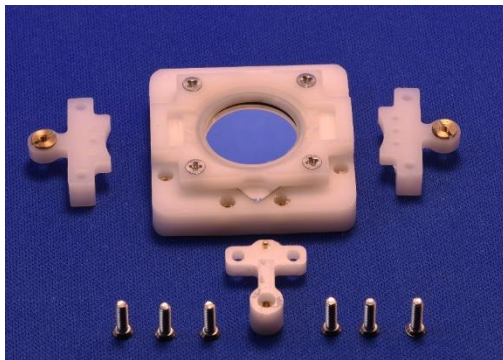


Side Chamber AFM EC Cell for Metal Thin Film



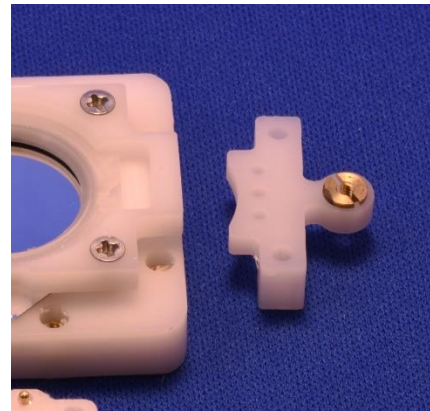
Electrochemistry in-situ AFM is a widely accepted measurement that electrochemistry research groups use to observe morphology and mechanical property change during EC reactions. This Side Chamber AFM Cell is designed to be used with Park NX10, NX20 and XE7 AFM. It can also be adapted to use on NX12 system.



For In-situ EC AFM experiments, thin film sample need to be electrically connected on the front of the sample, and also outside of the EC cell to avoid contamination of the EC reaction. A O ring type of cell top is designed with a corner of the substrate exposed for electrical contact.



A gold coated spring load contact pin is used to create a trouble free electrical connection to the front of the sample film.



A unique "side chamber" is arranged to house the counter and reference electrode. A electrode holder is used here to secure the connection of the counter and reference electrode. For electrodes with different size and shape, this module can be modified.