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News Release: For Immediate Release

Quantum Design Unveils new Physical Property Measurement System (PPMS®) – The PPMS® DynaCool™

SAN DIEGO, Calif. – June 25, 2010 – Following an all day workshop at the University of California San Diego entitled "Correlated Electron Physics in a New Lab," Quantum Design unveiled a new addition to its well-respected Physical Property Measurement System (PPMS) product line – The PPMS DynaCool. The inaugural installation of the PPMS DynaCool took place in Professor M. Brian Maple's new laboratory located in the historic Mayer Hall building at UCSD.

"We are very excited to have our first PPMS DynaCool installed in Professor Maple's laboratory," said William Neils, Project Manager for the DynaCool project at Quantum Design. "This measurement system represents a significant improvement of our PPMS line, allowing for the use of all of our measurement options in a truly cryogen-free environment."

The PPMS DynaCool meets Quantum Design's highest standards of cryogenic and magnetic sensitivity, automated system functionality, and expandable customization. This new cryo-free system uses a single two-stage Pulse Tube cooler to cool both the superconducting magnet and the temperature control system, providing a low vibration environment for sample measurements. In addition, it employs a unique He-based gas flow control system that provides rapid temperature cycling and accurate temperature control. The PPMS DynaCool also comes equipped with an integrated Cryopump used to pump out the sample space to a vacuum of $< 10^{-4}$ Torr. This makes the PPMS DynaCool compatible with all the available options, as well as other user-designed experiments.

Boasting a standard temperature range of 400K to 1.9 K, and magnetic fields up to 14T, the PPMS DynaCool allows for a wide range of measurement options such as Heat Capacity, Thermal Transport and Electrical Transport. Additional measurement options include a Vibrating Sample Magnetometer (VSM), VSM Oven, Dilution Refrigerator and ^{3}He Refrigerator.

Professor Maple stated at the event, "It is a privilege for us to be the first researchers to use this new system. I believe that it will be a very useful tool in our research here."

About Quantum Design

Founded in 1982, Quantum Design is a privately held corporation that develops and markets advanced technology cryogenic systems and instruments for the scientific community. Quantum Design is widely recognized as the leading commercial source for integrated laboratory analytical systems incorporating superconducting technology. In addition, through its strong R&D focus and direct foreign offices in the world's major technology markets, QD has developed a worldwide distribution channel for research-based instruments developed by other technology leaders.