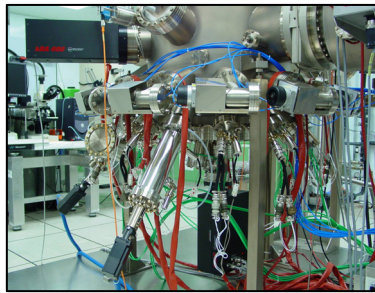


**2006: A Record Year!**

It's official: k-Space had record sales in 2006! Since we opened in 1992, k-Space has delivered enabling products for today's thin-film and semiconductor processes thanks to our strong network of distributors and close collaboration with customers. As we continue to grow to meet demand, we look forward to helping our customers realize their goals. Attending to customer needs with prompt technical customer support and service has been our guiding principle and will remain so for 2007 and beyond.

kSA MOS Successfully Installed on United States Air Force Research Laboratory's V-90 MBE System

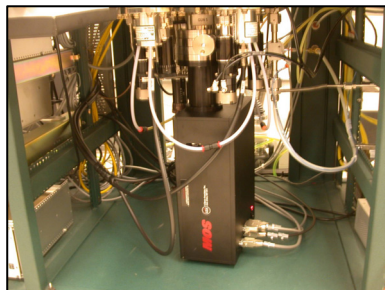
k-Space recently installed a new kSA MOS *in-situ* stress monitor to be used by Dr. Ron Kaspi and his MBE group on their new V90 reactor. MOS's high sensitivity to stress changes gives users the ability measure and monitor thin-film stress evolution after as little as 10 monolayers of film deposition. The kSA MOS will be used to strain engineer deposition in real time by providing feedback towards proper adjustment of fluxes of In, Ga, As, and Sb during deposition.



kSA MOS installed (bottom flange) on AFRL V-90, with existing kSA 400 analytical RHEED system

kSA MOS Successfully Installed on University of Alabama Sputtering System

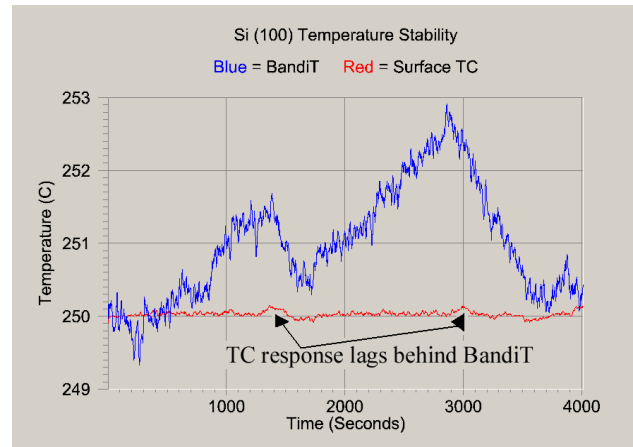
k-Space recently installed a new kSA MOS *in-situ* stress monitor to be used by Professor Greg Thompson at the University of Alabama. Professor Thompson's group will use kSA MOS to study grain size and the effect of stress on the fundamental film properties during sputter deposition of Fe, Pt, and other metals on Si substrates.



kSA MOS installed and rotationally triggered on AJA International sputtering system

kSA BandiT Achieves Excellent Temperature Resolution with Silicon

A key advantage to temperature monitoring with kSA BandiT is the ability to monitor temperature where other optical measurement techniques cannot. Recently, kSA BandiT was put to the test, measuring doped Silicon substrates at 250°C to determine temperature resolution. As shown in the chart below, the kSA BandiT performed with excellent temperature resolution ($< 0.2^{\circ}\text{C}$).



Note that the surface thermocouple (TC mounted on the surface of the Si wafer) was not as sensitive to temperature drift. Also note that as the TC temperature did detect temperature change, the heater power was adjusted accordingly, but with a lag time compared to the instantaneous BandiT measurement.

See the k-Space product line in action at the following upcoming conferences:

Euro MBE Workshop
Sierra Nevada, Granada, Spain
March 5-7, 2007

Physical Society of Japan (JPS) - 2007 Spring Meeting
Kagoshima University, Japan
March 18-21, 2007

Japan Society of Applied Physics (JSAP) - 2007 Spring Meeting
Aoyama Gakuin University, Japan
March 27-30, 2007

2007 MRS Spring Meeting
San Francisco, CA, USA
April 10-12, 2007

2007 Int. Conference on Metallurgical Coatings & Thin Films
San Diego, CA, USA
April 24-25, 2007