Staining grid with uranyl acetate and lead citrate for TEM

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Ziru Li

Instructions for staining with uranyl acetate and lead citrate

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1. Filter uranyl acetate and lead citrate with syringe filter.
2. Cut off two big pieces of parafilm and attach it to the lab bench by pressing down the periphery of the parafilm.
3. Make two chambers putting the lid of a petri dish on the parafilm. Cover both chambers with aluminum foil (this isn’t crucial but helps). Place some NaOH pellets into the 2nd chamber that will be used for lead citrate staining.
4. Place big droplets of uranyl acetate onto the parafilm in the 1st chamber (# of droplets corresponding to the # of copper grids to be stained). Carefully place each copper grid onto the surface of each droplet. The side with the samples should be facing the staining solution. If done carefully, the grid will float on the droplet due to surface tension. Stain the sample for 15 minutes.
5. Rinse the sample by picking up the grid and gently drop DI H2O droplets through the grid with a squeeze bottle. This should be done over a waste container, of course.
6. Dry the grid on filter paper.
7. Again, place big droplets of lead citrate into the 2nd chamber and stain the samples as we did before with uranyl citrate, for 15 minutes.
8. Rinse the sample with DIH2O and dry the grids on filter paper.
9. The grids are ready to be viewed on TEM and are good for ~3 months, according to Alicia.