



## **TOPIC: Scatter in Heat Capacity Data Below 2 K Due to Vibration of Heat Capacity Platform**

**PROBLEM:** Below about 2 K, vibrational warming of the heat capacity platform can cause increased scatter in the heat capacity data when using a helium-3 system.

**SOLUTION:** Quantum Design supplies a platform stabilizer plug with helium-3 heat capacity systems. This plug uses a nylon filament to hold the platform steady. The user should always use this stabilizer plug to hold the heat capacity platform stationary, thereby preventing the vibration and resultant scatter of heat capacity data. The stabilizer plug also prevents oscillation in the temperature versus time data that is sometimes observed when performing heat capacity with helium-3 in a magnetic field.\* If your stabilizer plug is missing or damaged, please contact Quantum Design service ([service@qdusa.com](mailto:service@qdusa.com)) for a replacement.

\*Note: See also the advisory "Oscillations in PPMS Heat Capacity Measurements with Helium-3 in a Magnetic Field."