

SEM - FEI Quanta 200 I

Date: 2019-10-22

Tags: SEM 07/10/2019Synth

Created by: James Bird

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Goal : Obtain micrographs appropriate for calculating a particle size distribution (PSD) and investigate vacuum oven-dried film morphology

Procedure :

- Samples (see Exp. 'SEM stub preparation for PSD IV' & 'SEM stub preparation for film characterisation') loaded into SEM chamber and vacuum acquired
- 15 kV accelerating voltage set for electron beam
- WD in range 10.2-11.3 mm
- Everhart-Thornley secondary electron (SE) detector employed

Results :

Sample	Filename prefix
Vacuum oven-dried film	Ti3C2 vac dried film

Film morphology imaged at various magnifications, again displaying the film's roughness. Film edge located, again clearly showing layered microstructure, as anticipated for restacked nanoparticles. Failed to image dropcast samples to give micrographs suited to particle size distribution analyses.

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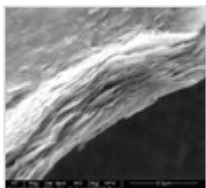
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Attached files

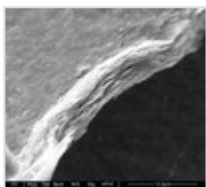
Ti3C2-vac-dried-film.tif

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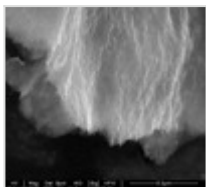
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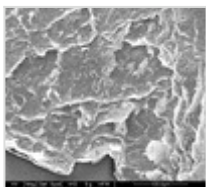
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Ti3C2-vac-dried-film_003.tif

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Link: <https://frankel-elab.manchester.ac.uk/experiments.php?mode=view&id=28>