

# INSTRUMENTAL ANALYSIS



**noctiluca**



IN-HOUSE  
ANALYSES

# Spectrofluorometer

Edinburgh Instruments FS5



# UV-Vis Spectrometer

Perkin Elmer Lambda25



# UHPLC-MS

Shimadzu LC-2060 3D (PDA) / LCMS-2020 (SQ)



# UHPLC-MS

Shimadzu LCMS-8030 (TQ)



# GCMS

Shimadzu TQ8030



# CombiFlash®

NextGen 300, Teledyne ISCO





# Spin Coater

Ossila



# Melting Point Meter

M5000, KRÜSS



# Glove Box

Plas Labs



OTHER  
AVAILABLE  
ANALYSES

# Nuclear Magnetic Resonance Spectroscopy

NMR

Bruker Avance III 700 MHz

Bruker Avance III 400 MHz

Bruker Avance 300 MHz

# Thermal Analysis

TG, TGA, DTG

Thermoanalyzer Jupiter STA 449 F5 by  
Netzsch, combined with FTIR spectrometer  
Vertex 70V by Bruker Optik

Thermoanalyzer Discovery SDT 650 by TA  
Instruments

# Microscopy

SEM-EDX, HR-SEM, TEM-EDX-EELS, AFM

Scanning electron microscope (SEM)  
produced by LEO Electron Microscopy Ltd,  
England, model 1430 VP, 2001

Energy dispersive X-ray spectrometer (EDX)  
Quantax 200 with XFlash 4010 detector,  
Bruker AXS, Germany 2008

Scanning electron microscope/focused ion  
beam (SEM/FIB) Quanta 3D

Transmission electron microscope (TEM), FEI  
Europe, Tecnai F20 X-Twin, Tecnai G<sup>2</sup> line, 2011

MultiMode microscope with NanoScope IIIa  
and Quadrex controller, Veeco (Digital  
Instrument USA)

# Spectroscopy

IR, Raman

FT-IR Vertex 70V vacuum spectrometer with  
Hyperion 1000 microscope, Bruker Optik

Raman, confocal, dispersion spectrometer  
Senterra, Bruker Optik



# Elemental analysis

elemental analysis, AAS, ICP-MS

Elemental analysis: Vario MACRO CHN  
ELEMENTAR Analysensysteme GmbH

Atomic Absorption Spectrometer iCE3300  
FL Thermo Scientific

ICP-MS 7500 CX, Agilent Technologies  
(Japan)