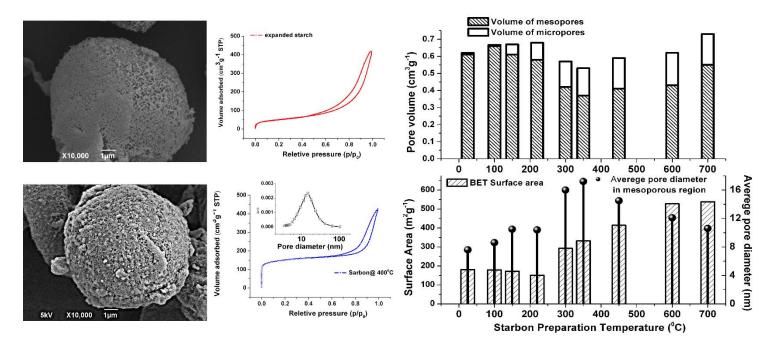


## Starbon® Case Study - Catalytic supports and base catalysis

By adjusting the temperature at which the carbonisation is carried out, a continuum of Starbon® materials may be prepared with controlled bulk and surface structures.

This process provides the opportunity to produce a whole range of mesoporous materials, including amorphous oxygen-containing carbons that have many applications including catalytic supports.



The ability to adjust the surface properties including energies, hydrophobicity, micropore to mesopore ratio and surface functionality make Starbon® materials ideal candidates for both modification and use as catalytic supports.

Starbon® base catalysts have demonstrated promise in Knoevenagel condensations with conversions of up to 87%.

$$+ \underset{\mathsf{NC}}{ } \underset{\mathsf{CO}_2\mathsf{Et}}{ } \underbrace{ + \underset{\mathsf{H}_2\mathsf{O}}{ } }_{\mathsf{EtO}_2\mathsf{C}} \underbrace{ \mathsf{CN}}_{\mathsf{CN}}$$