HITACHI
Inspire the Next

HITACHI UHR in-lens FE-SEM SU9000

SU9000

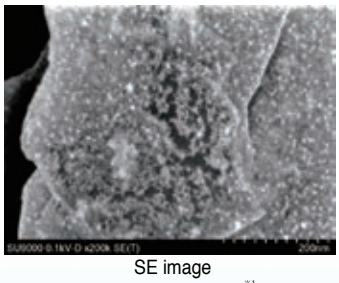
Science for a better tomorrow

Feature

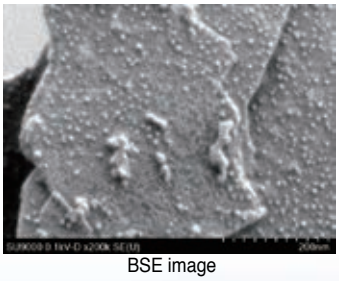
- Spectacular CFE Gun with high brightness and in-lens system optimized for ultra high resolution imaging.
- High throughput observation with the side entry goniometer stage and its quick sample exchange (The side-entry exchange positions the sample holder at the correct position for high resolution imaging)
- Low voltage STEM / EELS suitable for Nano-materials

Hitachi UHR FE-SEM SU9000

ULV & high contrast SEM imaging

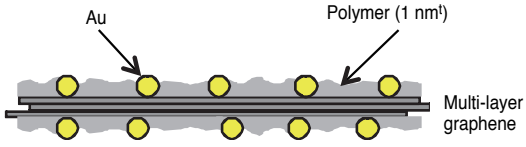


SE image



BSE image

Specimen : Graphene / Polymer / Au[※1], Vd : 100 V

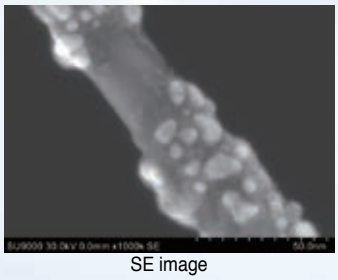


Specimen cross section schematic view

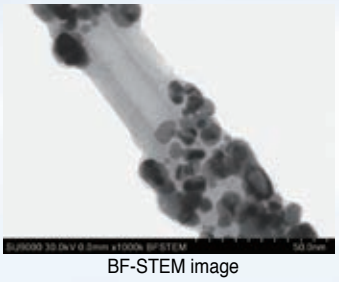
SE image : High contrast observation on polymer coating condition

BSE image : Topographic condition observation on topmost surface

surface & volume information simultaneously



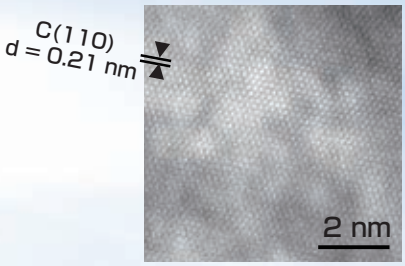
SE image



BF-STEM image

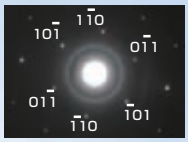
Specimen : CNT coated by Polybenzimidazole attached with Platinum Nano Particle[※1]
HV : 30 kV

Low-voltage lattice imaging



BF-STEM image

Specimen : Graphene
HV : 30 kV
Mag. : 3,000 kX

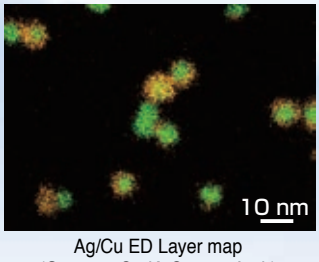


Diffraction pattern

Ultra high resolution EDX

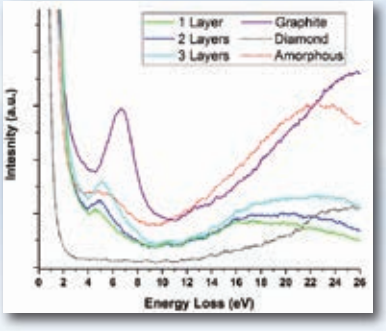
DF-STEM image

Specimen : Silver-Copper Nanoparticle[※2]
HV : 30 kV, Mag : 1,200 kX



Ag/Cu ED Layer map
(Orange : Cu-K, Green : Ag-L)

30 kV EELS



EEL spectra of graphene, amorphous carbon, graphite and diamond

※1 : Specimen Courtesy of A. Prof. Tsuyohiko Fujigaya, Department of Applied Chemistry, Faulty of Engineering, Kyushu University ※2 : Specimen courtesy of Dr. Dai Mochizuki, Department of Applied Chemistry, Tokyo Institute of Technology