

Vergabebekanntmachung

1) Name und Anschrift des Auftraggebers und dessen Beschaffungsstelle

Bezeichnung	ICT
Zusatz	Institut für Chemische Technologie
Postanschrift	Joseph-von-Fraunhofer-Str. 7 76327 Pfinztal
Telefon-Nummer	+49 72146400
Telefax-Nummer	+49 72146400
E-Mail-Adresse	einkauf@ict.fraunhofer.de

2) Name des beauftragten Unternehmens

Bezeichnung	Waters GmbH
Postanschrift	Helfmann-Park 10 65760 Eschborn

3) Verfahrensart

Verhandlungsvergabe ohne Teilnahmewettbewerb nach UVgO

4) Art und Umfang der Leistung

Aktenzeichen	PR1277046
--------------	-----------

Procurement of a high-performance rheometer

This tender is for the procurement of a highly sensitive rheometer to support ongoing research and development within the redox flow battery group. The instrument is critical for the "Ultra ThinFlow" (UTF) project, which focuses on developing ultra-thin redox flow battery cells with a total architecture thickness of less than 2 mm. The objective is to acquire an advanced rheometer capable of sub-nano torque measurements to precisely analyze fluid dynamics and electrolyte properties. This analysis is essential for achieving the UTF project's primary goals of ensuring uniform electrolyte distribution, minimizing hydraulic pressure losses, and improving power density by at least 20% in the new redox flow battery architecture. The instrument will be operated in a standard chemical laboratory environment for regular research and material testing purposes. The contractor must deliver the rheometer hardware (primary testing station and separate electronics enclosure) and provide full access to the operational and analytical software. The software must be license-free with unlimited organizational access and free future updates. The system must incorporate a magnetic levitation thrust bearing and a low-mass drag-cup induction motor. It must achieve accurate measurements down to a minimum torque of 5 nN.m in steady shear and 1 nN.m in Direct Strain oscillation. Furthermore, it must support a maximum continuous torque of 250 mN.m without external fluid cooling, feature axial oscillatory DMA capabilities, and support integrated chirp-based measurements.

5) Zeitraum der Leistungserbringung

Datum der Information

22.09.2026 - 14:58 Uhr