



### A Great Year for k-Space--2006 Looks Even Better!

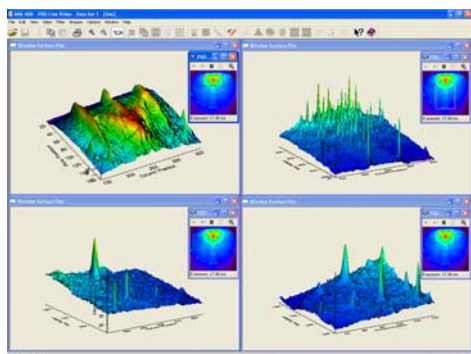
k-Space Associates is excited about 2006. We are growing fast and have increased staff and added new distributors. Stay tuned and expect more exciting product and application news for all kSA products throughout the year.



A big thanks goes to our customers who continuously push our development team and help us deliver today's most advanced thin-film characterization products.

### Tech Tips: Multiple Data Sets with the kSA 400

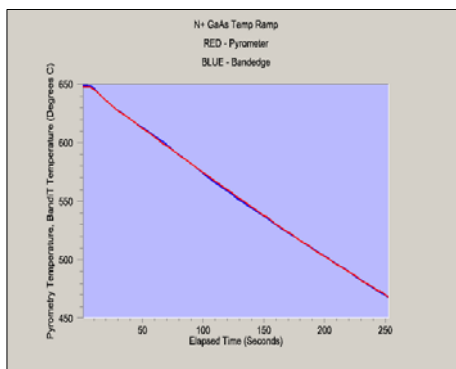
The kSA 400 (V4.30 and higher) can acquire from multiple triggers and sort the acquisition data into multiple data sets in real time. In this manner, acquire, sort and independently analyze RHEED



data from multiple azimuths during substrate rotation. If you have the kSA Gun Control option, then you may also set the gun control settings (x,y deflection, focus, etc.) for each azimuthal position to accommodate for substrate tilt or wobble. The kSA 400 will then set the gun control settings for each azimuthal angle *before* each angle is reached.

### Trigger your BandiT!

The kSA BandiT has always provided continuous temperature measurement during substrate rotation. Now, the kSA BandiT can be triggered during rotation, allowing temperature to be measured at specific points on the substrate (or substrates for multi-wafer MBE and MOCVD systems).

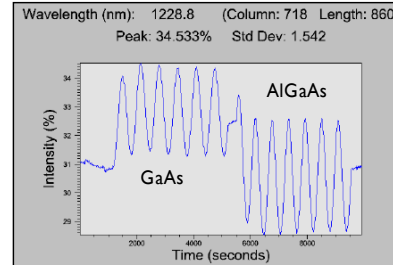


**kSA BandiT triggered on V-100 MBE System during rotation and temperature ramp down**

Because it is not affected by stray light or viewport coatings, kSA BandiT promises to be an invaluable tool for yield enhancement and process development.

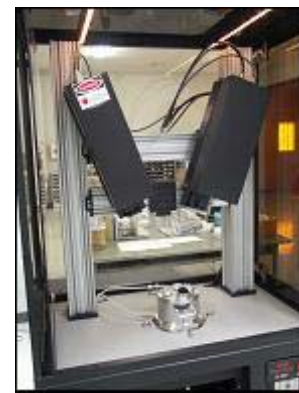
### Growth Rate Calibrations with kSA BandiT

The kSA BandiT system now has the ability to determine deposition rate from pyrometric interference oscillations in radiated light from the sample surface. These oscillations occur because the deposited layer has a different index of refraction from the under layer or substrate. Achieve growth-rate calibration to within 0.5%. Please contact k-Space for more details and look for an upcoming Application Note.



### kSA MOS Ultra-Scan, now with Sample Heating

kSA MOS Ultra-Scan has the highest resolution and repeatability for stress mapping in the world. Now add the capability to analyze samples from room temperature up to 800°C. This fully integrated system is available now for substrates with diameter up to 4 inches (~100 mm).



### Automated V-90 MBE System for Sale

Originally purchased for development work, kSA is now offering for sale an automated V-90 MBE system. Just add effusion cells, pumps, power supply and shutters for a fully functioning MBE system. Still in its factory crate, no material has ever been loaded in this system! Please contact k-Space for details.



### Come see k-Space at the following conferences:

- Spring MRS – San Francisco, CA April 18-20<sup>th</sup>
- 13<sup>th</sup> International Conference on Metal Organic Vapor Phase Epitaxy – Miyazaki, Japan May 22-26<sup>th</sup>
- E-MRS Spring Meeting – Nice, France May 29-June 2<sup>nd</sup>
- 48<sup>th</sup> Electronic Materials Conference – University Park, PA June 28-30<sup>th</sup>