

Tuesday Morning, October 16, 2007

Exhibitor Workshops

Room: Exhibit Hall - Session EW-TuB

Exhibitor Workshops

Moderator: R. Childs, Consultant

10:00am **EW-TuB1 New AFM Imaging Technique-Dual ACTM Mode.**
R. Proksch, D. Bocek, C. Callahan, J. Cleveland, T. Day, J. Li, A. Moshar,
Asylum Research

In a new AFM imaging technique, Dual AC Mode, the cantilever is driven at or near two of its resonant vibrational modes. For commercially-available cantilevers, these resonant modes are not harmonic. The amplitude and phase signals measured at the different frequencies show very different contrast on a variety of samples.¹ The workshop will discuss how Dual AC mode works and show application examples of Dual AC on magnetic samples, material and bio samples. In addition to images of a variety of samples, we will also discuss amplitude and phase vs. the tip sample distance curves which further elucidates the physics of the contrast formation.

¹R. Proksch. Multifrequency, repulsive-mode amplitude-modulated atomic force microscopy. Applied Physics Letters 89, p. 113121, (2006).

10:20am **EW-TuB2 What a Certified Rebuilt Pump Really Is - And Why It's Important.** *G. Govola*, FMG Enterprises

What is FMG Certified Program? For those who want their remanufactured pumps to work right the first time, and keep their line technicians focused on maximum tool productivity, FMG Certified ProgramTM is a validation process of the technical competencies and expertise needed to plan, deploy, support, and service FMG's Pumps. The FMG Certified ProgramTM is a structured certification with emphasis on precision, reliability, durability and performance. Each Rebuild Pump that leaves FMG has been thoroughly inspected by our factory certified technicians and backed by our Certification process. FMG has geared up to be equal if not better than the factory specifications for high quality Rebuild Vacuum Pumps. FMG CertifiedTM assures that you will get products as good or better than new because FMG goes the "extra mile" at every step. Procedure of Rebuild: FMG has developed our own internal disassembly, cleaning, reliability, testing, detailing and shipping; Technicians: All of FMG's technician's are factory trained and Certified on each pump type; Documentation: Disassembly, evaluation, build sheet, data sheet, final assembly sheet. Test and Quality Assurance sheet, Paint QA and shipping documentation are recorded; Pump Tracking: Internal database monitors incoming rebuilds in every stage of the rebuild process. Features: Electrical 100 point inspection, Electrical/Module/Software, Mechanical parameters, Perform vacuum integrity leak check beyond OEM specifications, 36 performance burn-in reliability checks, Final Quality Assurance Inspection check, Check and record pump parameters including fluid levels, temperatures, pump flows, Perform visual and vacuum integrity leak check, and Check any facility issues directly associated with the pump; system leak check. Advantages: Foresee potential problem areas before any occurrences may arise-through extensive evaluations; Extends pump life, positively affects bottom line with reduced numbers of pump rebuilds or purchases; Maximize overall equipment uptime for production; Cost Savings; and Statement of work performed.

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