1. Contract testing using thermal methods:-

Measurement of specific heat and thermal conductivity of most solids, foams, fibrous mats, gels and liquids. We have a background in polymer and composite testing, and over 20 years experience of doing such tests to iso8301, ASTM C518, DIN 52612 and many more international standards. We use exclusively Lasercomp apparatus and can test from <1mm to >150mm thick samples. For the more conducting samples we ideally need two different thicknesses with surfaces of the same smoothness such as 5 and 12 or 10 and 25mm. The Temperature range is up to 250°C mean, but for some materials this will be only to a max of 150° or 180°C mean.

DMA / DMTA (Dynamic Mechanical Thermal Analysis) for the glass transitions (Tg) and melts (Tm) even for soft silicones with Tg's around -125°C. Since 1981 we were involved in the development of the famous PL DMTA, and have offered such contract testing for more than 20 years now. We wrote the book chapter on DMA in "Handbook of Polymer testing – Physical methods" – edited by Roger Brown (ex RAPRA, Shawbury) and published in 1999. Often DMA has 1000 times the sensitivity of DSC or even mDSC for subtle trace components or phases. Your samples can be bar shaped, films, fibres or even powders or a drop of viscous liquid as we have Triton material pockets, & the sensitivity is enough to see the Tg/Tm of ~2mgs in these 750mg steel pockets! Tested to various ASTM, ISO & DIN standards.

TMA (Thermal Mechanical Analysis) for thermal mechanical expansion covers the T range from <-100°C to 1000°C for almost any solid material using a pukka TMA apparatus (rather than trying to do it in the DMA tensile mode – where the pre-stress affects the results.) Sample size should be (1 to 5) x (1 to 5) x (5 to 10mm) high with the measurement possible in any of the 3 orthogonal directions, if samples are

this size or smaller. Nanometre resolution. We test to the relevant ISO and ASTM standards.

DSC & TGA runs can also be arranged at competitive prices.

2. Distributor of a very wide range of deuterated polymers C13 and normal polymers & co-polymers from American Polymer Standards Inc and Polymer Source Inc, with good discounts for European Universities or VSME's.