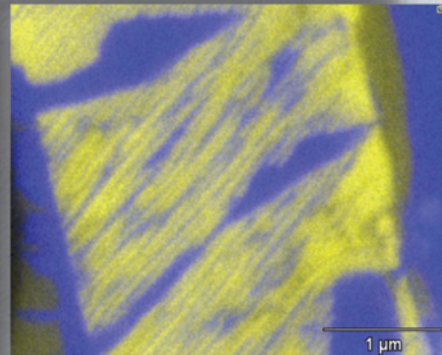
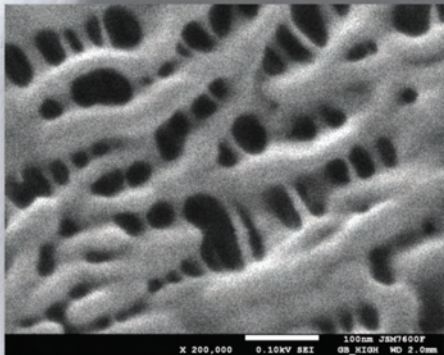


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1-3 nm twinning in mineral BSE image

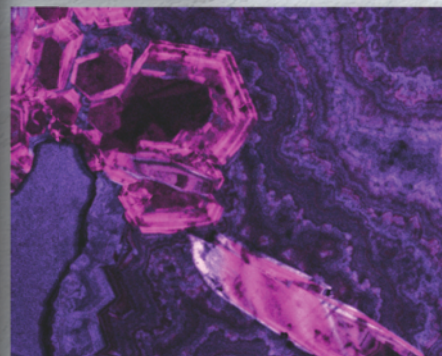
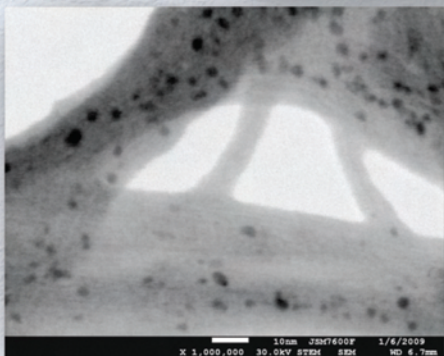


### EBSD

Orientation map of Ni alloy

### STEM

CNT with 1-3 nm Pt nanoparticles



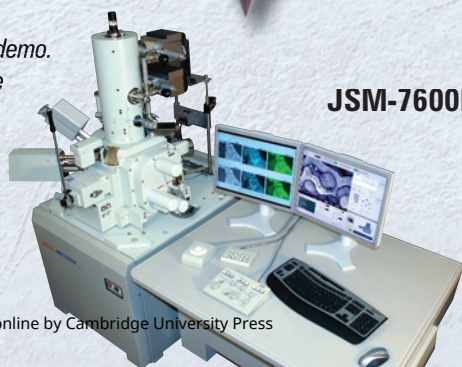
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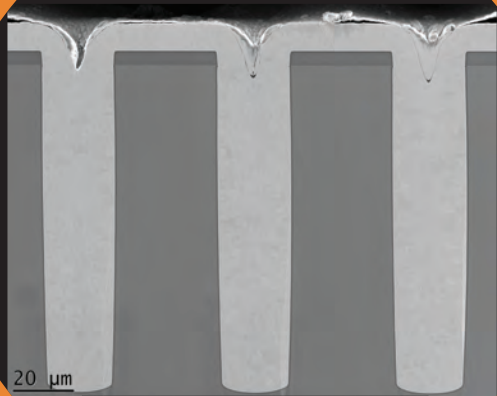
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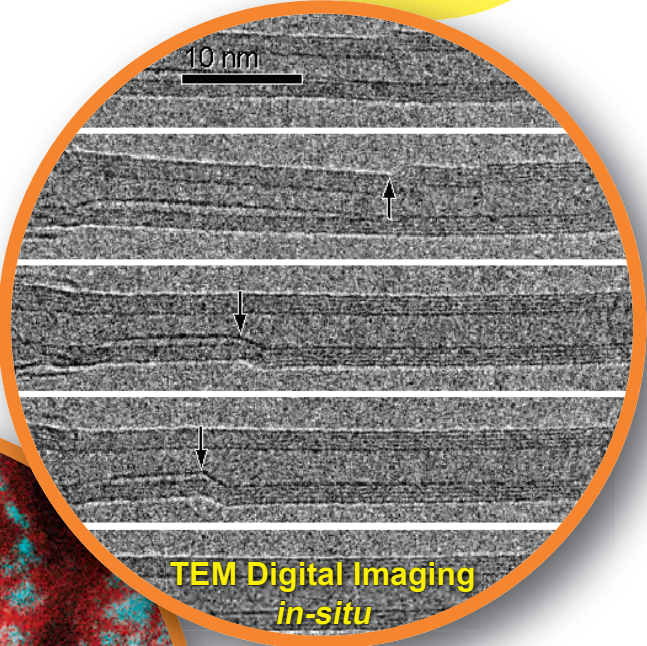
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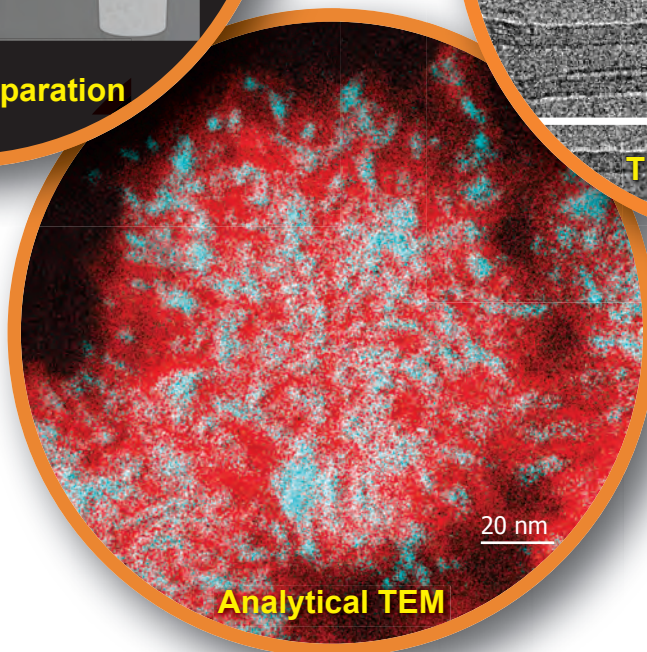
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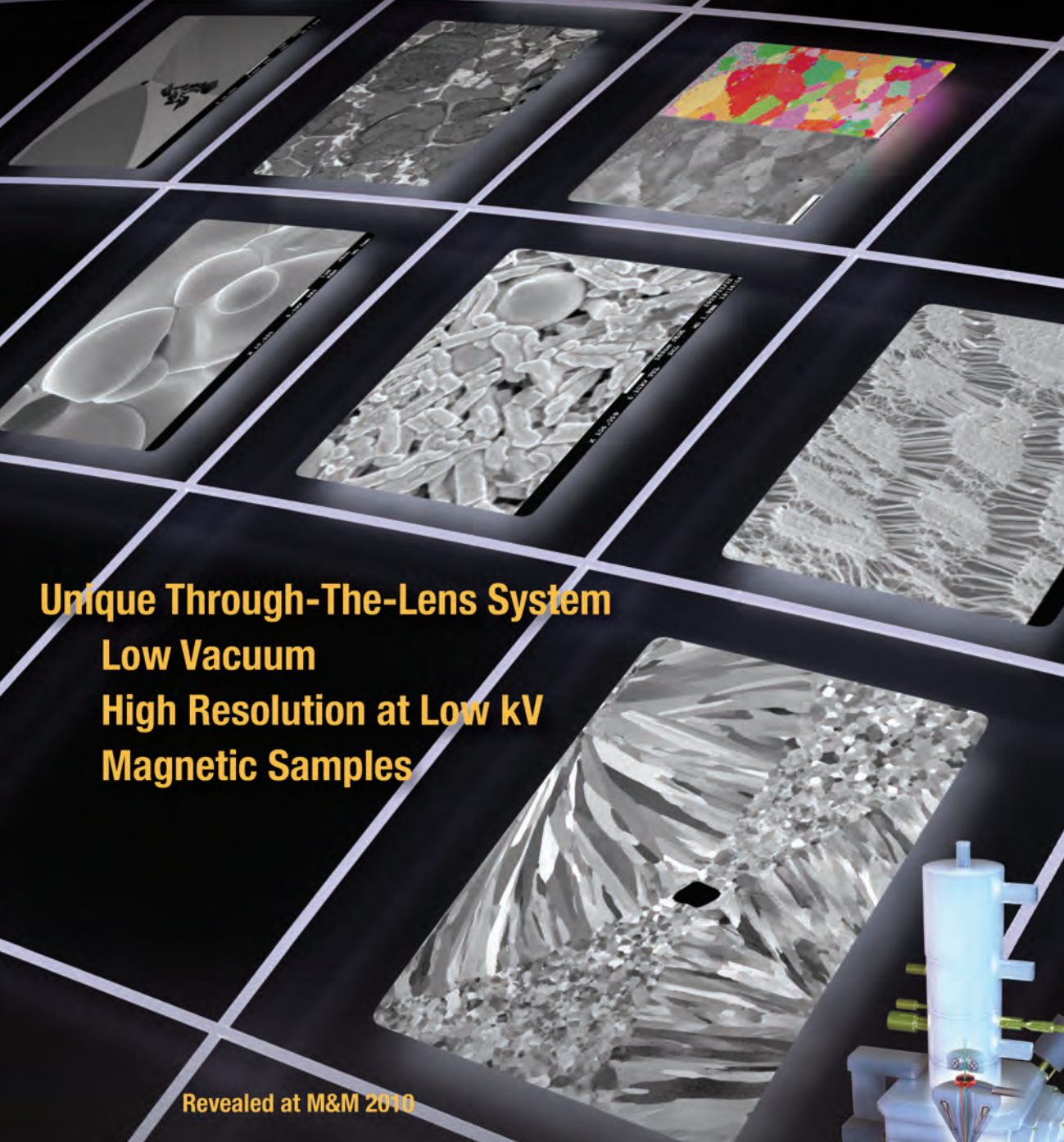


**Analytical TEM**

Images (from left to right): **SEM Specimen Preparation**: SEM image of copper vias prepared using Gatan Iion™. **TEM Digital Imaging In-situ**: Kink motion (arrow) in a carbon nanotube under tensile stress at 2 V and 100  $\mu$ A. The tensile strain was 3% and the strain rate was 0.04 nm/s. The *in-situ* images were recorded with Gatan UltraScan® 1000 CCD camera. Image courtesy of Dr. Jianyu Huang, Sandia National Lab. **Analytical TEM**: 1k x 1k composite elemental map showing gadolinium particles (blue) and carbon nanotubes (red) using a Gatan Imaging Filter (GIF®) operated at 100kV. The total acquisition time of the elemental maps was only 40sec to preserve the sample from beam radiation. Sample courtesy of Dr. Yudasaka, AIST Japan.



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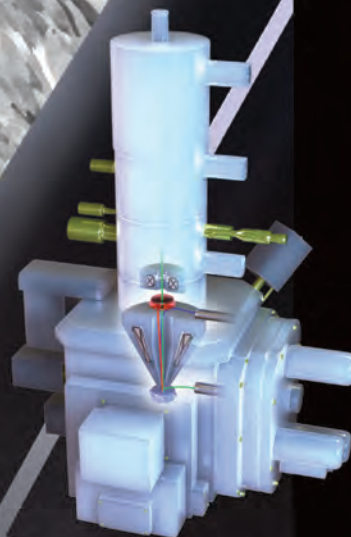
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