Rate		201002	19 Mar 2021

MICROSCOPY AND DIFFRACTION		Tool-time	Operator Service <sup>a</sup>	\$	\$
<b>Field-emission Scanning Electron Microscopy</b>	LEO / Ultra / Quanta		hr x \$40/hr	40.00	80.00
SEM Training			x \$500/user		500.00
Consumable- Box of 12 stubs			x \$30/box		30.00
Gold (or C) coating			x \$30/unit		30.00
<b>Helium Ion Microscopy</b>	Zeiss Orion Plus		hr x \$60/hr		100.00
<b>Atomic Force Microscopy</b>	DI Dimension 3100 Nanoman IV		hr x \$40/hr	40.00	80.00
Consumable-AFM tip			x \$50/tip		50.00
<b>High-resolution 4-circle X-ray Diffractometry</b>	PANalytical MRD X'pert Pro		hr x \$20/hr		60.00

SPECTROMICROSCOPY AND SPECTROSCOPY		Tool-time	Operator Service <sup>a</sup>	\$	\$
<b>Imaging ESCA/X-ray Photoelectron Spectroscopy</b>	VG ESCALab 250		hr x \$40/hr		80.00
<b>Scanning Auger Microscopy</b>	VG MicroLab 350		hr x \$40/hr		80.00
<b>UV-Vis Spectroscopy</b>	Perkin Elmer Lambda 35/1050		x \$30/unit <sup>b</sup>		30.00
<b>Photoluminescence Spectroscopy</b>	Perkin Elmer LS55		x \$30/unit <sup>b</sup>		30.00
<b>Fourier Transform Infrared Spectroscopy</b>	Bruker Tensor 27		x \$30/unit <sup>b</sup>		30.00
<b>Dispersive Raman Confocal Microscopy</b>	Bruker Senterra II		x \$30/unit <sup>b</sup>		30.00
<b>Secondary Ion Mass Spectrometry</b>	ION-TOF SIMS-5		hr x \$40/hr		80.00

MISCELLANEOUS		Tool-time	Operator Service <sup>a</sup>	\$	\$
<b>PPMS</b>	QD Dynacool		hr x \$20/hr		60.00
<b>Electrical and Electrochemical Testing</b>			hr x \$20/hr		60.00
<b>Photovoltaic Testing</b>	PVM IV 5		hr x \$20/hr		60.00
<b>Ion Beam Nanofabrication</b>	Raith Ion Line		hr x \$60/hr		100.00

QNC METROLOGY LAB SERVICE		Tool-time	Operator Service <sup>a</sup>	\$	\$
<b>Transmission Electron Microscopy</b>	Zeiss Libra 200MC <sup>d</sup>		hr x \$40/hr <sup>c</sup>		80.00
TEM Grid			x \$10/grid		10.00
<b>Focussed Ion Beam Microscopy</b>	Zeiss Auriga		hr x \$100/hr <sup>c</sup>		140.00
<b>Atomic Force Microscopy</b>	Asylum MFP-3D-BIO		hr x \$40/hr		80.00
<b>Powder X-ray Diffractometry</b>	PANalytical MPD X'pert Pro		hr x \$20/hr		60.00
<b>Small angle X-ray Scattering</b>	Anton Paar SAXSess		hr x \$20/hr		60.00
<b>MPMS</b>	SQUID VSM		hr x \$20/hr	20.00	60.00

STAFF SUPPORT		Tool-time	Operator Service <sup>a</sup>	\$	\$
			hr x \$40/hr		40.00

<sup>a</sup> For Operator Service, the rate is Tool-time rate plus Operator-time rate. The Operator-time rate is \$40/hr.

<sup>b</sup> Operator-time included.

<sup>c</sup> The transfer of the management of the TEM and FIB to QNC Clean Room by UW central administration has resulted in rate increases for the tool-time to \$50/hr (from \$40/hr) for the TEM and to \$100/hr (from \$60/hr) for FIB. WATLab is still allowed to provide OS service to our users using the new rates for these tools (our staff rate remains unchanged at \$40/hr), and unfortunately every minute must now be accounted for because of the Badger tool log-in system now put on these tools.

<sup>d</sup> This system has been taken off line by QNC Clean Room since February 2020.

<b>Invoice Period:</b>	Oct 2020 to Mar 2021
<b>Total for this Period before Discount</b>	
<b>Total Discount</b>	
<b>Final Charge</b>	TOTAL for period

Comment: Thank you for your continued kind support over the past period. DUE TO THE HUGE AMOUNT OF TIME INVOLVED IN CHASING AFTER LATE PAYMENTS, WE WILL NOW FREEZE ALL THE SERVICES OF THESE ACCOUNTS IF PAYMENTS ARE NOT MADE IN FULL BEFORE Mar 27, 2021. Please insert the account number here and sign. Please return the signed form by email to Slavica Bogdanovic (sbogdanovic@uwaterloo.ca) as soon as possible. Thank you.