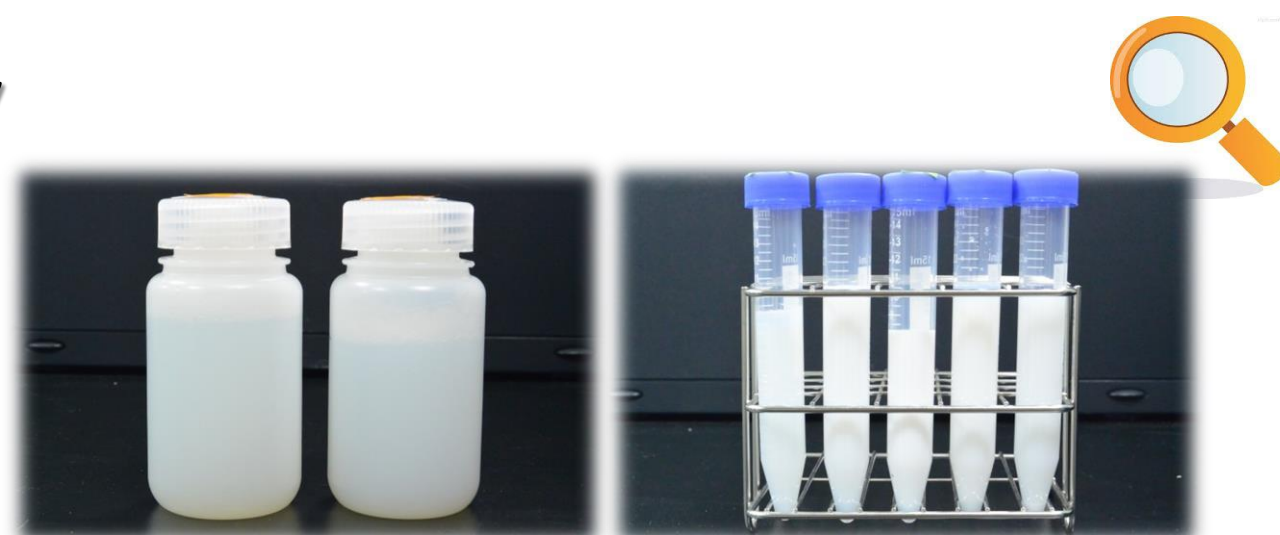


# CMP – Slurry Analysis

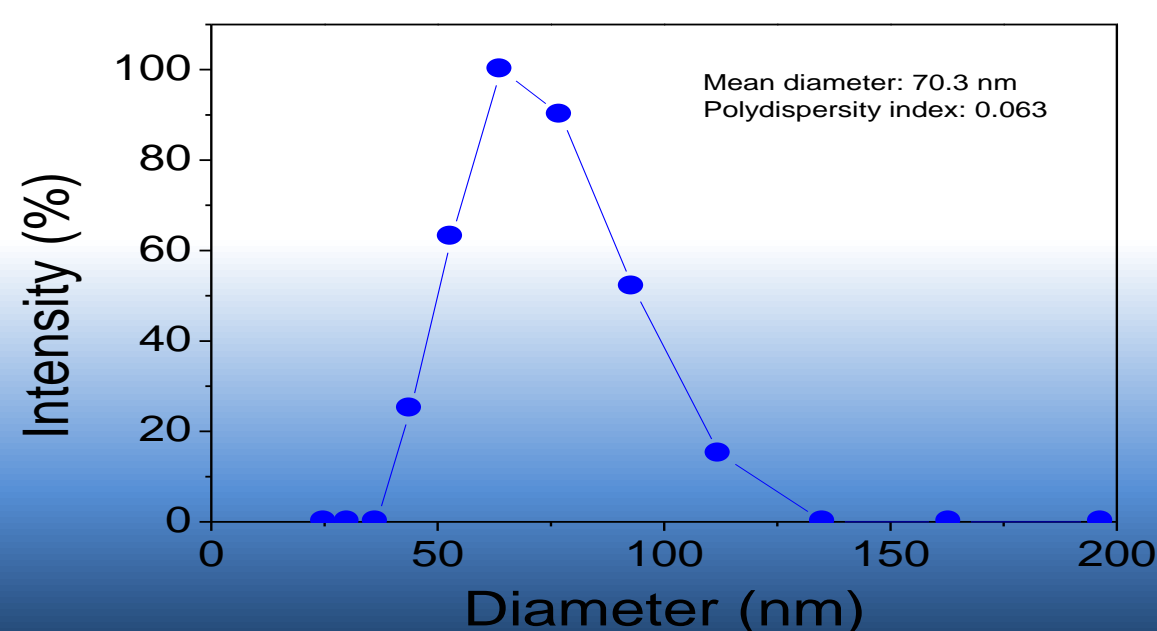
Characterize the particle size and aggregates/agglomerates of abrasives in CMP slurry

Providing total solutions for CMP-Slurry characterization, including:

Size, Shape, Composition, and Aggregates/Agglomerates of Abrasives etc.



## DLS Dynamic light scattering

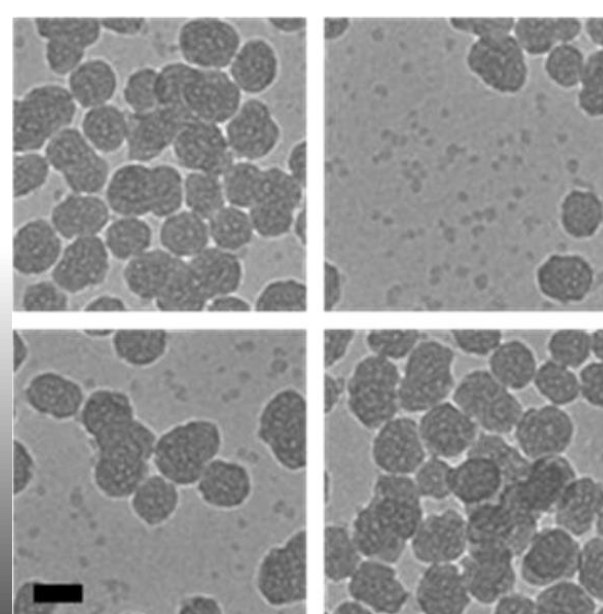


Bulk size analysis

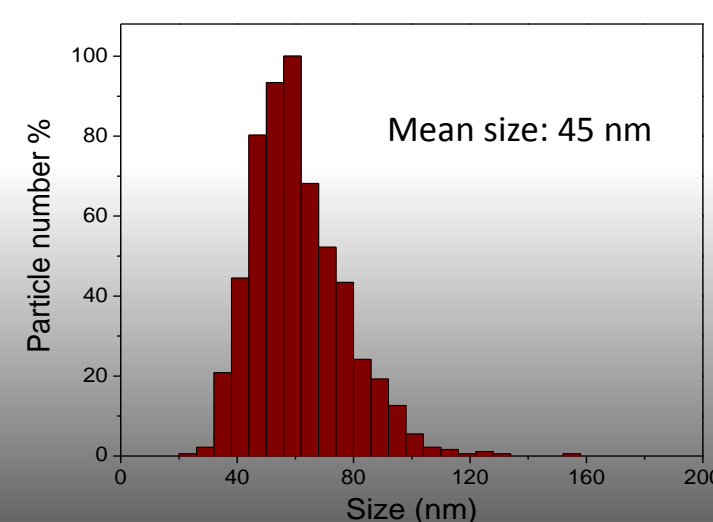
Primary particles size and shape analysis

Transmission electron microscope

TEM/GRID

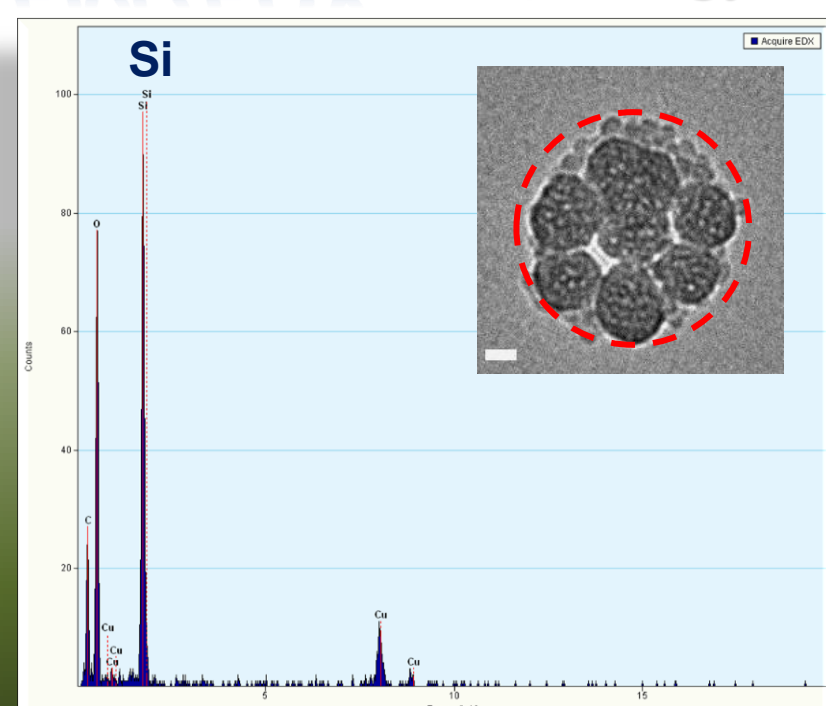


\* Scale bar: 50nm



TEM/EDX

TEM / Energy-Dispersion X-ray Spectroscopy



Composition characterization

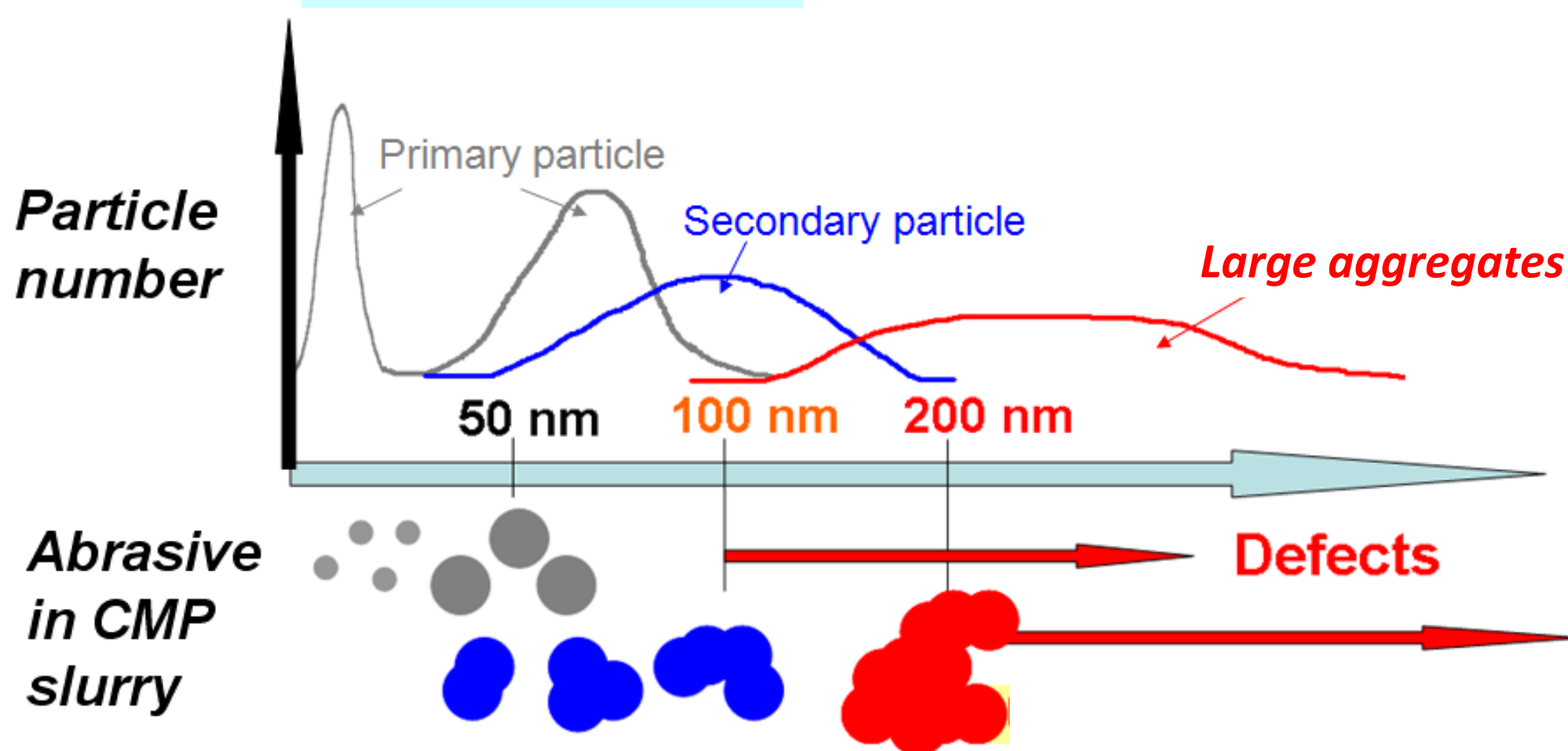


## Application of TEM for Distinguishing the Primary and Secondary Abrasives of Undiluted CMP Slurry

Native state  
observation

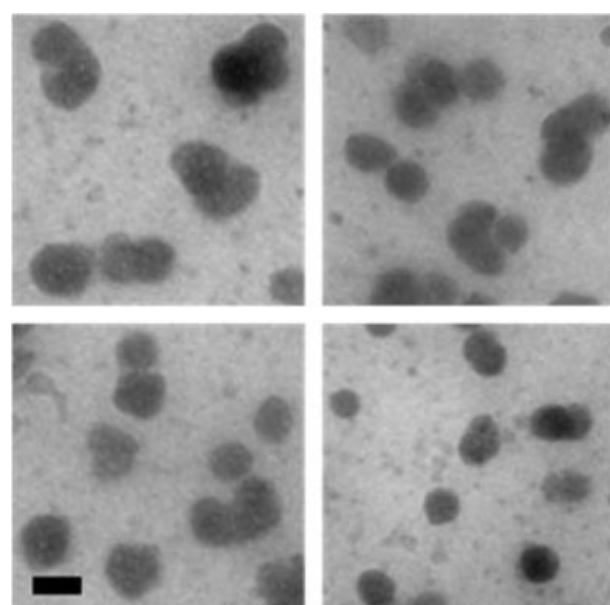
Liquid Sample TEM (K-kit)

Cryo-TEM



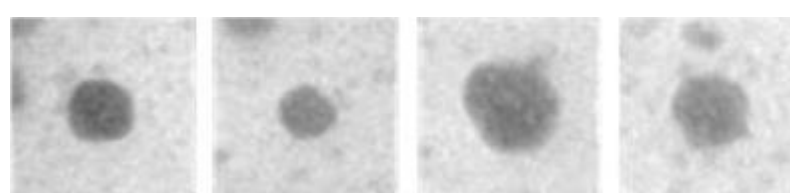
TEM

### ◆ K-kit / TEM

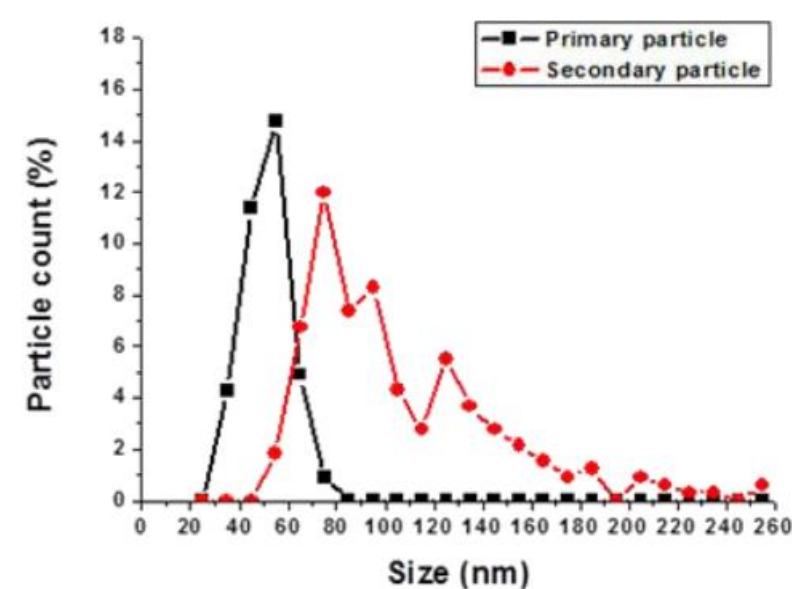
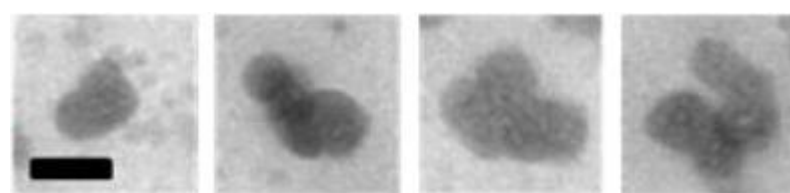


\* Scale bar: 50nm

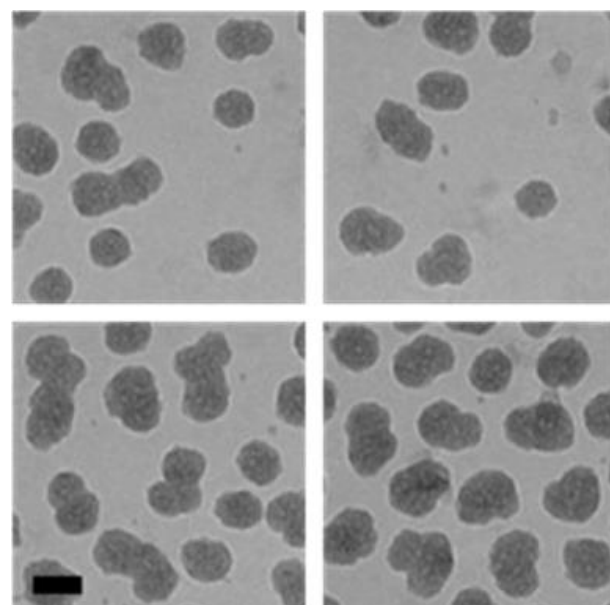
#### ➤ Primary abrasives



#### ➤ Secondary abrasives

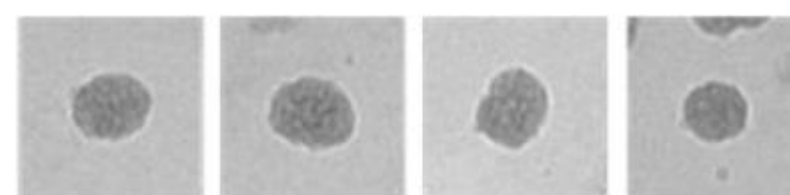


### ◆ Cryo / TEM



\* Scale bar: 50nm

#### ➤ Primary abrasives



#### ➤ Secondary abrasives

