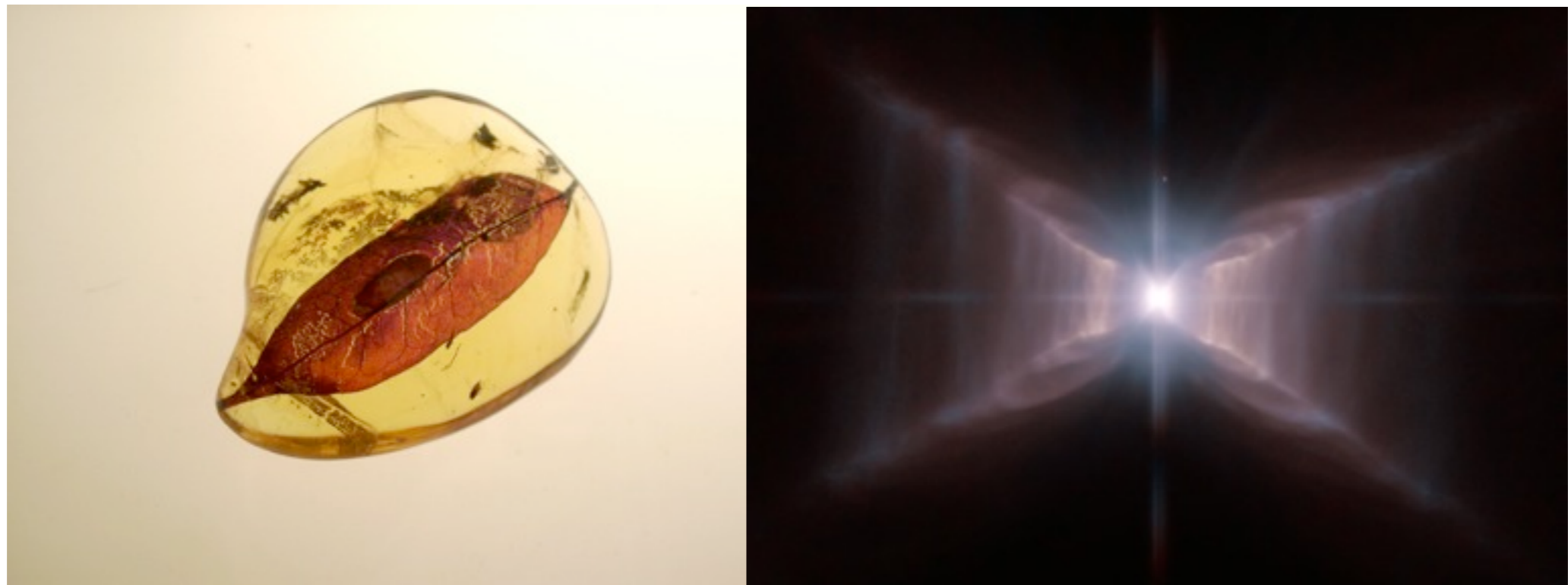




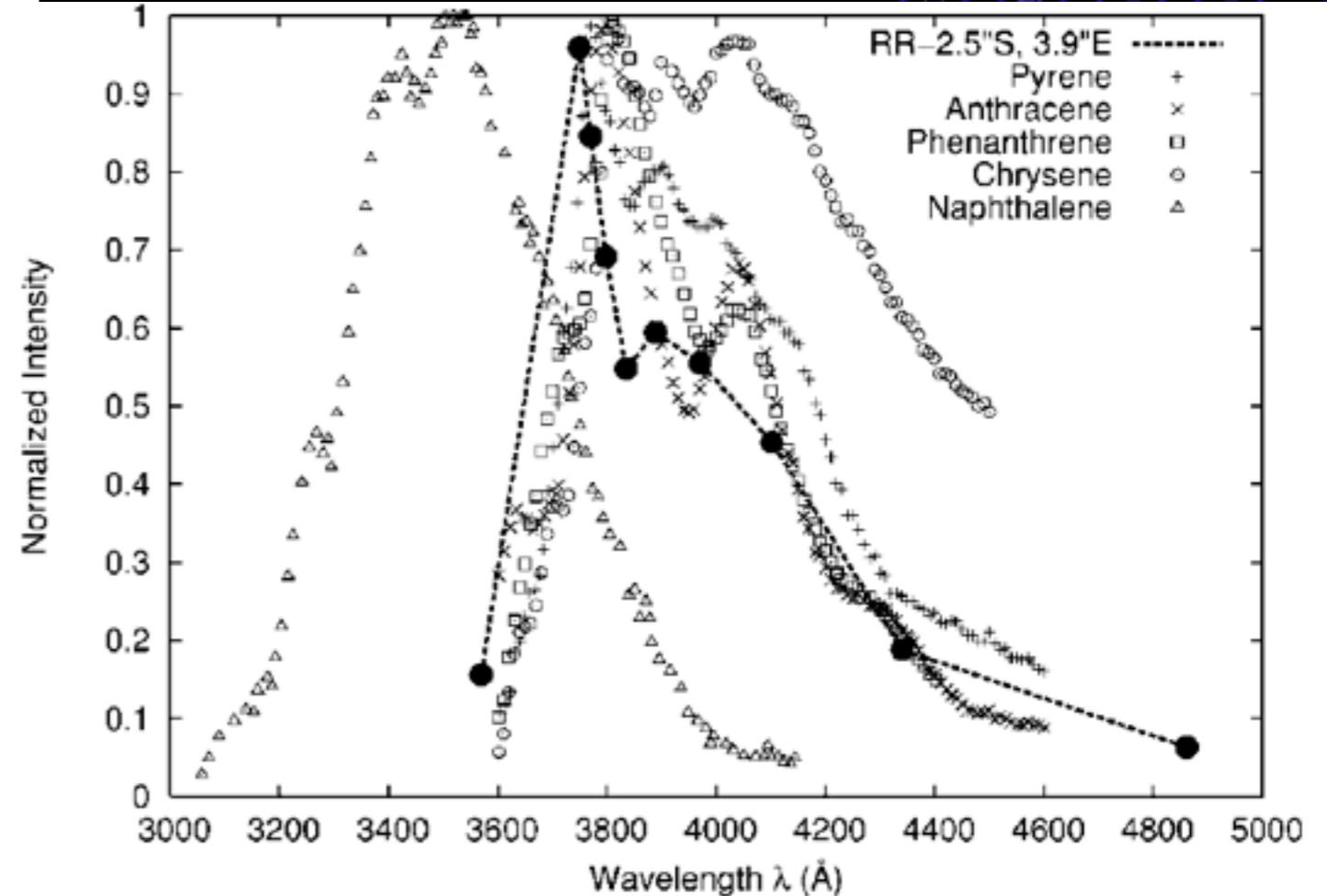
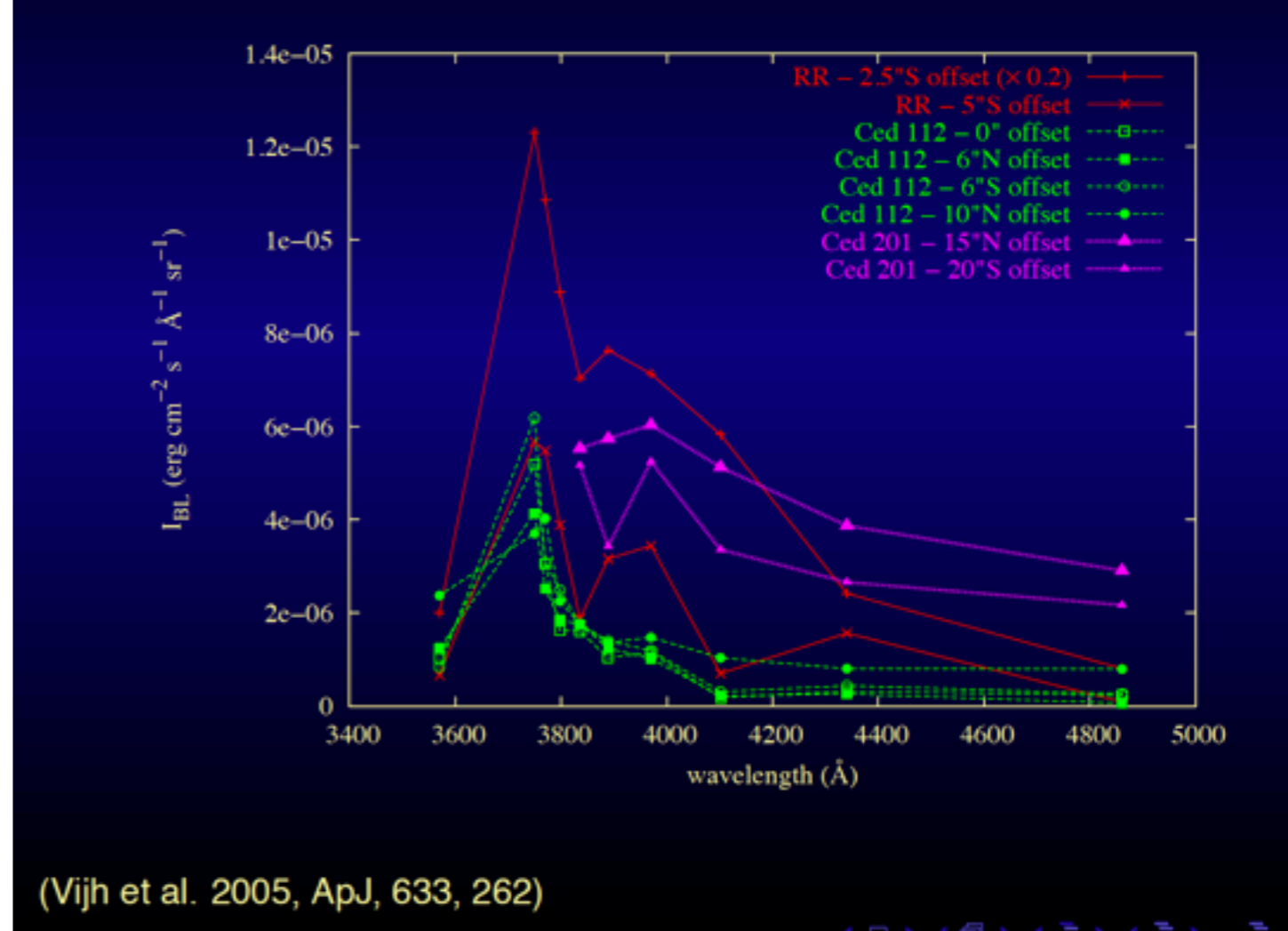
# Reflection nebular spectra and the rise of the Savanna 30Ma ago

Bob Fosbury

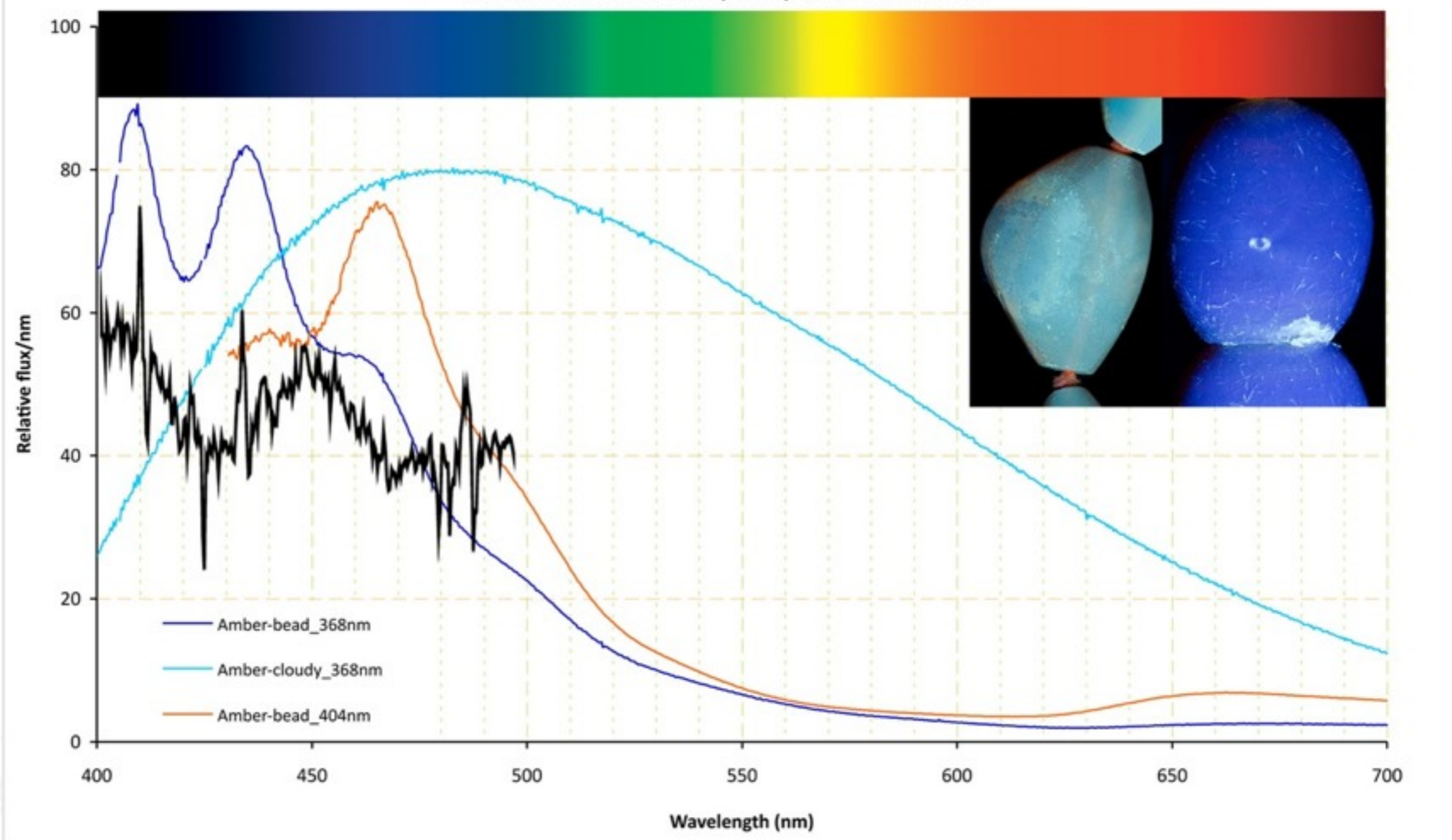


Most likely PAH identifications are with anthracene and pyrene — which both have a very high fluorescent efficiency for near-UV excitation

Technique useful for specific PAH size determination and identification — not possible with the IR bands



Amber bead fluorescence; RAEF; 19 November 2012



Comparison of blue amber and reflection nebula (Ced 201) fluorescence

PAH from forest fire smoke, probably captured by sap from the now extinct tree *Hymenaea protera* ~ 25 million years ago when the grasses were stealing land from the forests (low CO<sub>2</sub>, high O<sub>2</sub>)