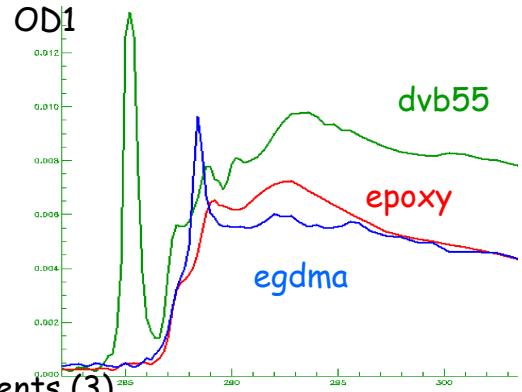


STACKS: component maps & color composites

Core shell particle: (Stover, 2003)
 Core: DVB55
 shell: 50% EGDMA
 Matrix: amine-epoxy (TTE)

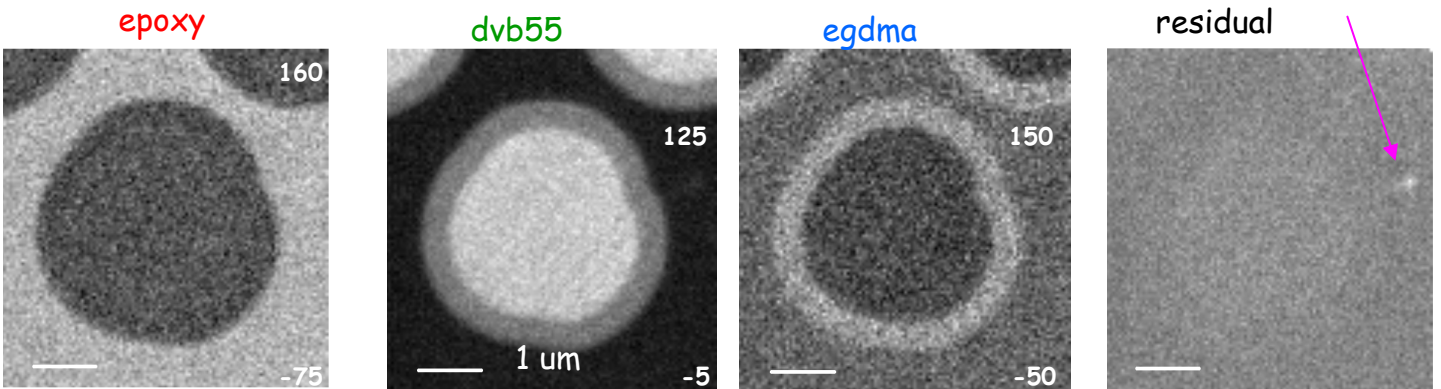
Test data: aligned, OD stack : **cs50_532_30928042od**

Reference spectra: **epoxy-resin-od1**, **dvb55-od1**, **egdma-od1**



A. Click **stacks~maps~SVD**

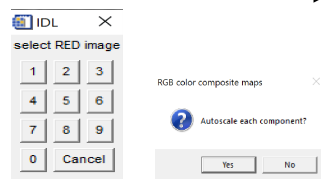
1. select stack
2. select parameter file OR indicate # of components (3)
 component 1: **epoxy-resin-od1** component 2: **dvb55-od1** component 3: **egdma-od1**
3. save parameter file: **resin-egdma-dvb-od1.par**
4. (no) to 'clip limits' [always see full component map; clip later]
5. (no) to 'save residual stack' (rarely useful)



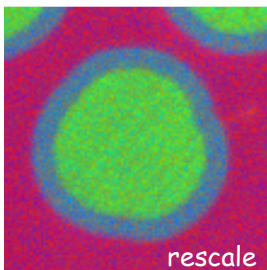
B. **Inspect maps and residual.** If residual is large, or structured (here there is a burn spot - radiation damaged epoxy), consider isolating that area and including in the fit.

C. Display~RGB composite

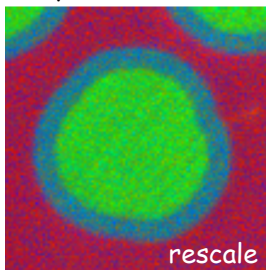
Select up to 3 components, for R, G, B; if do not want a color, click on a buffer that is empty or a spectrum



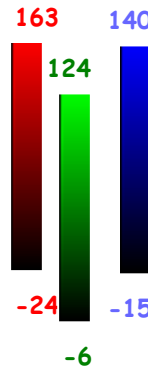
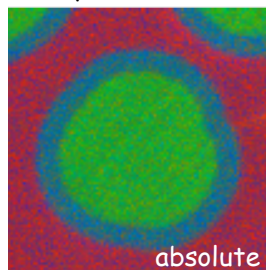
3-SVD fit



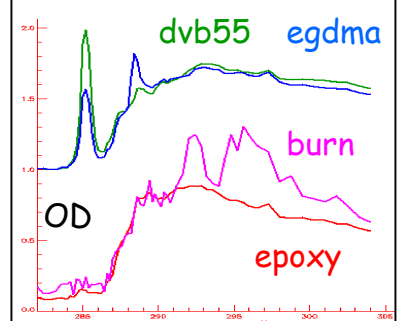
Clip -ve; 3-SVD fit



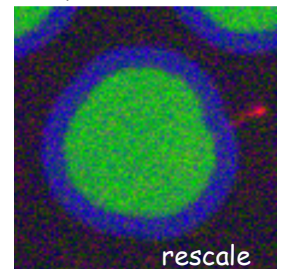
Clip -ve; 3-SVD fit



4-component SVD



Clip -ve; 4-SVD fit



D. **Images~clip signal~histogram** improves contrast, removes unphysical -ve results

