



Development of Intelligent In-line E-Beam Inspection System

Electron beam inspection technology can provide better analyzing function than optical methods for liquid samples, however the incompatibilities of observing samples in liquid state in high vacuum environment restrict electron microscopy (EM) to be used only for solid state study. Moreover, liquid or wet samples cannot be inspected for the in-situ image survey and analyzation in their original states with EM. CMNST develops “the Intelligent In-line E-beam System” which contains many unique strengths: (1) In-situ e-beam analysis for liquid samples; (2) Multi-function sampling stage design; (3) High resolution liquid cell design; (4) Original liquid state analysis. The in-situ wet cell technique creates high resolution and high quality images to identify the morphology and nano particle size distribution/composition, as shown in Fig. 1. Furthermore, samples such as lotion and cream, can be observed in their actual status (without dilution), as shown in Fig. 2.

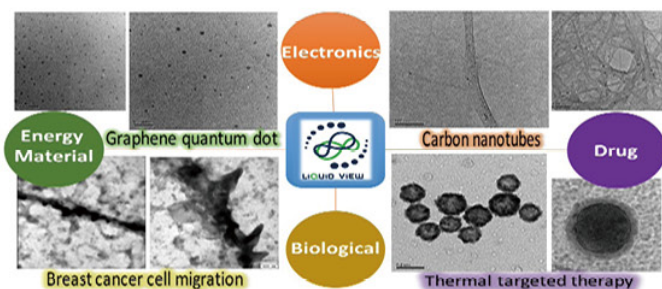


Fig. 1 Applications of nano liquid testing device on industrial and biomedical samples

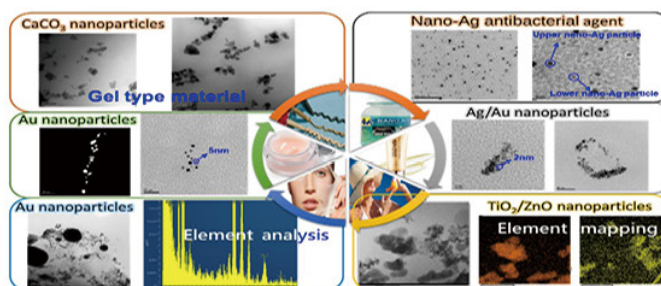


Fig. 2 Applications of Un-Dilution Products

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