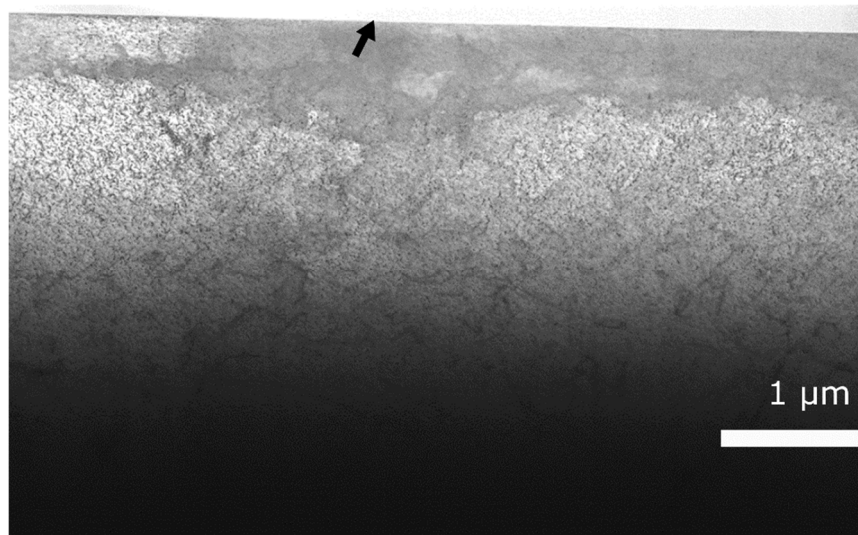


**Figure S1.** T-SEM image of the foil prepared from the position shown in Figure 6. The DTL fades to the left as shown in Figure 7a. The image here is taken left of the image shown in 7a.



**Figure S2.** T-SEM image of a foil prepared from the wear track of experiment 3. Position of the foil corresponds to the position of the foil shown in Figure 5b, i.e., before the formation of a distinct wear track. The foil was prepared in a second wear track to reproduce the result in an independent wear track.