

Figure 1: A. Representative negative stain micrograph of *Synechocystis* sp. PCC 6803 photosystem I (PSI) which contains 2-ethyl, 1,4- naphthoquinone (ENQ). B. 2D classes obtained from 402 particles on 6 micrographs.

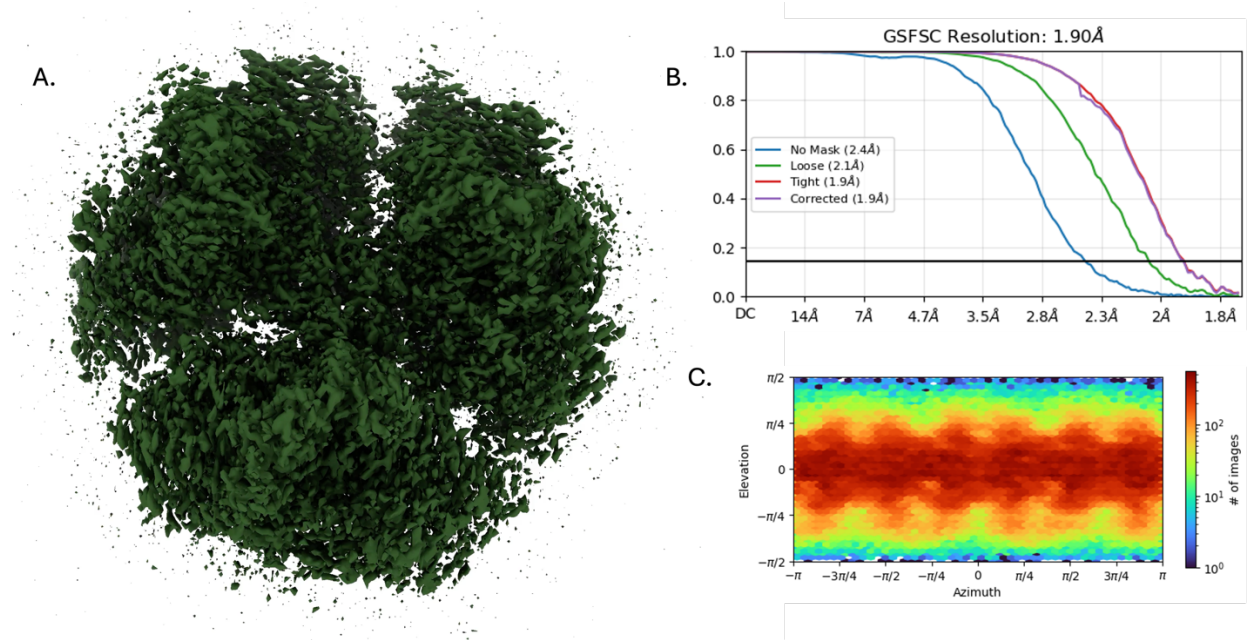


Figure 2: **A.** Density map from *Synechocystis* sp. PCC 6803 photosystem I (PSI) which contains PQ-9. **B.** GSFSC resolution curve for final homologous recombination job. **C.** View distribution plot for final homologous recombination job.

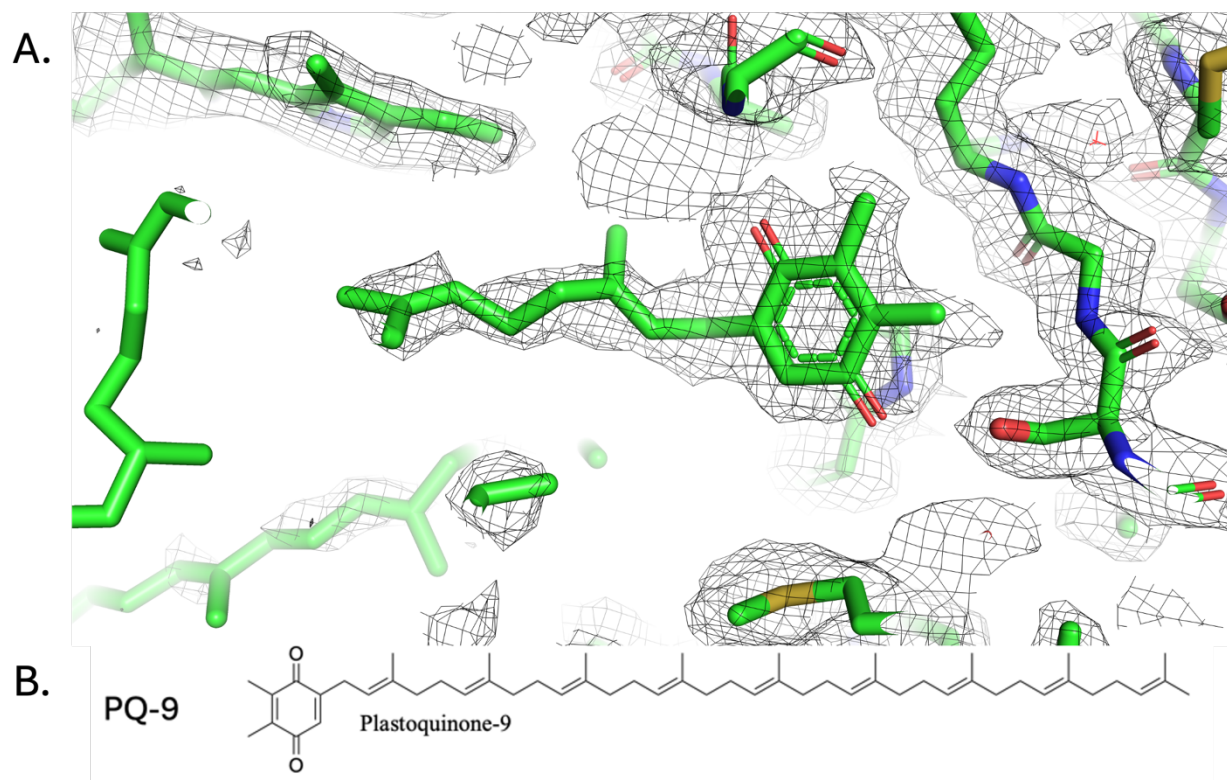


Figure 3: **A.** View of the head group of PQ-9 bound within the A-side electron transfer chain of PSI. Density map is fully sharpened at 1.90Å reported resolution. **B.** Structure of PQ-9 cofactor bound within this binding site.