

Equipment Schedule 2021

| # | Equipment Description |
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| 1 | GC/MS system – Agilent 7890B High sensitivity 7000C Triple Quad MS/MS EI/CI Source. CombiPAL RSI 120 robotic sampler * |
| 2 | GC/MS custom system Agilent 7890B Multi-detector with EI/CI and APCI source. Gas sampling valves. CombiPAL RSI 120 robotic sampler # |
| 3 | ICP-MS Agilent 7900 with SPS4 Autosampler with high organics capability * |
| 4 | HPLC Agilent Bio inert G5611A 1260 Infinity RI, ELSD, UV (diode array) -multidetector # |
| 5 | Thermal Desorption System Markes Unity 2 with Series 2 Ultra autosampler (for tubes) and CIA advantage automated bag & canister analyser – VOC's range from C2-C40 both solids, liquids (into empty tube) and gas (adsorbent tube –various types) capable# |
| 6 | HPLC MS Agilent G6530BA Accurate Mass Q TOF – Ultra high performance 1290 Infinity II LC * |
| 7 | IC Metrohm 930 /848 IC Package Compact IC Flex 941 eluent generator and programmable gradient elution anion / cation # |
| 8 | Auto Titrator Metrohm 905 Titrando with 814 autosample processor and 856 Conductivity module, pH & Conductivity electrodes for solvent and aqueous; Orion (portable) high sensitivity D.O. meter |
| 10 | Flash Pyrolyser CDS 1000 Pyroprobe System- flash pyrolysis 50 -1200°C for solids and liquids both vaporisation and pyrolysis# |
| 11 | SEM Tescan VEGA LMU (tungsten filament)with variable pressure operation and Thermo Scientific EDS package |
| 12 | GC Agilent 7890B Multi Inlet and Detector, G4513A Liquid Autosampler, with gas sampling valves & NPD TCD FID detectors |
| 13 | Microbalance Sartorius Genius 5 figure balance, 0.001 to 230 g |
| 14 | UV-Vis , Varian Cary 300 |
| 15 | FTIR , Access to Perkin Elmer Spectrum 1000 with ATR accessory, Specac Golden Gate II |
| 16 | Muffle Furnace , 16L, SEM model 202, 1150°C programmable |
| 17 | Rotary evaporator , Heidolf with Vacuubrand vacuum pump and Julabo chiller circulator |
| 18 | Bomb calorimeter , LECO AC-350 |
| 19 | Tube furnace , Labec HTF150/12 1200°C, 1000mm x 130mm;3 programmable heated zones SS and Al2O3 work tubes |
| 20 | Purge and trap GC/MS , O-I-Analytical Archon 4552 autosampler with Tekmar 3100 sample concentrator |
| 21 | Autoclaves , 600 mL Parr 4563 Mini Benchtop reactor with 4843 controller fitted with gas/liquid introduction and sampling accessories, 1L Zirconium Mini Benchtop reactor, 8x50ml Teflon lined pressure vessels. |
| 22 | HPLC Agilent G7116B 1290 Infinity II |
| 23 | Centrifuge Sigma - John Morris |
| 24 | MilliQ Direct8/16 system MilliPak - MilliQ |
| 25 | Ethos Microwave Digestor MA182 Ethos Up - Milestone |

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| 26 | Velocity Nitrogen Generator N2-14A – Agilent |
| 27 | Sputter Coater SC100M Magnetron mini coater - Dynavac |
| 28 | Benchtop Bioreactor Biostat A – Sartorius stedim |
| 29 | Chiller cooler Julabo FL601 John Morris |
| 30 | Lab Reactor IKA LR 1000 – John Morris |

on trolley can be connected to instruments labelled with *