

CNT MEASUREMENT

分散液中の CNT 長さ測定

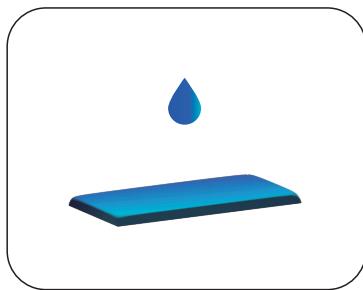
Measurement of CNTs length in dispersion

CNTをほぼ傷つけず、また難しい操作を必要とせず分散度合いや長さを測定する手法を確立した。使用する分散液は数[mL]とごく少量で、その分散液を希釈し平滑な板の上に滴下し乾燥させることで、CNTが凝集せず広がった状態を保持できる。

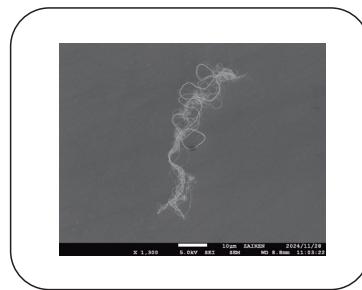
We have established a method to measure the dispersion and length of CNTs without damaging the CNTs and difficult operations. The dispersion used is a very small amount, only a few [mL], and the CNTs can be kept spread without agglomeration by dropping the dispersion onto a smooth plate and allowing it to dry.



分散液の希釈
dispersion



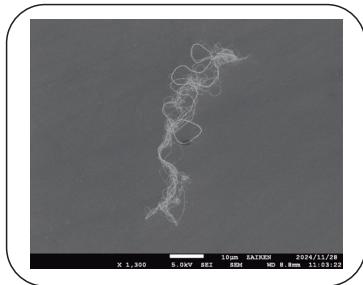
滴下・乾燥
Dripping and drying



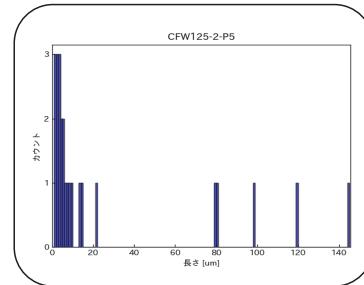
SEM観察・長さ測定
SEM observation and
length measurement

自社製 CNT 分散液の長さ測定

Length measurement of in-house CNT dispersion



FE-SEM画像
FE-SEM image



CNTバンドル長さのヒストグラム
Histogram of CNT bundle length

自社製CNT分散液をFE-SEMにて観察・撮影し、バンドル長さのヒストグラムを作製した。

長尺CNTの長さを保ったまま液中に分散していることが分かる。

A histogram of the length of CNT bundles was created by FE-SEM observing the CNT dispersion.

It can be seen that long CNT are dispersed in the liquid while maintaining their length.