Newcastle Biosphere, UK

Research and development services tailored to your molecule's needs

Newcastle Bisophere at a glance

Established in **2002**	**15+** employees	**2,100+** molecules	**1,442** sq/ft facility	Schedule **1-5 controlled substances** approved

The Newcastle facility delivers extensive research and development (R&D) expertise to support early phase small molecule projects.

Some of our key services include:

- Custom synthesis of small molecules
- Route scouting, design, development and process optimisation
- Focused compound libraries
- Stable isotope labelling, including ^{2}H, ^{13}C, ^{15}N, ^{17}O, and more
- Metabolite synthesis
- Non-GMP supply for toxicology studies from mg to multi-gram scale
- Isolation, identification and synthesis of unknown impurities
- Process scale up evaluation
- Catalyst screening capabilities including organometallic catalysis
- Biocatalysis capabilities with ability to rapidly screen hundreds of enzymes to narrow down to a small cohort for further optimisation

State-of-the-art equipment to maximise your success

Home to an array of specialised equipment, our Newcastle facility can handle comprehensive analytical work and complex chemistries for R&D projects, including early phase API discovery and development.

Some of the equipment and facilities we have on site at Newcastle Biosphere include:

- Fully equipped R&D labs
- Cryogenic (-80°C) and hydrogenation (atmospheric) capabilities
- LC-MS (electrospray)
- Analytical and semi-preparative HPLC
- Chiral HPLC
- NMR access (up to 700MHz) via Newcastle University
- X-ray crystallography
- Optical rotation
- Biotage automated chromatography machines
- Biotage microwave reactor
- Lyophiliser

Patent development

Our Newcastle facility is highly experienced in process improvement, which has frequently led to the filing of new process patents by our customers. **Our ability to adapt to changing project requirements and deliver focused compound libraries to strict deadlines, makes us the ideal partner to support your patent's development.**

Learn more at www.sterlingpharmasolutions.com