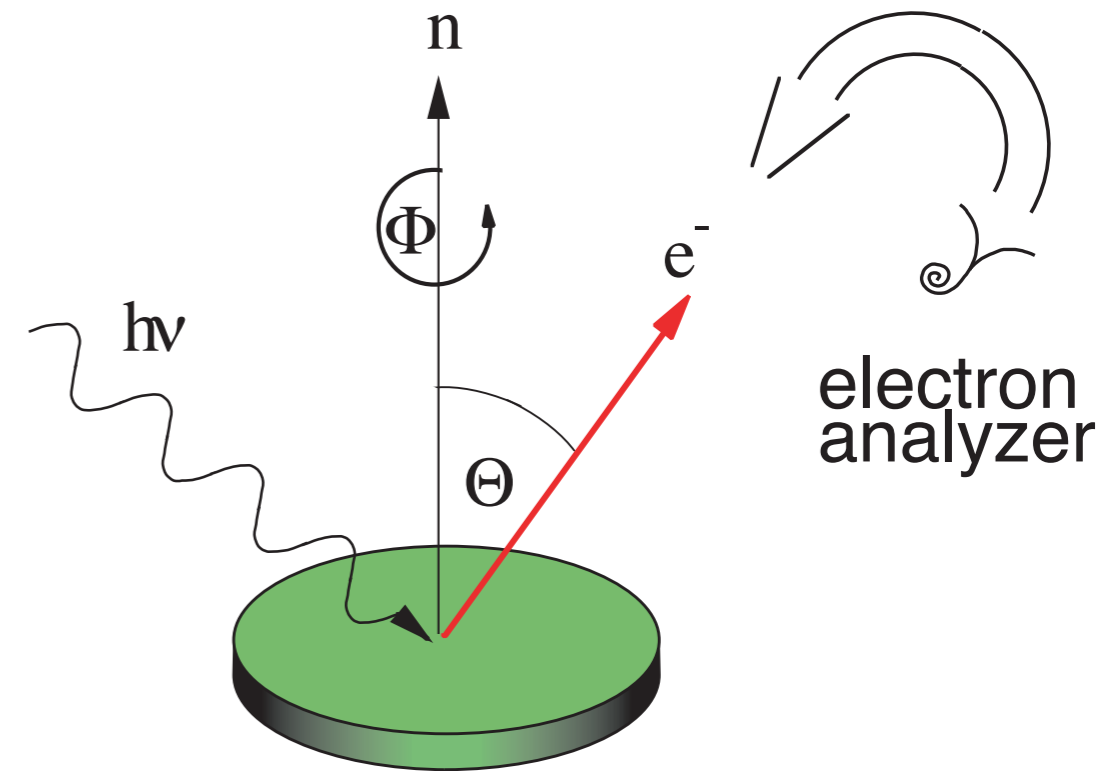
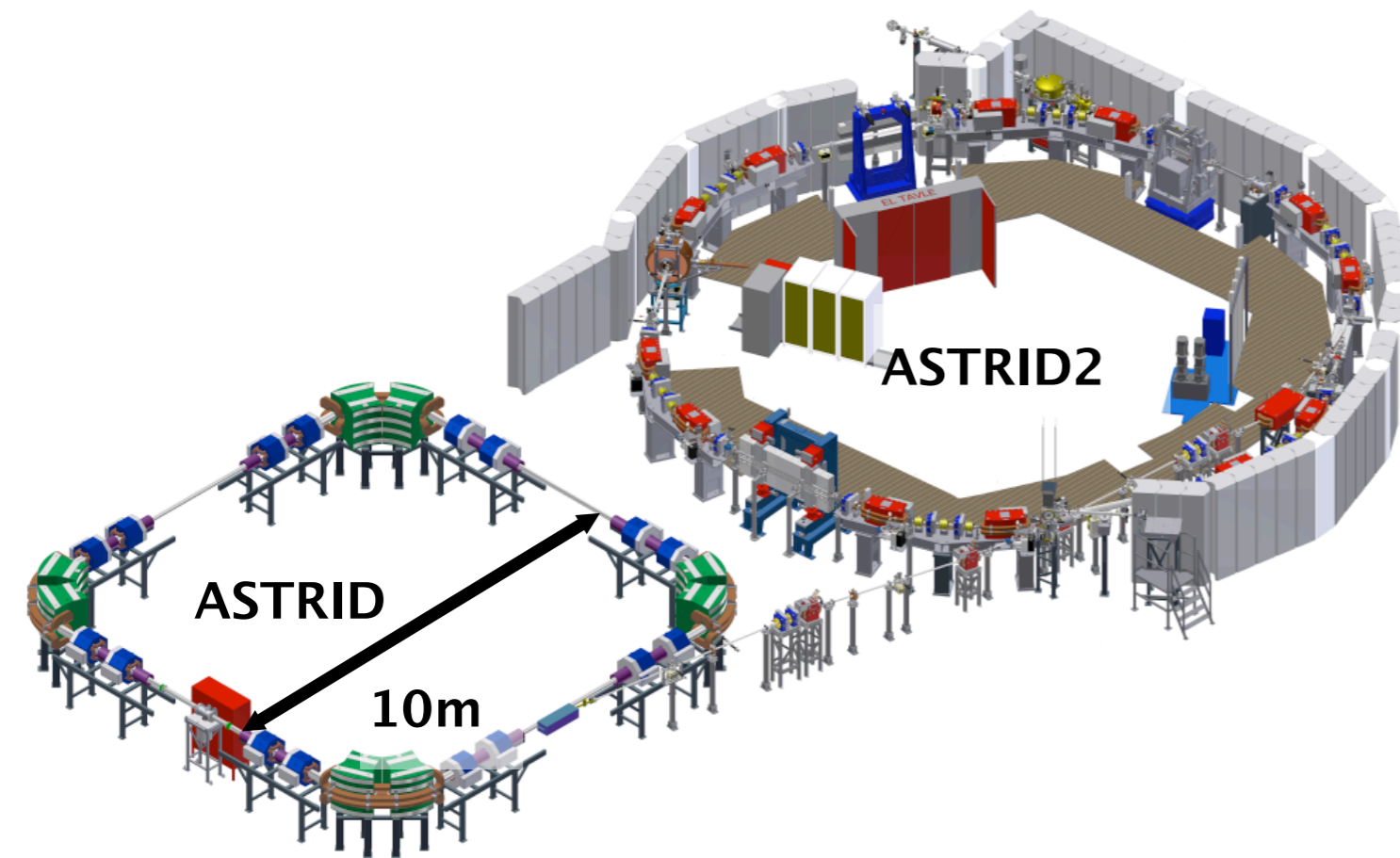
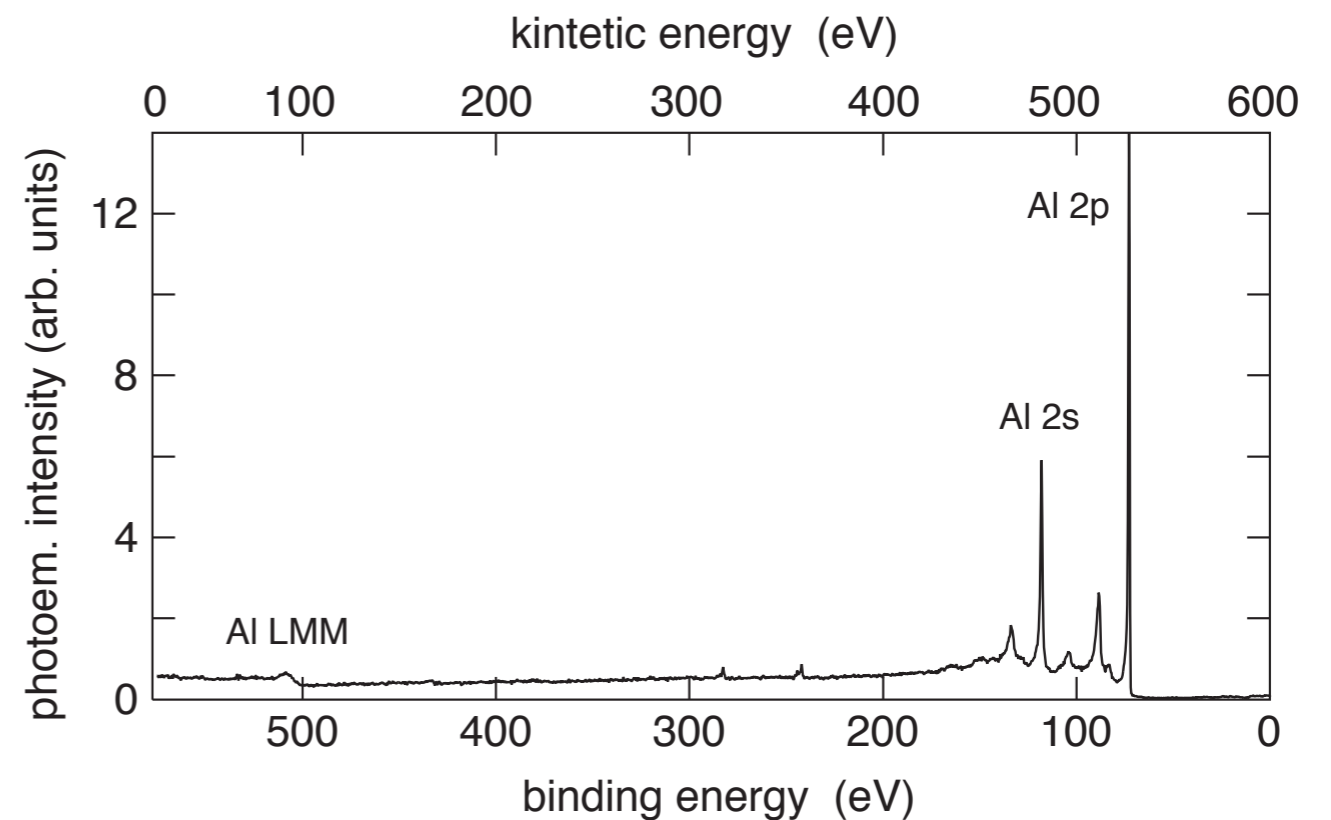


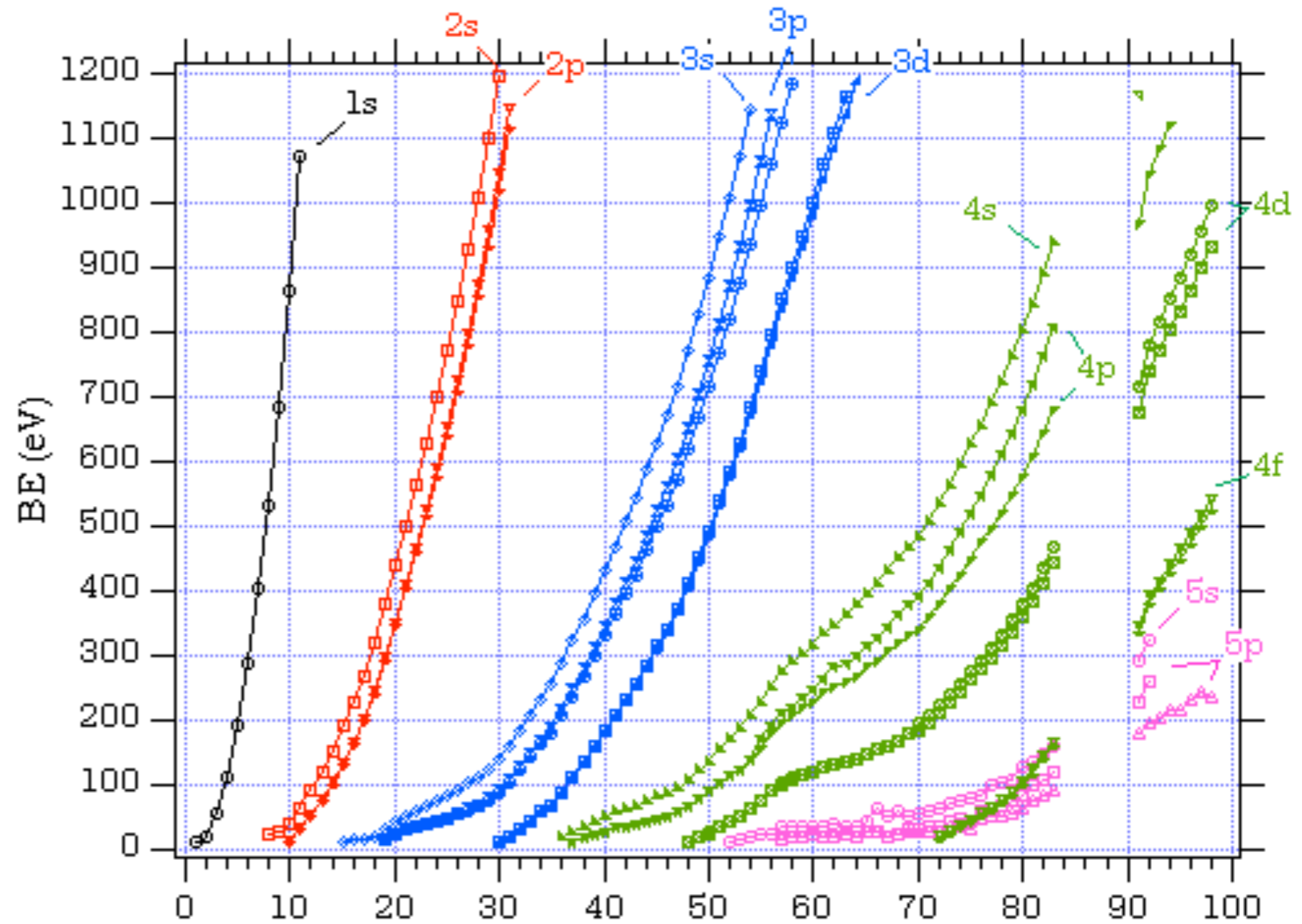
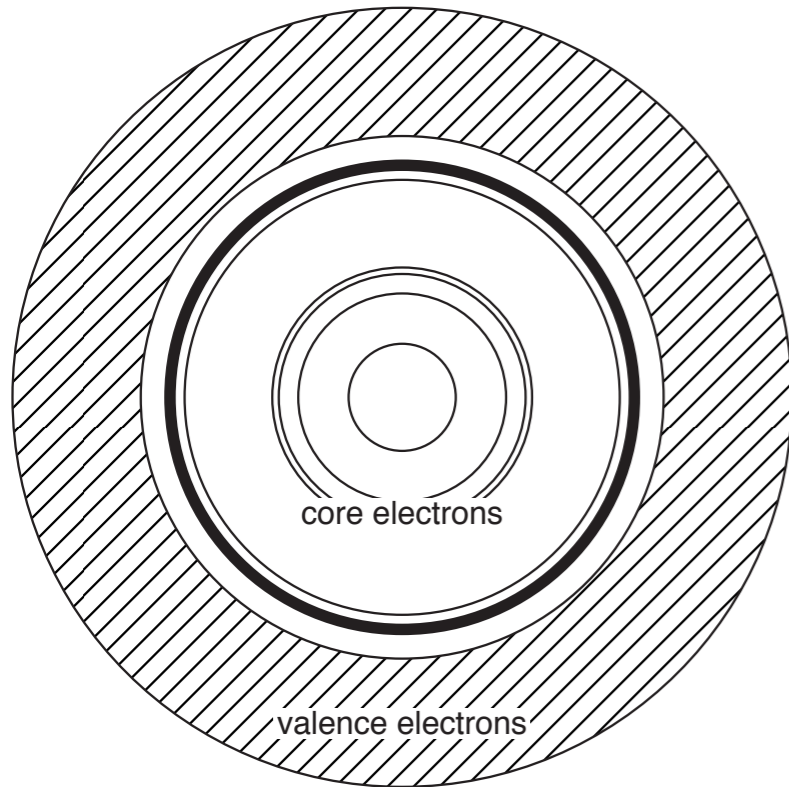
X-ray photoelectron spectroscopy (XPS)



- baseret på den fotoelektriske effekten
- høj opløsning med synkrotronstråling



Relation til Bohrs atommodel



$$E_{kin} = h\nu - E_{bin} - \Phi$$

fotoelektrons
kinetisk energi

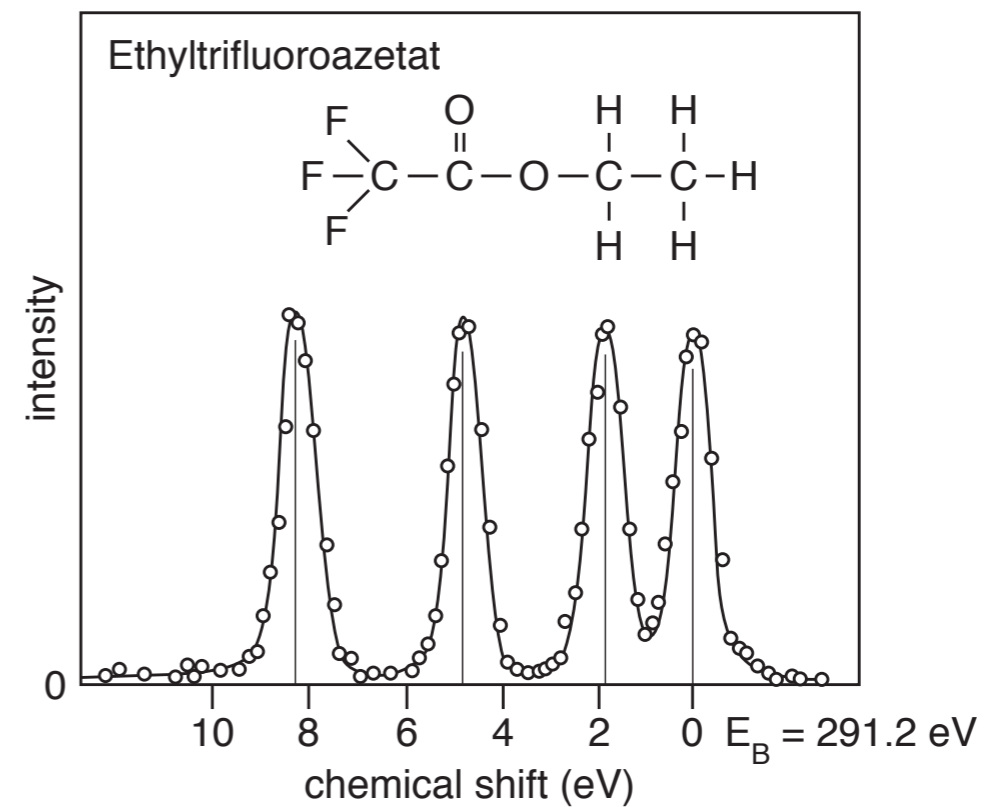
fotonenergi

bindnings-
energi

løsrivelses-
arbejde

anvendelser

- kemisk analyse i materialefysik og katalyse
- grundlaget til båndstrukturmåling med vinkelopløst fotoemission
- i fremtiden høj tidsopløsning (100 fs) på European XFEL i Hamborg



K.Siegbahn et al.,
Nova Acta Reg. Soc. Sci. Upsaliensis
Ser. IV. Vol.20 (1967)

