22. Kalorimetrietage Abstract:

Steve Stones
Thermal Hazard Technology

Micro Reaction Calorimetry
Newer Applications for the Chemical & Pharmaceutical Industry

A micro reaction calorimeter has applications far beyond scale-up and reaction calorimetry itself. A micro reaction calorimeter is also a scanning calorimeter (a large volume DSC), an isothermal calorimeter (sensitive enough for stability studies), a properties calorimeter (for heat of solution, mixing and specific heats) and an isothermal titration calorimeter.

Data from heat capacity measurements and heat production from microbes will be presented. The gas flow option to study Carbon Capture involving the exothermic reaction that occurs when CO2 gas is absorbed by an amine solution will also be discussed.