

Electronic Supplementary Information

Figure S1. Scanning Electron Microscopy image of the product $\text{Li}_{0.6}\text{MoS}_2(\text{PAN})_{1.2}$ showing the lamellar nature of the product.

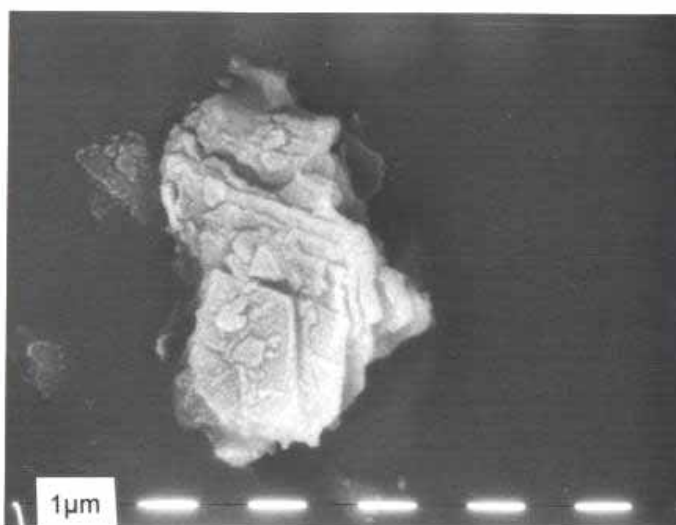


Figure S2. ^7Li MAS-NMR spectrum of the nanocomposite $\text{Li}_{0.6}\text{MoS}_2(\text{PAN})_{1.2}$ measured using LiCl as external standard. Only one symmetric, narrow signal is observed pointing to the presence an unique lithium species in the product.

