



Upgrades & Accessories

Tecnai™ F30 ST Long-term Investment planning at Indian Institute of Science, India

“Acquiring new instruments with a predefined upgrade plan resulted in a leading edge research institute”

“The FEI Company and ICON Analytical Ltd., FEI’s representative in India, have provided invaluable support for our efforts to contribute to the scientific, academic and technological goals of our country,” said Professor Kamanio Chattopadhyay of the Indian Institute of Science IISc).

As an institute dedicated to cutting edge research and education in science and technology we have full suite of FEI instruments that we have enhanced through a carefully planned program of upgrades and accessories. For example, the base Tecnai™ FEG 30ST TEM installed in 2005 has been continually upgraded and now supports a variety of the most advanced research techniques.”

The challenge:

Perhaps it should be a central axiom of research planning that the cost of the instrumentation needed will always exceed the amount of funding available. Allocating the available budget to best meet the anticipated technology requirements requires creative, long-term investment planning.

The solution:

Professor Chattopadhyay created just such a solution when he developed a long term plan that started with the acquisition of a basic system followed by planned investments in instrument upgrades. As initially delivered, the institute’s 300 kV FEG Tecnai™ TEM was used primarily for basic materials science TEM application and Cryomicroscopy. Following a systematic upgrade program that included STEM, EDX, HAADF detector, TruElmage™ and 3D tomography software, it now supports sophisticated high resolution imaging and analytical techniques for both STEM and TEM modes.

The result:

Ultimately the program of enhancements extended the instrument’s capabilities to support multiple advanced applications, allowing the institute to remain at the forefront of research and education in a broad range of important research interests.



Upgrade plan

- Tecnai™ FEG 30ST – Base configuration, 300 kV column with field emission gun installed at the beginning of 2005.
- STEM + EDX - installed at the end of 2005
- HAADF detector and Truelmage™ software installed early 2007
- 3D tomography installed in 2008

FEI's support structure in service, applications and training demonstrated their commitment to supporting their customers throughout the lifetime of the instrument. Their training facility, The FEI Academy, ensures that equipment owners have the knowledge they need to benefit fully from their system's leading edge performance.

FEI's web based owner's forum (fei.com/owners), a relatively recent addition to their support infrastructure, enables users to:

- Learn and stay updated on new developments and applications
- Share expertise and knowledge with peers
- Discuss and communicate with FEI specialists
- Check for the latest upgrades & accessories for our tools

The combination of continuing upgrades and extensive customer support has allowed IISc to enhance its imaging and analytical capabilities and maintain its position as a leading research institute.



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Register on: www.fei.com/owners to learn more about latest developments, applications, upgrades and accessories.