



## Real time analysis of multiple images and data

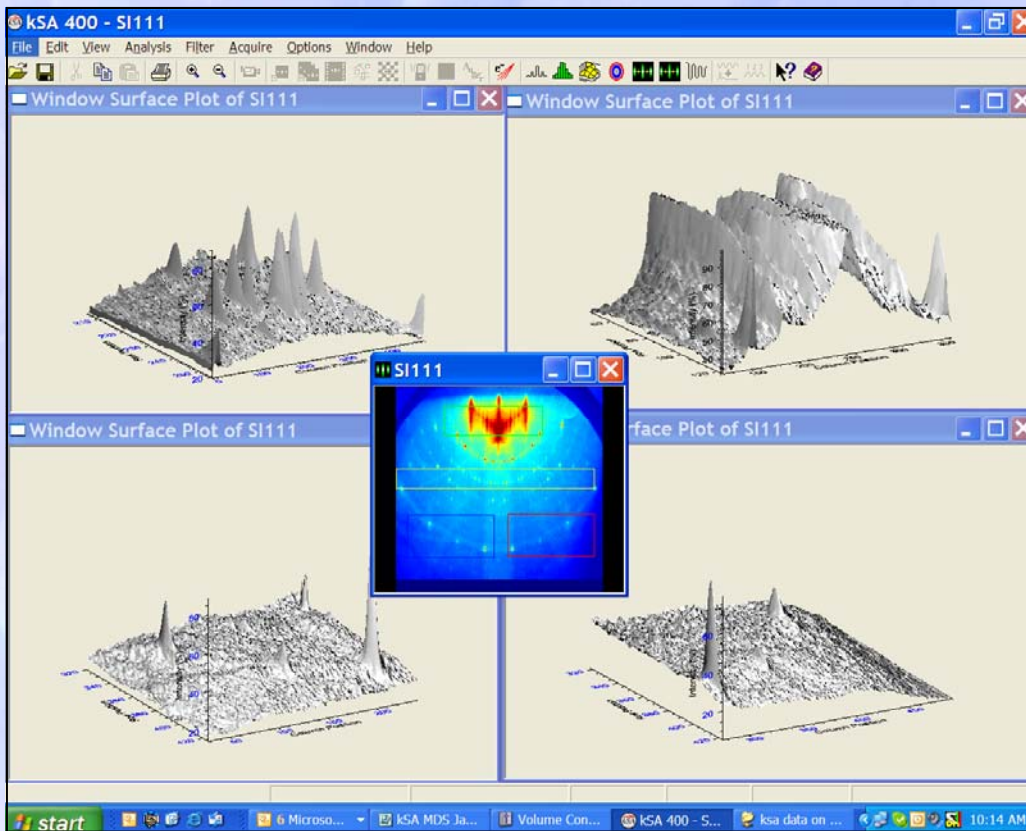
POWERFUL REAL TIME ANALYSIS  
MONITOR UP TO 95 SIMULTANEOUS DATA SETS

k-Space's Multiple Data Set (MDS) monitoring gives kSA users the capability to acquire, sort, and analyze data input from multiple trigger sources. Using MDS with the kSA400 allows for real time data acquisition at multiple azimuth angles during rotation. This allows for full analysis of RHEED patterns to gain a more complete understanding of epitaxial growth. MDS is also used for monitoring multiple wafers within a platen of wafers during multi-wafer MBE or MOCVD growth. Temperature, stress, and growth rate may all be monitored at the wafer level during multi-wafer growth. The MDS capability will accept single line or multiple line triggers, and sort the triggered image data according to the trigger input. Live video from each data set is displayed simultaneously within the kSA application.

All kSA400 analysis capabilities (e.g. lattice spacing, growth rate, etc.) can now be applied and displayed for each data set simultaneously. In fact, gun control parameters

may also be configured for each data set independently, thereby allowing for specific gun control settings for each azimuth angle. The kSA 400 will automatically pre-set the gun to the proper settings before the next trigger is detected.

**Figure 1: Data may be taken in real time from a single wafer in multiple areas during rotation (shown at left) or from multiple azimuths during rotation via kSA MDS triggering integration on most epitaxial growth systems.**



### Your partner in thin film characterization

Since 1992, k-Space Associates, Inc. has been a leading supplier of advanced instrumentation and software for the surface science and thin-film technology industry. Extensive input and close collaboration from our world-wide customer base has lead to delivering powerful thin film characterization products. We realize that the best products are developed with our customers' input, so we're good listeners and look forward to helping you with your thin film characterization needs.

## WORLDWIDE REPRESENTATIVES



k-Space Associates, Inc.  
Ann Arbor, MI USA  
Tel: (734) 668-4644  
requestinfo@k-space.com  
www.k-space.com

### Japan

Vieetech Japan Co. R-DEC Co.  
sales@vieetech.co.jp info@rdec.co.jp  
www.vieetech.co.jp www.rdec.co.jp

### Europe

RTA Instruments, Ltd  
sales@rta-instruments.com  
www.rta-instruments.com

### ROC/Taiwan

R-DEC Co.  
info@rdec.co.jp  
www.rdec.co.jp

### Korea

Jung Wong Corp  
sales@jwc.co.kr

### India

El Camino Technologies  
vmohan@touchtelindia.net