# **Protochips**

Protochips, Inc. enables researchers to achieve their objectives with revolutionary workflow driven tools for in situ microscopy. Since 2007 we have delivered more than 150 in situ systems around the world and our products have generated data in over 400 peer-reviewed publications. Our products include complete solutions with the Atmosphere Environmental Gas Cell that achieves 1000 degrees Celsius and up to 1 ATM of pressure, the 2013 Microscopy Today Innovation Award-winning Poseidon liquid and electrochemistry cells and also the newly redesigned Aduro heating and electrical biasing system. At Protochips, our focus on innovation in applications research is matched only by our dedication to safety and customer service.

# **Atmosphere Environmental Gas Cell**

- Study materials in a precisely controlled gas environment at pressures up to 1 ATM and temperatures up to 1000 °C.
- SmartTemp™ closed-loop temperature control for constant known temperature with any gas species or pressure.
- Fully EDS compatible.

# **Aduro 300 Heating System**

- Temperatures up to 1200 °C while maintaining atomic resolution.
- Integrated SmartTemp precision temperature control that adapts to environmental changes.
- Uses a flat ceramic membrane as both sample support and heating element, eliminating the furnace used by bulk-type heating holders
- EDS compatible

#### Aduro 500 Heating and Electrical System

- Builds on the Aduro 300 and also provides electrical measurements in the picoamp range.
- Software upgradeable for future expanded E-chip applications.

## Poseidon 210 Liquid Flow Cell

- Enables high-resolution hydrated sample analysis directly within the TEM in static, flowing or mixing modes.
- Features an EDS-compatible design that allows a direct view from the sample to the detector.

## Poseidon 510 Electrochemistry Cell

- Builds on Poseidon 210 with an integrated low-noise electrochemical system.
- Features three electrodes (WE, RE, CE) with a selection of electrode patterns and materials.
- Enables high-resolution TEM and STEM imaging while flowing and conducting measurements.
- EDS-compatible design that allows a direct view from the sample to the detector.

Protochips supports researchers and product developers in materials and life sciences markets by developing innovative, user-friendly tools to help advance their work more efficiently. Our products are used for a wide range of applications in fields such as catalysis, corrosion, fuel cells, batteries, emulsions and liposomes. We consistently develop new technology and new capabilities to best meet the requirements and benefit the research of our customers.



# How to find us

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