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Jeol releases new scanning electron microscope

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JEOL Ltd., based in Japan, has announced the release in August 2020 of a new Scanning Electron Microscope (SEM), the JSM-IT700HR, offering unprecedented throughput.

Scanning electron microscopes are used in various fields such as nanotechnology, metals, semiconductors, ceramics, medicine and biology. SEM applications are also being developed to include quality control and basic research. Demands for faster data acquisition from higher quality SEM images, and easier confirmation of composition information are increasing.

Based on its award-winning “InTouchScope ™” SEM series predecessors, the JSM-IT700HR features Schottky field emission electron gun (FEG) built into the lens. This powerful new SEM meets the needs for observation and analysis of other miniaturized materials in the daily operation of the laboratory.

The JSM-IT700HR offers a high resolution of 1nm and a maximum probe current of 300nA (15 times higher than before), providing a wealth of observation and analysis information. With an easy-to-use user interface, a compact design accommodating a large sample chamber, and a renewed anti-vibration mount for the main console, observation and analysis is even easier than ever before.

To further improve the "ease of operation", the JSM-IT700HR incorporates a new function, integrated into the SEM's graphical interface, to display the characteristic depth of X-ray generation. This allows a quick understanding of the analysis depth. (reference) sample, particularly useful for elemental analysis.