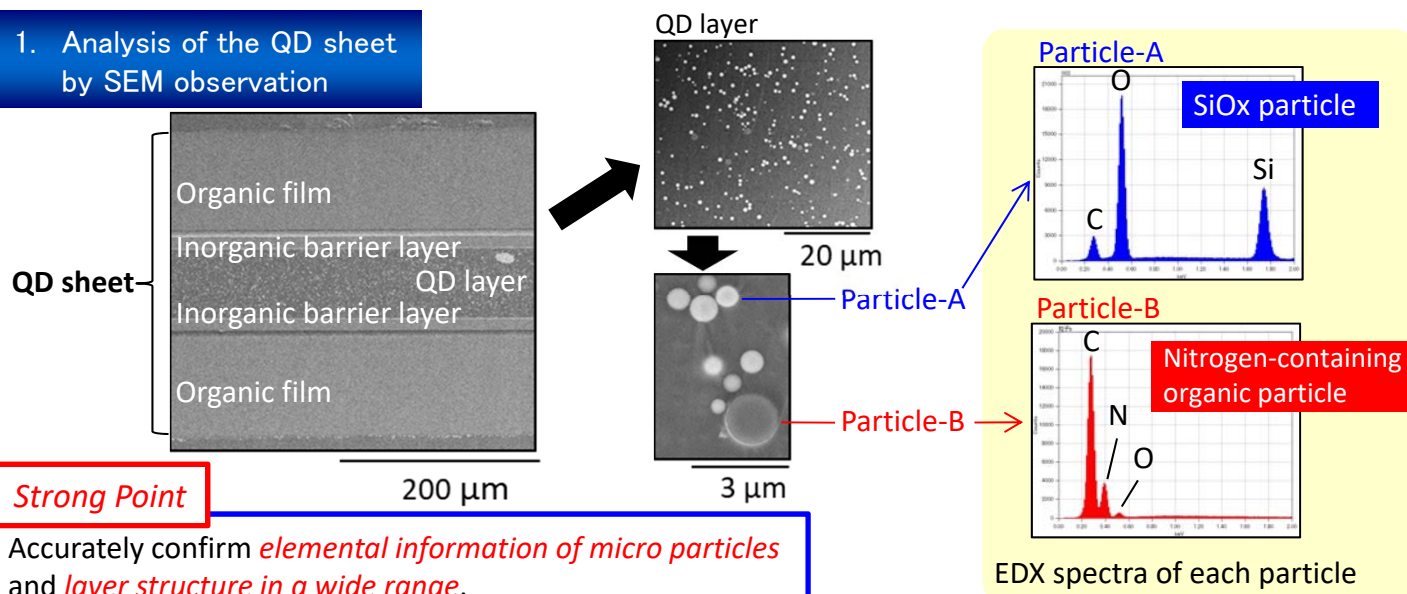


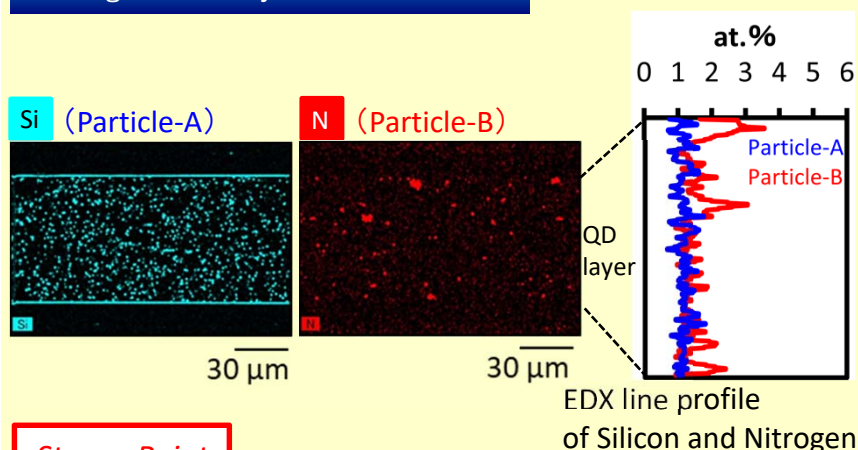
Evaluation of the QD sheet by SEM-EDX analysis and quantitative image analysis

About QD (quantum dot) sheet used for the backlight of the liquid crystal display, we developed technique to get the layer structure and the elemental information by SEM-EDX analysis. By special cross-section processing technique and the high efficiency EDX detector, we are able to offer the various quantitative information such as the particle diameter and the distribution.

1. Analysis of the QD sheet by SEM observation



2. Evaluation of the QD layer using the high efficiency EDX detector



3. Image analysis

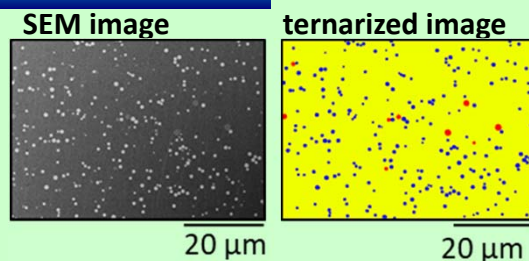


Table. Area ratio and particle diameter

	Particle area/ QD layer area	Average particle diameter
A	4.3%	0.8 μm
B	0.4%	1.2 μm

Strong Point

★Image analysis under the optimum conditions at any situation
Various quantitative information such as diameter, area ratio, site distribution ...

**Various
Information**

SEM image

SEM-EDX analysis

Image analysis

⇒

Layer composition, Thickness

⇒

Elemental information, Distribution

⇒

Diameter, Area ratio, Histogram, etc.