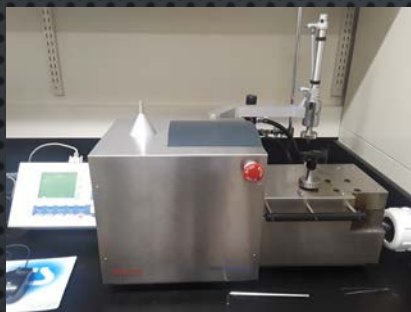


EQUIPMENT IN SMDL [1]

• SAMPLE PREPARATION



TWIN SCREW EXTRUDER (HAAKE MINILAB II)
- POLYMER & NANOCOMPOSITE COMPOUNDER

<http://www.rheologysolutions.com/the-mo-scientific-haake-minilab-ii/>



FILM APPLICATOR (ELCOMETER 4340)
- UNIFORM FILM DEPOSITION (10 μ M – 1 MM THICKNESS)

<https://www.elcometer.com/en/laboratory-physical-test-equipment/film-application/automatic-film-application/elcometer-4340-motorised-automatic-film-applicator.html>



JET 3D PRINTER (NSCRIPT 3DN TABLETOP)
- 3D PRINTING OF VARIOUS SOLUTIONS (WIDE RANGE OF VISCOSITY)

* CO-OWNED AMONG 4 PROFESSORS INCLUDING DR. CHUNG

<https://www.nscript.com/3dn-ddm-series/>



HOT PRESS (CARVER BENCHTOP)
- HOT PRESS MOULDING OF POLYMERS

<https://www.carverpress.com/products/benchtop-manual>



GLOVEBOX (VAC-ATM GENESIS)
- OXYGEN & H₂O FREE ENVIRONMENT

<https://www.vac-atm.com/genesis/>

• ELECTROCHEMISTRY



POTENTIOSTAT – EIS (METROHM AUTOLAB PGSTAT302N)

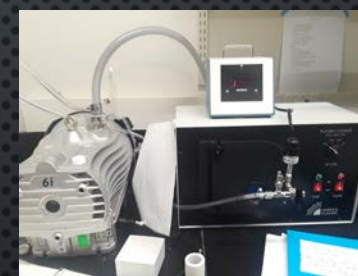
<https://www.metrohm.com/en/products/electrochemistry/autolab-modular-line/PGSTAT302N>



POTENTIOSTAT (PINE WAVE NOW)

<https://pineresearch.com/shop/potentiostats/wavenow-series/wavenow-bundles/>

• SURFACE TREATMENT



PLASMA CHAMBER (HARRICK PCD-001)
- SURFACE TREATMENT FOR VARIOUS MATERIALS

<https://harrickplasma.com/plasma-cleaners/expanded-plasma-cleaner/>



UV-OZONE CLEANER (JELIGHT UVO CLEANER 342)
- SURFACE UV-OZONE CLEANING
- UV-INDUCED POLYMERIZATION (OZONE-FREE LAMP)

<http://www.jelight.com/uvo-cleaner/>

EQUIPMENT IN SMDL [2]

- CHARACTERIZATION**



UPRIGHT FLUORESCENT
MICROSCOPE
(NIKON ECLIPSE NI-U)

<https://www.microscope.healthcare.nikon.com/products/upright-microscopes/eclipse-ni-u>



UNIAXIAL TENSILE TESTER
(CELLSCALE UV-200-01)

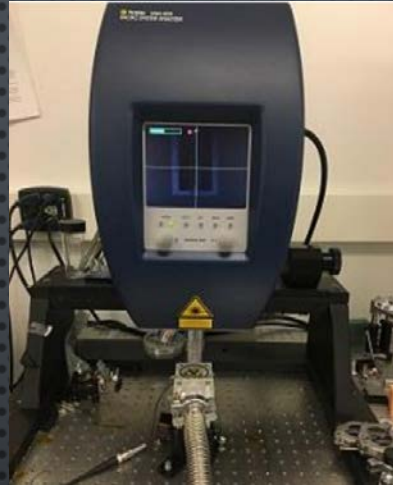
<https://cellscale.com/products/univert/>

LCR METER

(B&K PRECISION MODEL 894)

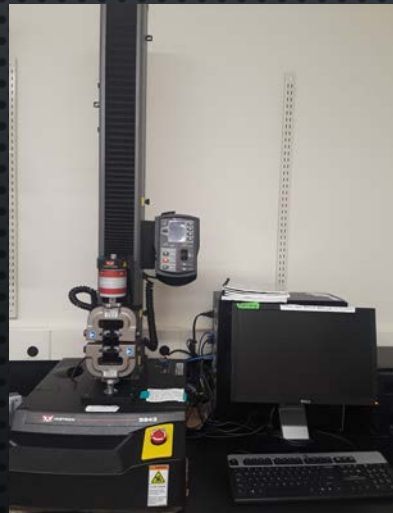
<https://www.bkprecision.com/products/component-testers/894-500khz-lcr-meter.html>

- MECHANO-ELECTRIC
MEASUREMENTS



LASER DOPPLER VIBROMETRY
(POLYTEC MSA-500)

https://www.polytec.com/fileadmin/d/Vibrometrie/OM_BR_MSA-500_E_42121.pdf



UNIAXIAL TENSILE TESTER
(INSTRON 5943)

* FREQUENTLY USED BY
COURTESY OF DR. A.L. ELIAS

- PRECISE MECHANICAL
MEASUREMENTS

<https://www.instron.us/en-us/products/testing-systems/universal-testing-systems/electromechanical/5900-series/5940-single-column>



QUANTUM CASCADE LASER
(MIRCAT-QT, DAYLIGHT SOLUTIONS)

<https://www.daylightsolutions.com/product/mircat/>

... **AND OTHER ELECTRONIC & IONIC MEASUREMENTS**



BENCHTOP pH/ION METER
(METTLER TOLEDO SC-220)

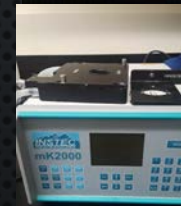
https://www.mt.com/ca/fr/home/products/Laboratory_Analytics_Browse/pH-meter/benchtop-pH-meter.html



DIGITAL SOURCEMETER (SMU)
(KEITHLEY 2402)



FUNCTION GENERATOR
(BK PRECISION 4047B)



THERMAL MICROSCOPE STAGE
(-40C ~ +120C)
(INTEC TS102G)

<http://www.instec.com/products2.php?id=20>