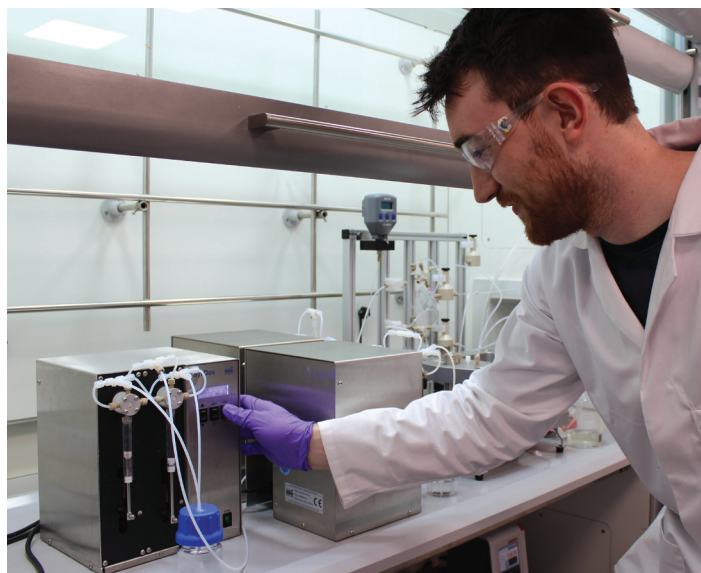


Speciality chemical development and manufacture

- Commercial manufacture of intermediates and regulatory starting materials in the European Union
- Chemical route scouting, process development and scale-up to multi-tonne supply
- Flow chemistry development and ATEX-rated flow production at multi-tonne scale
- Thin film evaporation and short-path / falling-film distillation expertise
- selectAZyme™ enzyme technology and biotransformation scale-up
- Commercial enzyme purification and immobilisation





What we offer:

- Gram to multi-tonne manufacture of intermediates and speciality chemicals
- Biocatalysis and chemocatalysis
- Flow chemistry
 - High pressure (50 bar) and high temperature (300°C) reactions
 - High pressure hydrogenation (up to 100 bar)
 - Low temperature lithiation (-80°C)
- Kilo laboratory and pilot plant from 10 L to 1,000 L in glass-lined, Hastelloy and stainless steel vessels
- Production scale from 1,000 L to 6,000 L glass-lined, Hastelloy and stainless steel vessels
- Working temperature range from -80°C to 220°C
- Commercial enzyme purification and immobilisation
 - Chromatography from 40 L to 250 L
 - Ultrafiltration and diafiltration
- Enzyme technology (selectAZyme™)
- Thin film evaporation and short-path / falling-film distillation expertise

Our chemistry expertise includes:

- Alkylation
- Aminoalkylation
- Asymmetric synthesis
- Biocatalysis - selectAZyme™
- Base catalysis
- Catalytic transfer hydrogenation
- Condensations
- Darzens synthesis
- Dealkylation
- Dieckmann condensation
- Diels Alder
- Esterification
- Grignard chemistry
- Leuckhart reaction
- Michael reaction
- Methacrylate based monomers
- Organolithium chemistry
- Organometallics
- Organosilicon chemistry
- Oxidation chemistry
- Stereoselective chemistry

Chiral chemistry and biocatalysis

Arran is a specialist in the development and scale-up of chiral chemistry and biotransformations. The selectAZyme™ enzyme platform contains a diverse array of enzymes classes, which are ready for deployment at kilogram to tonne scale.

Arran partners with its clients in the application of industrial biocatalysis in a production environment to reduce waste, satisfy environmental controls and fulfil green chemistry obligations.

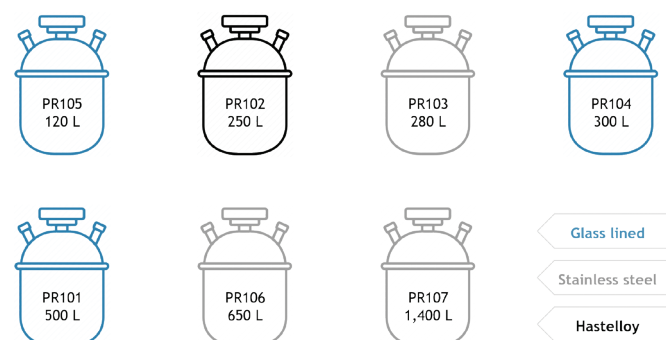
selectAZyme™

Established products include chemicals:

- Aroma chemicals including just-in-time supply of Calone® (watermelon ketone)
- Chiral intermediates, chiral amines and chiral alcohols
- Biocatalysis derived products
- Enzyme manufacture, purification and immobilisation
- Grignard and organolithium derived products
- Chiral catalysts and associated ligands
- Specialist optical monomers, reactive dyes and UV blockers



Production facilities



Challenge us with your chemistry problems

See how we can apply innovative technologies in a production environment to increase process scalability, lower cost-of-goods and build a long term supply relationship.

Arran welcomes audits (on-site or virtual) and visits at our headquarters in Athlone, Ireland.

Accreditations



FDA
Human Foods Division

iRDG
THE INNOVATION NETWORK

PSCI
PHARMACEUTICAL SUPPLY
CHAIN INITIATIVE

arranchemical.ie

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