Instrument features include:

- Unrivalled accuracy and repeatability
- Fully automated operation
- Comprehensive data analysis software
- Up to 12 different probe gas molecules
- User friendly wizard based software
- Optional humidity control
- In-Situ sample pre-conditioning
- Wide temperature range
- Column packing accessory

The iGC-SEA provides unique access to the following physico-chemical properties of a wide range of solid materials in a controlled humidity environment:

- Dispersive and polar surface energies
- Heats and entropies of adsorption
- Acid/base interactions
- Phase transitions
- Sorption isotherms
- Permeability, solubility and diffusion
- Micropore and mesopore distributions
- Competitive (Multicomponent) adsorption
- Surface energy heterogeneity mapping

Typical iGC-SEA Applications – iGC-SEA provides access to unique physicochemical information for:

- Pharmaceuticals
- Cosmetics and Personal Care Products
- Food Products and Ingredients
- Minerals and Coals
- Building Materials
- Flavourings and Perfumes
- Natural and Artificial Fibres
- Biopolymers
- Coatings and Thin Films
- Supported Catalysts
- Polymers, Fillers and Composites
- Microporous Materials