



## **Anasys Instruments Announces New Chemical Imaging Mode with sub-10nm Resolution**

Hello Channel Partners and Sales and Application Colleagues,

Anasys Instruments has announced a new imaging mode Tapping AFM-IR that provides easy fast high resolution chemical imaging capabilities with 10nm spatial resolution.

No doubt many of you will have seen the email announcement and checked out the web page.

Tapping AFM-IR provides many benefits to the user:

- Down to 10nm spatial resolution for chemical imaging
- More easily achieve high spatial resolution with less heroic efforts
- Extends applications to samples where contact mode chemical imaging was limited.
- Provides the ability to do Tapping AFM-IR spectroscopy where contact mode may not be suitable.
- Faster imaging than conventional contact mode.

We continue to make significant strides in product development and have a significant number of new improvements being added to the products over the next 6 months to a year.

Below is information on the sales support material available for promotional purposes.

### **Sales Support Information**

- Please refer to the attached Tapping AFM-IR presentation for use for sales presentations. You can simply add these slides to your current nanoIR2-S/nanoIR2-FS presentations. We will have a full new presentation for you at the sales meeting. We have used a couple of copolymer examples as illustration of the new modes capability from a spatial resolution perspective.
- Tapping AFM-IR data sheet – will be updated with new information over the coming weeks as we add more data
- Press release – week of 12/19

We have a lot of new data that we are currently clearing with customers and will update you and our material as we get them approved.

### **New web pages**

<http://www.anasysinstruments.com/technology/nanoir-technology/>

<http://www.anasysinstruments.com/technology/tapping-afm-ir/>



### **Sales Training Webinar – Week 12/19.**

We will create and send you access to a 15 minute sales training webinar during the week of 12/19, We will go through the sales slides in detail, and explain the principle of operation. The principle is though fairly straightforward and is essentially Tapping Mode based AFM-IR measurements with a few clever additions where we have applied for a patent.

Below is general information and commercial details of the new mode for your information. Pricing will be confirmed early next week. Contact your sales manager for any urgent requests.

### **Current Customer/Installed Base - Upgrades**

Current nanoIR users can be upgraded with the new imaging mode but they require a system that supports resonance enhanced AFM-IR. This means they require a QCL laser or the new Resonance enhanced mid-IR OPO laser. The upgrade is chargeable as it requires a specific type of lock-in amplifier. The cost of the amplifier is significant. We are working on reducing the cost of the amplifier to reduce the price of this exciting option.

Unfortunately, this capability does not and cannot work with the standard OPO configuration laser due to the high laser repetition rates required.

### **Tapping AFM-IR for new System Quotation**

The Tapping AFM-IR mode is provided as an option (at a lower price than an upgrade). In the near future, we will work on the price reduction and incorporate as part of the nanoIR2-FS. Bear with us as we work through that. We expect to have an update at the sales meeting.

### **Quotation Descriptions.**

#### **Tapping AFM-IR for nanoIR2-FS & nanoIR2-s**

TM-AFM-IR

NEW high resolution chemical imaging mode for use with resonance enhanced AFM-IR and tapping mode. Includes required lock-in amplifier.

System must support Resonance Enhanced AFM-IR operation with appropriate laser. (Pulsed QCL laser or FASTspectra IR OPO laser).

**Consumables: includes Qty 5 PR-EX-TnIR-A-10probes**

#### **Tapping AFM-IR Upgrade for Resonance Enhanced Systems**

TM-AFM-IR-UP

NEW high resolution chemical imaging mode for use with resonance enhanced AFM-IR and tapping mode. Includes required lock-in amplifier and latest software version upgrade.

System must support Resonance Enhanced AFM-IR operation with appropriate laser.

Requires Tapping Mode operation if not currently available.

Requires 2 day installation & training to be quoted.



**Consumables: includes 5 PR-EX-TnIR-A-10probes.**

**Tapping mode/ Tapping AFM-IR probes**

PR-EX-TnIR-A-10

10 pack of probes for use in the nanoIR2/2S/2FS systems for AFM imaging in Tapping mode and IR spectral collection in contact mode.

Also required for Tapping AFM-IR chemical imaging where the feature is available.

Gold coated, microfabricated silicon probes that are ~225 microns long and come pre-mounted on half washer mounts for easy exchange in the AFM head.

If 5 or more 10 packs of this probe are purchased at the same time then a 10% discount is applied.

No pricing change for the probes.