



### k-Space is Growing!

We are very pleased to welcome aboard Eric Friedman as our new Sales and Marketing Director. He comes to us from Veeco Instrument's MBE division, where he was most recently Director of Marketing. Eric is well versed in both MBE and MOCVD technologies, and having been a kSA customer for many years, brings an important perspective to the team. With his degrees in physics and mathematics, along with his extensive deposition process experience, he is rapidly getting up to speed with our products!

### Spring Sale – kSA 400 With Free RHEED Screen!

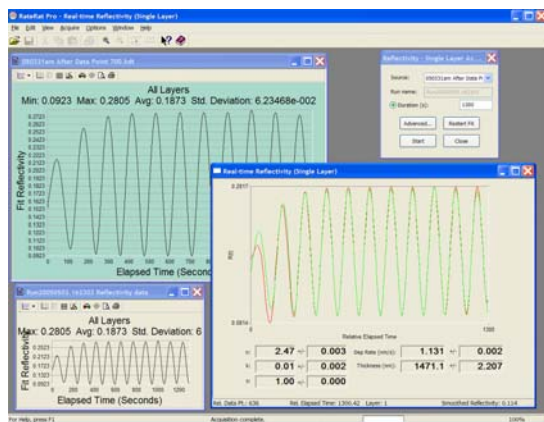
Roses are red, violets are blue, we've got a 400 and a free RHEED screen for you! The kSA 400 analytical



RHEED system instantly puts the power of RHEED at your fingertips. With a long list of RHEED-specific analysis capabilities, full user-programmability, ease of use, and the best product support in the industry, the kSA 400 is the clear choice for analytical RHEED and LEED. During May & June, 2005, we're offering a **free RHEED screen and holder** (that's a \$1300 value!) to go along with the kSA 400. Visit our website for details on our high-quality screens. Simply let us know your view port size (6" or 8") and screen preference (full coat, partial coat, P43 or P31 phosphor) when ordering.

### Tech Tips – kSA RateRat Movies

In the last newsletter we talked about recording movies with kSA BandiT. We have actually structured all of our products to have the ability to play

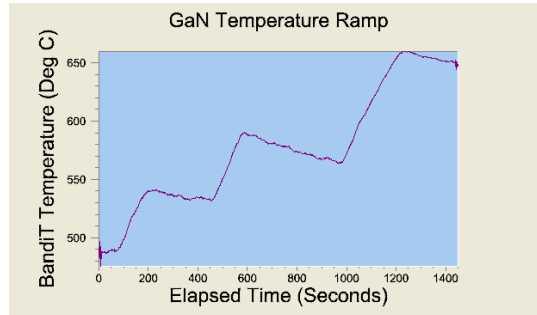


back acquired data as if it were the live data source, and our RateRat Pro deposition monitor is no exception. In this manner you can change fitting parameters, run different data filters, and so on, without affecting the original data set. In order to play back RateRat data, first load the data file into the RateRat software.

Next, right-click on the file, select Properties, then select the Acquire Source tab. From this dialog, select the Channel 0 input to be reflectivity. This sets the input for the acquisition mode to be the reflectivity from the file. Finally, run the Reflectivity – Single Layer acquisition mode, and select the open file as the Source on the main acquisition dialog. By clicking Start, RateRat will play the original data and analyze it as if it were the live data source.

### New BandiT results for GaN temperature measurement!

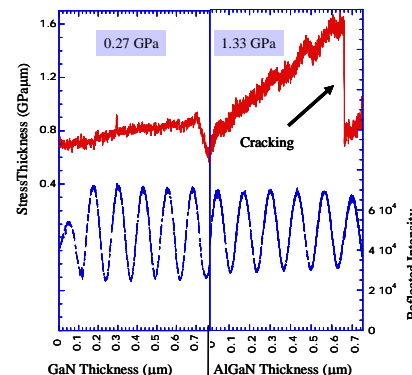
k-Space has just completed GaN film temperature measurement, and the results are excellent! Tests were carried out on a Veeco GEN



200 MBE reactor with a nitrogen plasma source. The data above shows the GaN temperature during 50°C thermocouple ramps. Note that while the TC temperature was stable at each plateau, the actual GaN temperature dropped during the soak time. BandiT was also successful in monitoring SiC substrate temperatures. If you'd like further information on these results or a GaN BandiT quotation, please don't hesitate to contact us!

### kSA MOS For In-Situ GaN Film Stress

Proven over 5 years ago on R&D reactors, kSA MOS is now available for production MOCVD systems, even where mounting constraints exist. The Mini-MOS system utilizes a small footprint 1D array for real-time curvature, stress, and deposition rate measurement. We know you have plenty of stress in those GaN films on sapphire, so now's the time to control that stress! Please contact us for details.



### Important Dates

- **May 31, 2005:** New kSA 400 User Manual release date.
- **July 15, 2005:** RHEED simulation software release date.
- **June 22-24, 2005:** 47<sup>th</sup> EMC Conference, UC Santa Barbara – come visit us!
- **July 11-13, 2005:** 12<sup>th</sup> OMVPE Workshop, Big Sky Montana – come visit us!