

JSR CMP Slurry

Oxide slurry

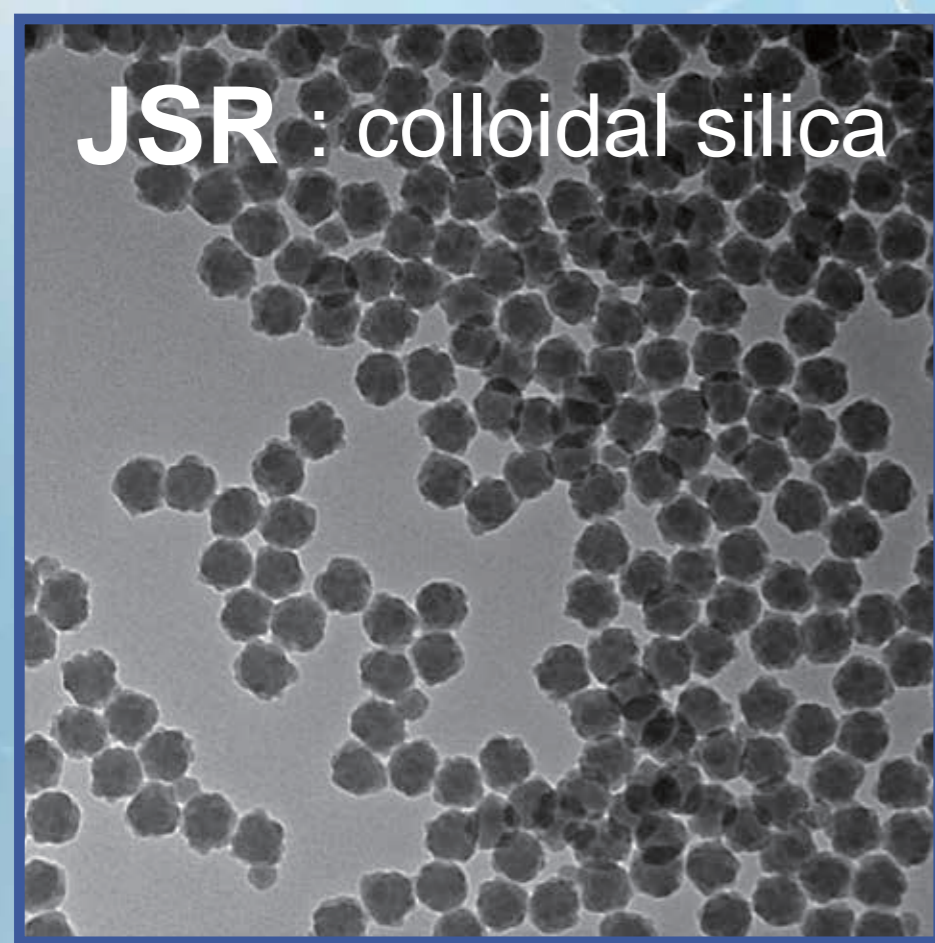


Fig.1. TEM image of abrasive

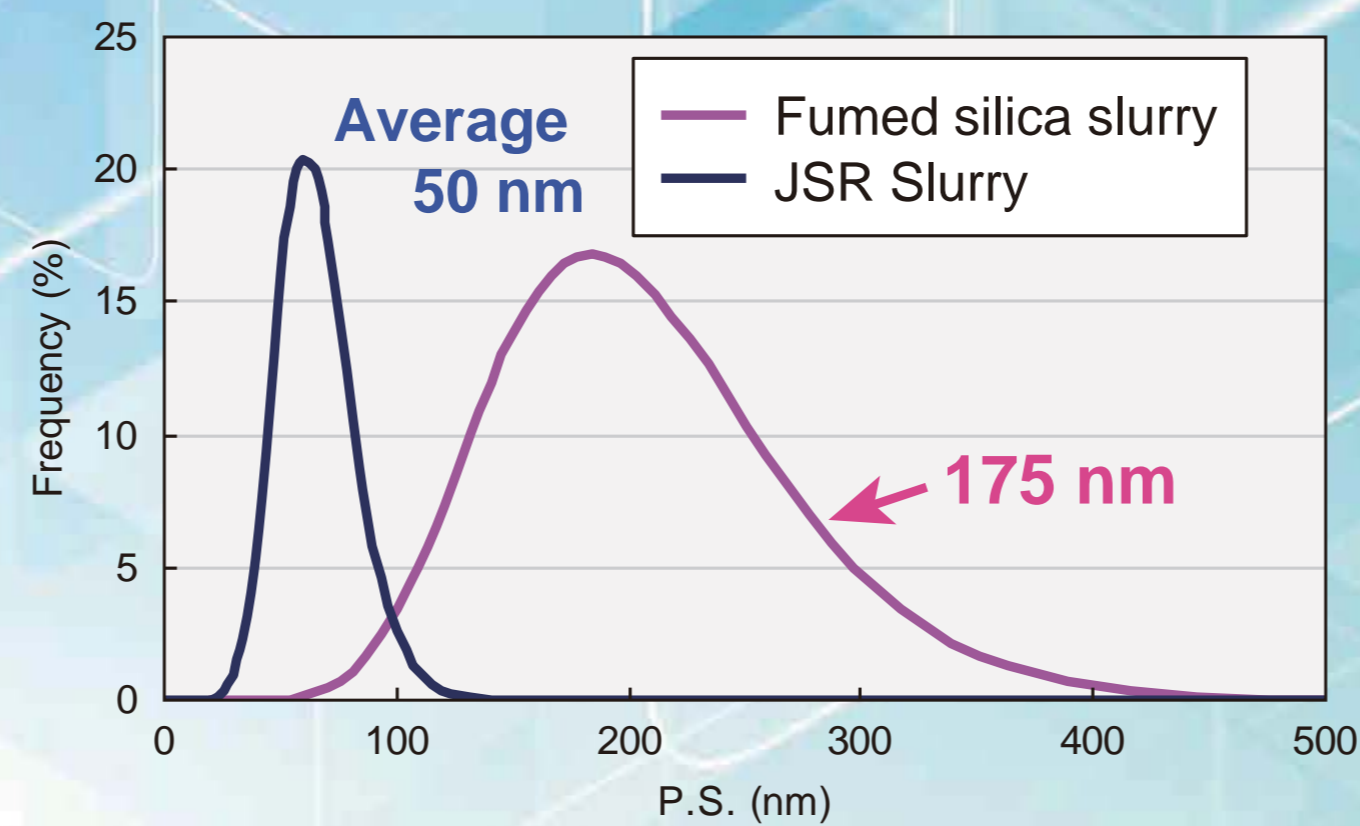


Fig.2. Particle size distribution

Typical value of slurry

Total Solid Content	wt %	3.1
pH		2.4
Viscosity	mPa·s	0.98
Particle Size	nm	50

Low defectivity with mono-dispersed colloidal silica

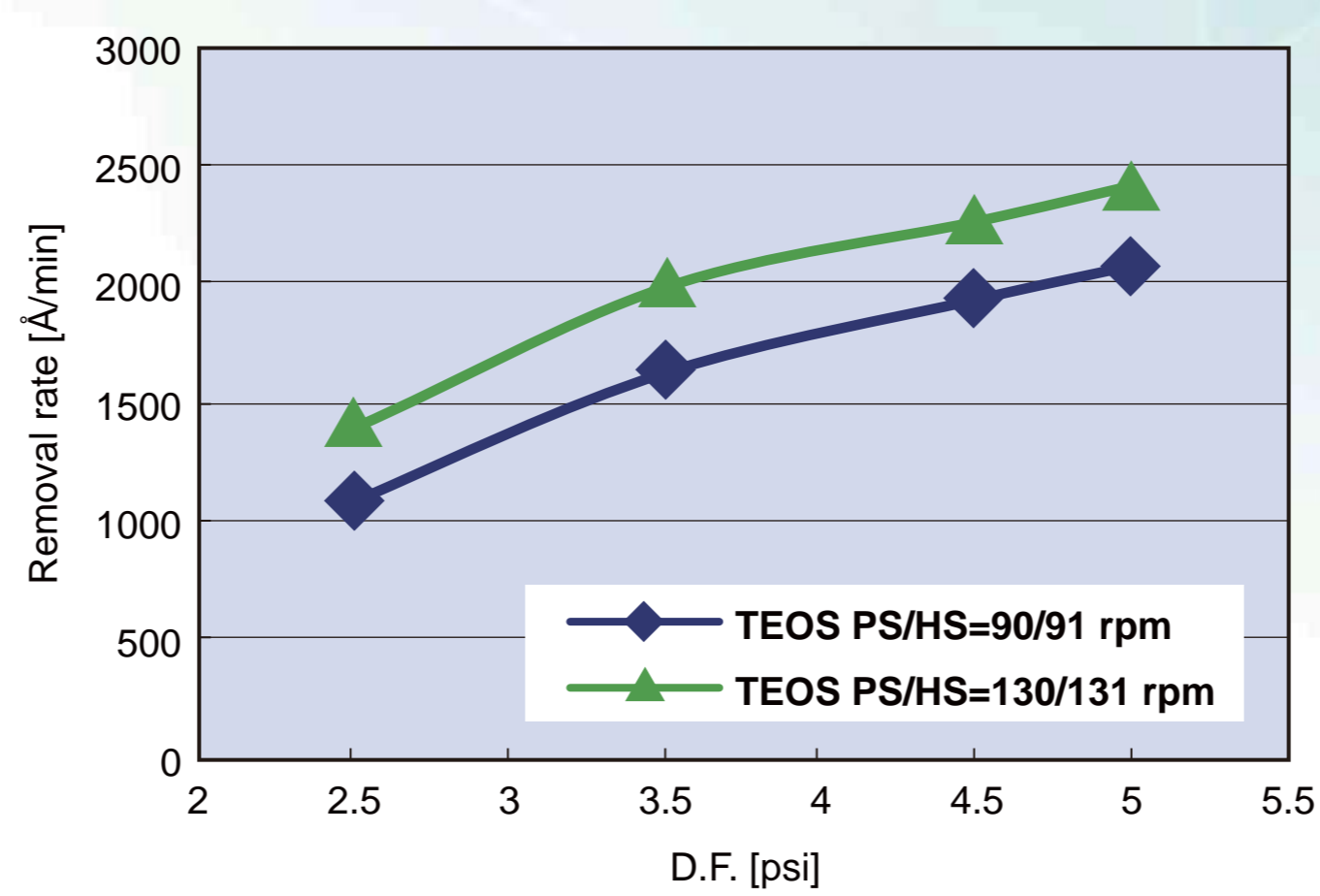


Fig.3. Relation between RR and downforce

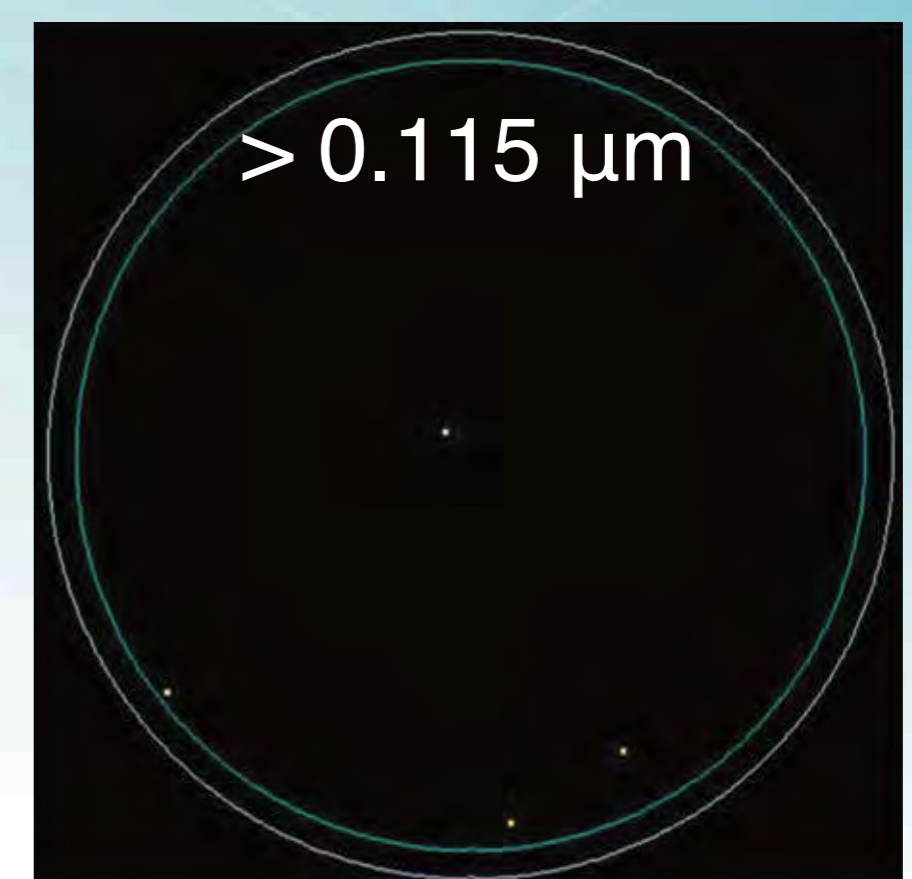


Fig.4. Defectivity data

Process condition
Tool : Reflection LK pad: hard pad
SFR 200 ml/min, PS/HS=90/91 rpm

W / Oxide / SiN selective slurry

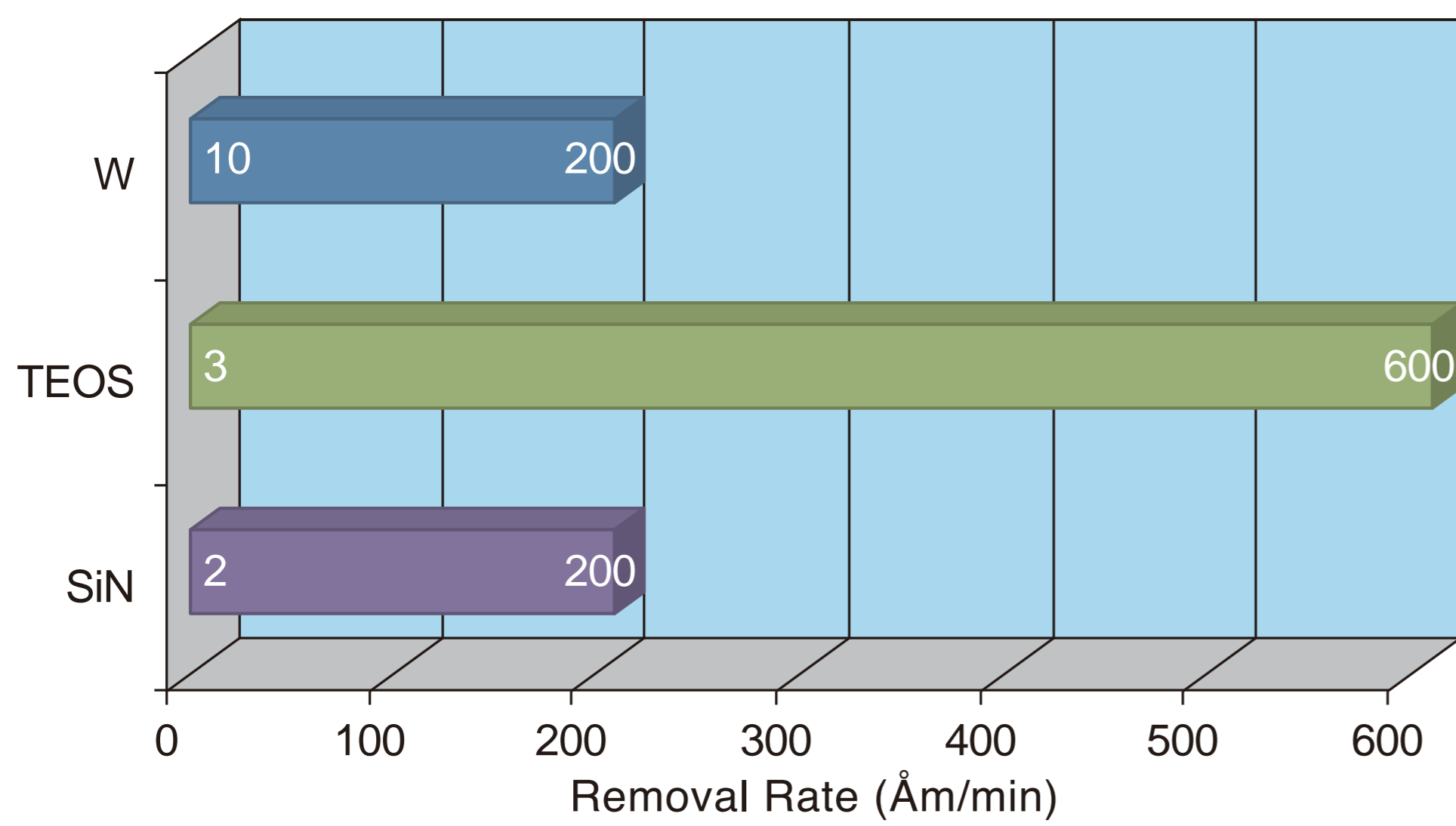


Fig.5. Removal rate knob

Good dispersion technique for good defectivity and controllable removal rate knob

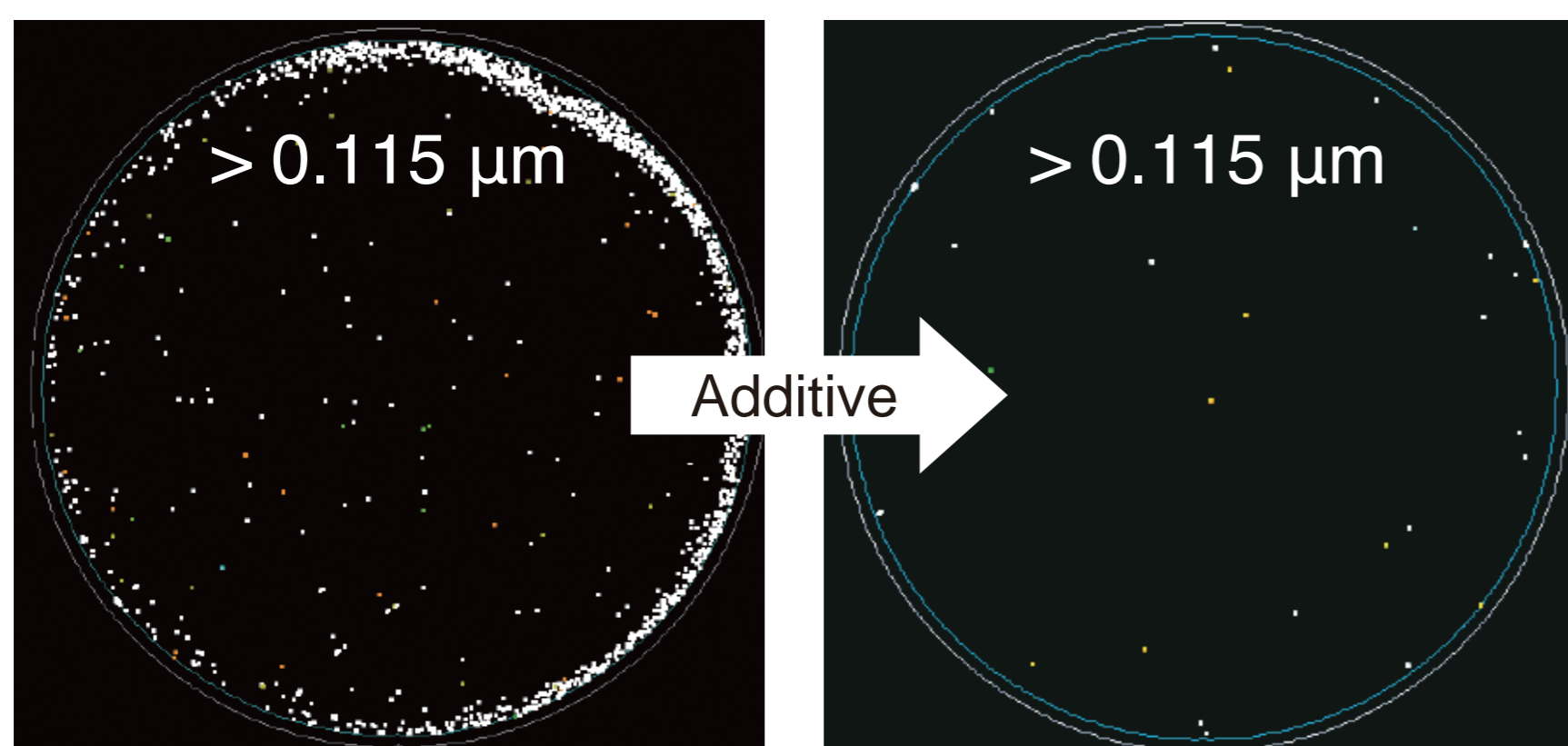


Fig.6. Defectivity results with and w/o additive

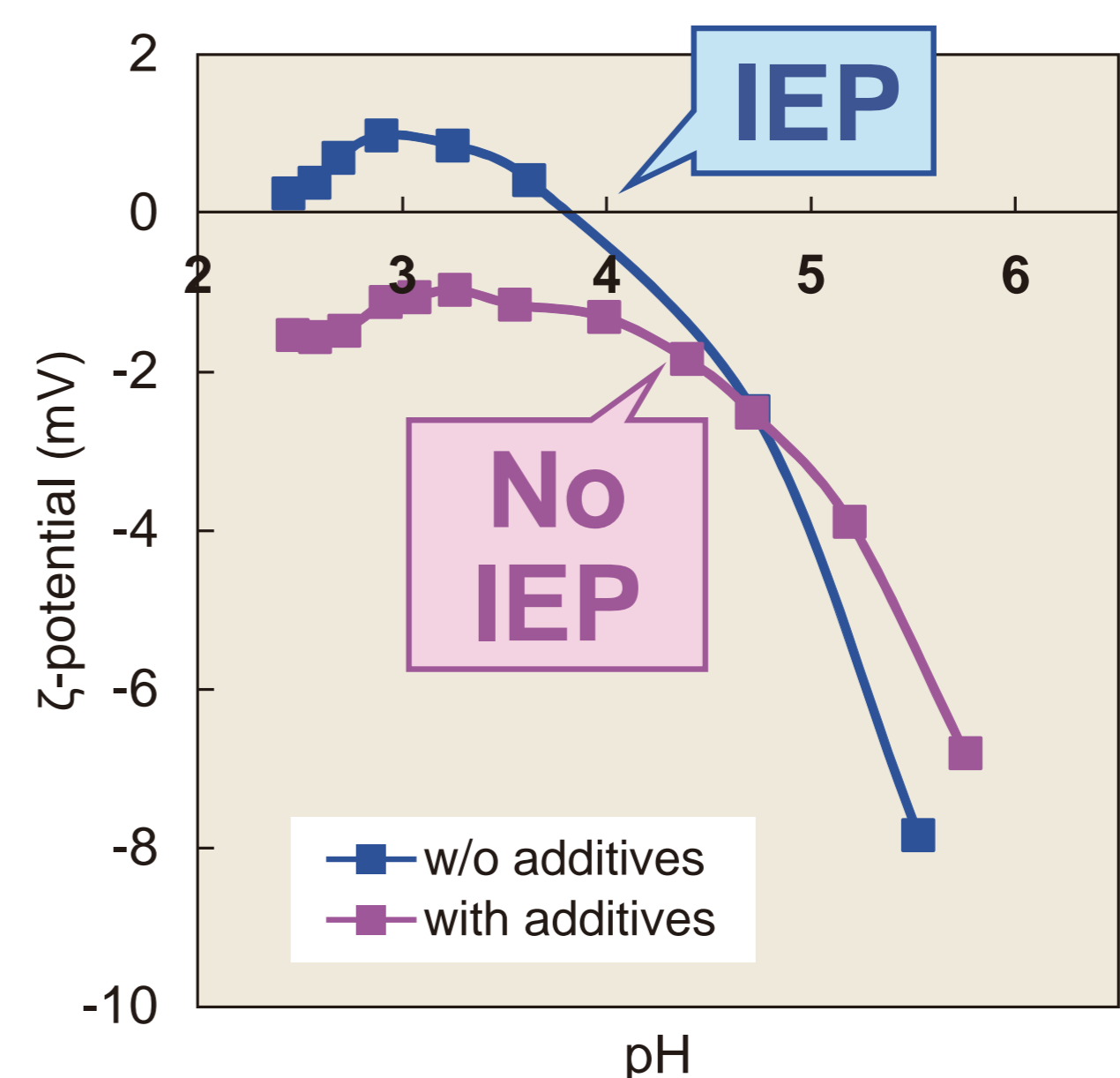


Fig.7. ζ-potential of slurry with additives