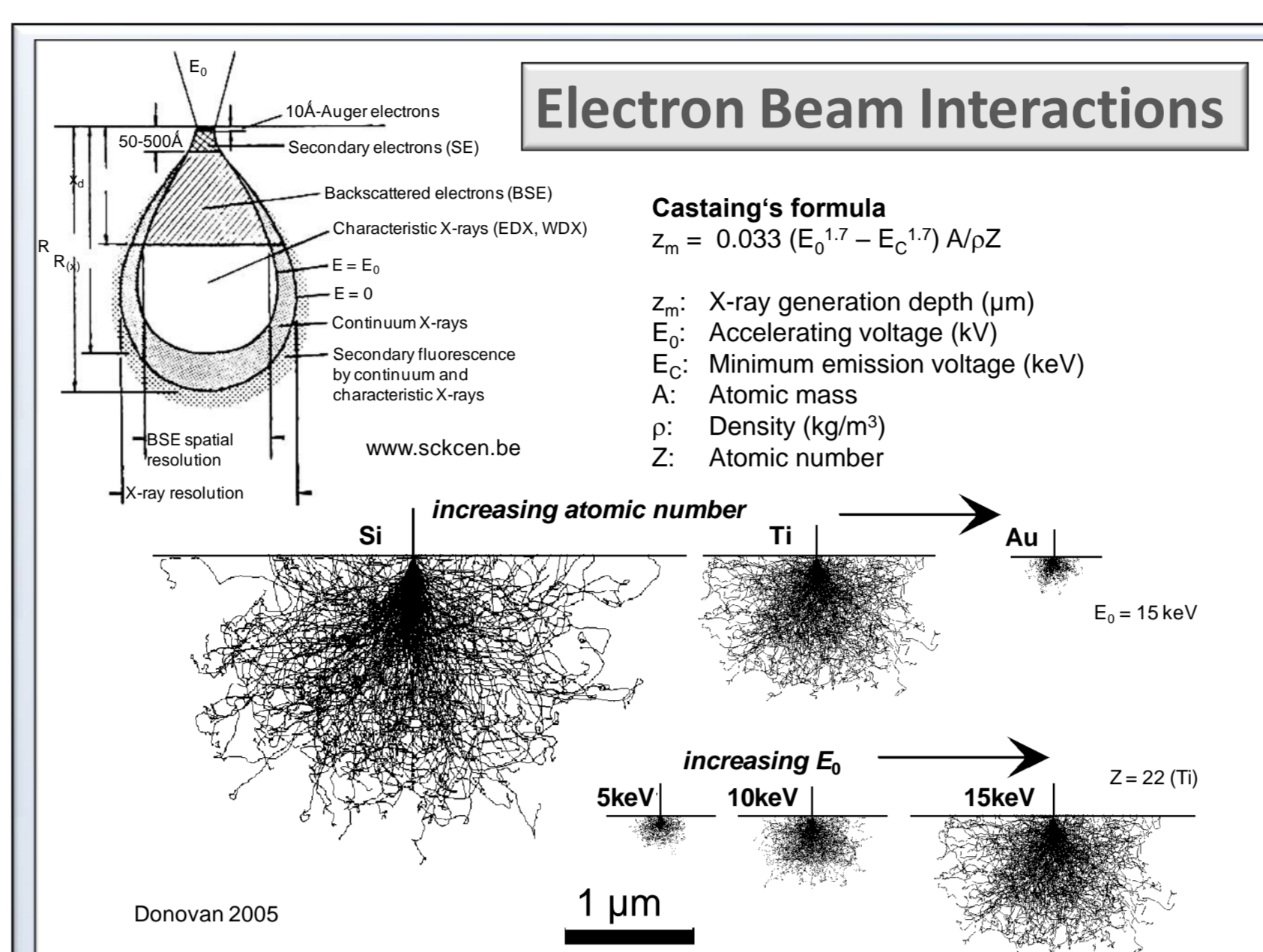
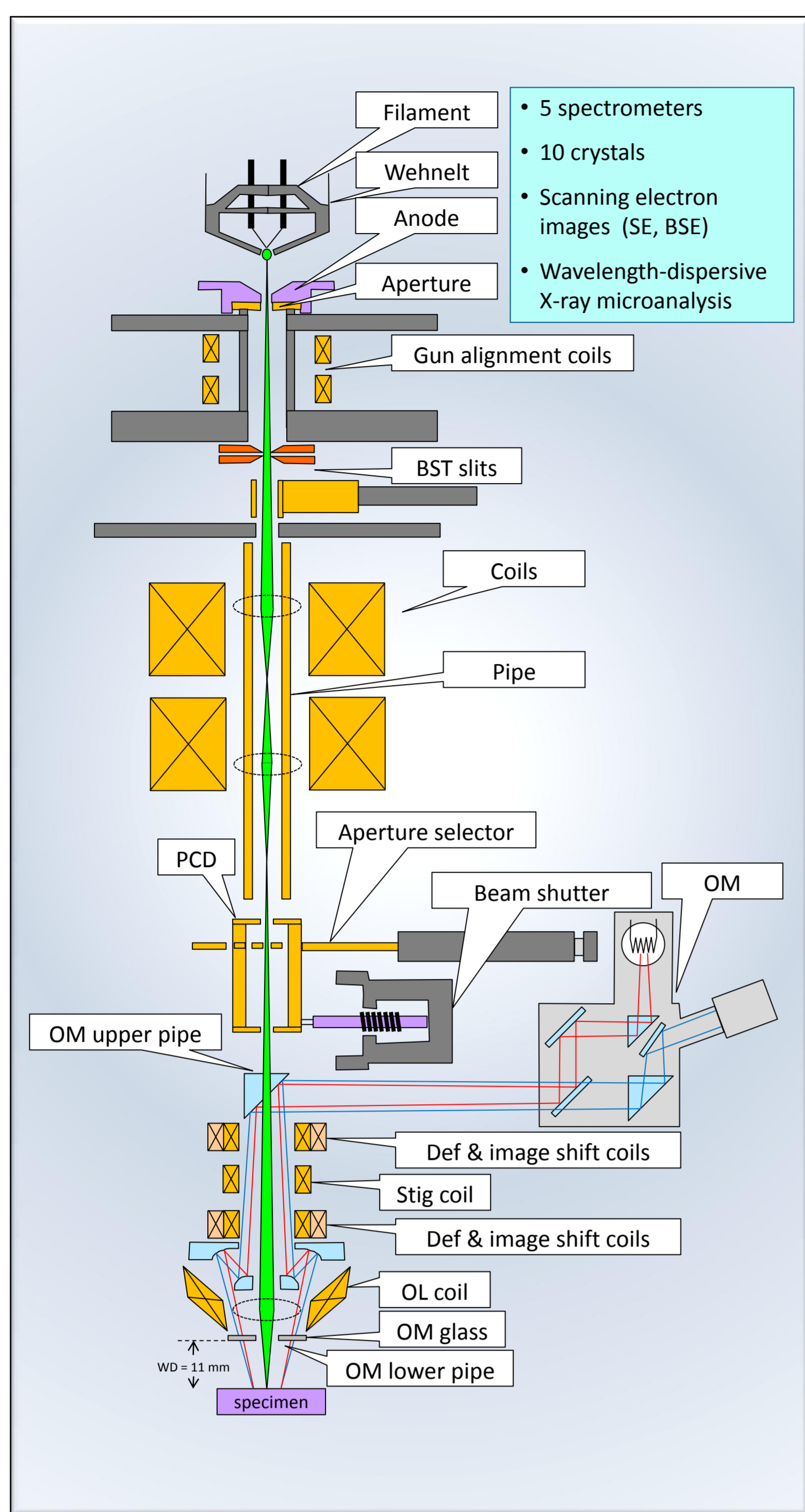


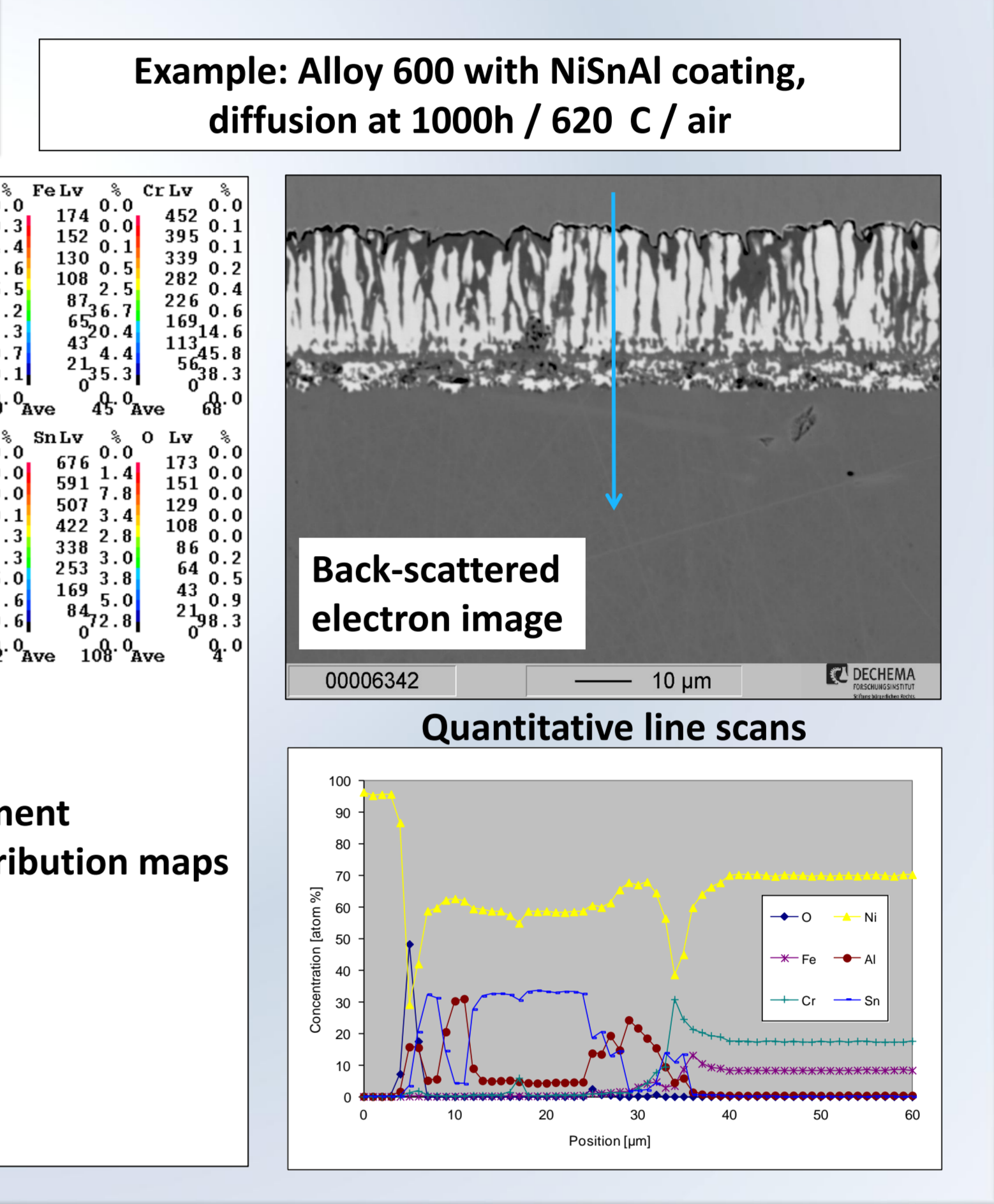
## Electron Probe Microanalysis (EPMA) Jeol JXA-8100



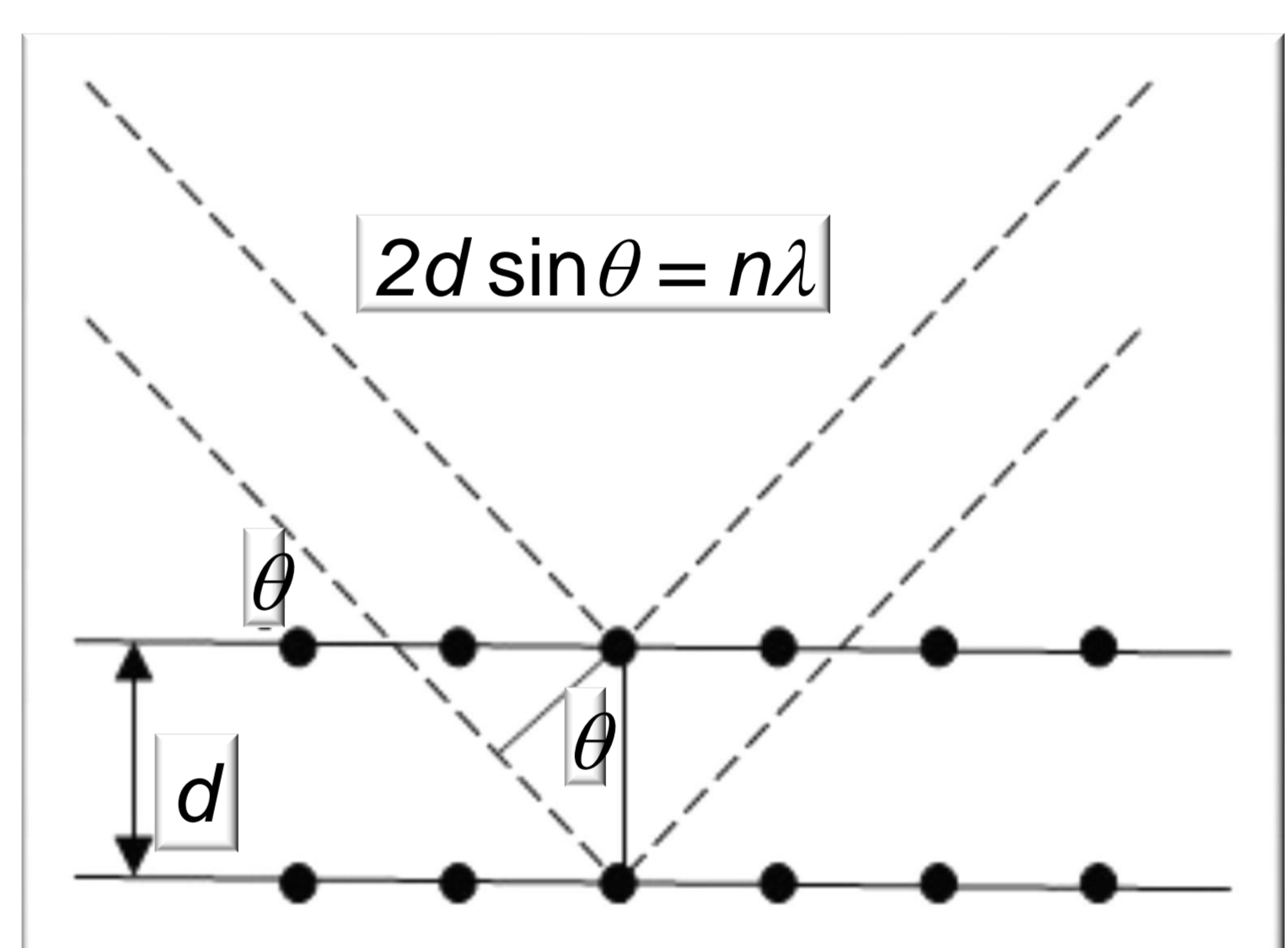
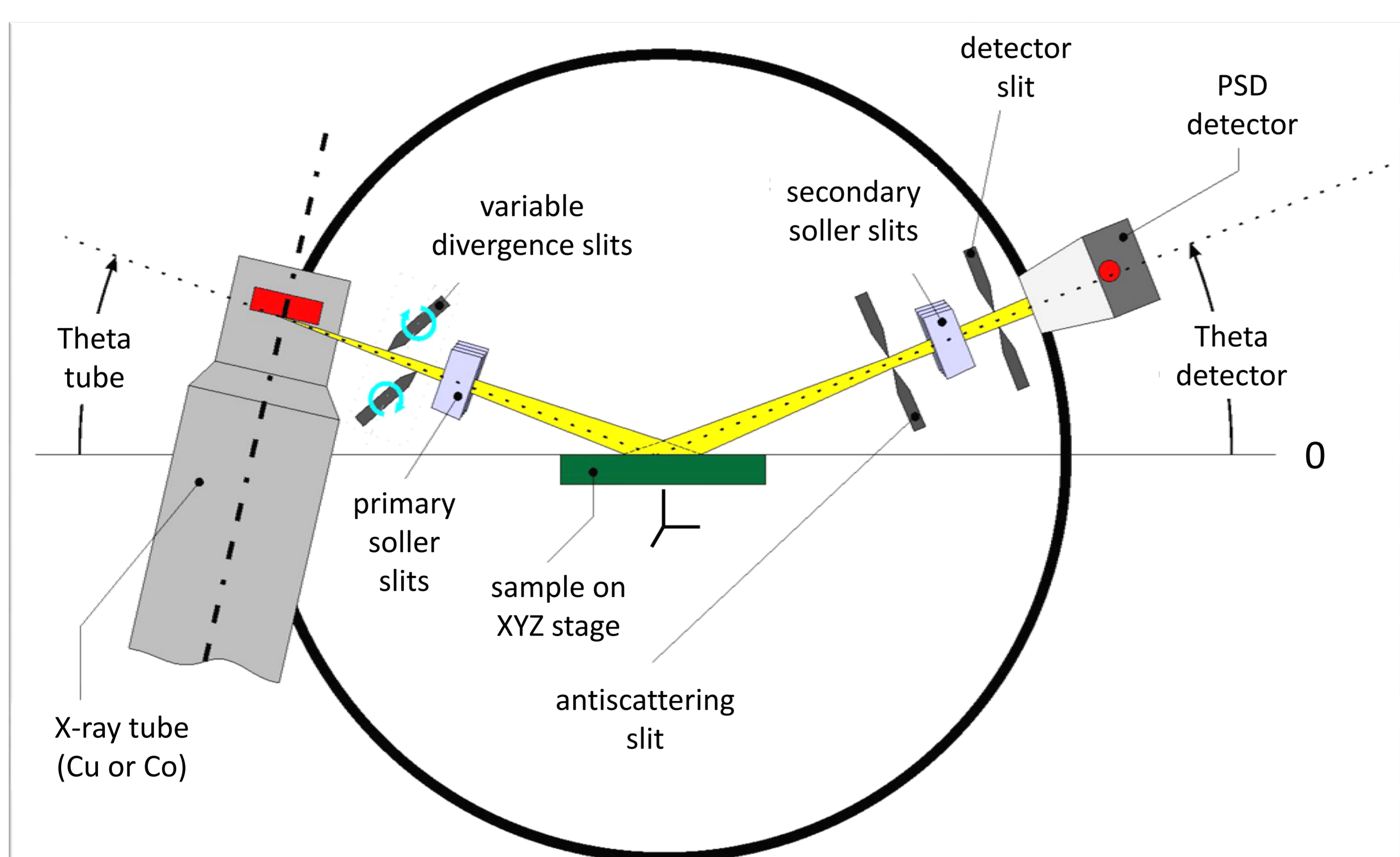
### Element Ranges of Analyzing Crystals

Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18													
Period 1	H	He																													
Period 2	Li	Be											B	C	N	O	F	Ne													
Period 3	Na	Mg											Al	Si	P	S	Cl	Ar													
Period 4	K	Ca											Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr				
Period 5	Rb	Sr											Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	Xe				
Period 6	Cs	Ba											Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn				
Period 7	Fr	Ra											Rf	Db	Sg	Bh	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn
Lanthanoids													La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb					
Actinoids													Ac	Th	Pa	U															

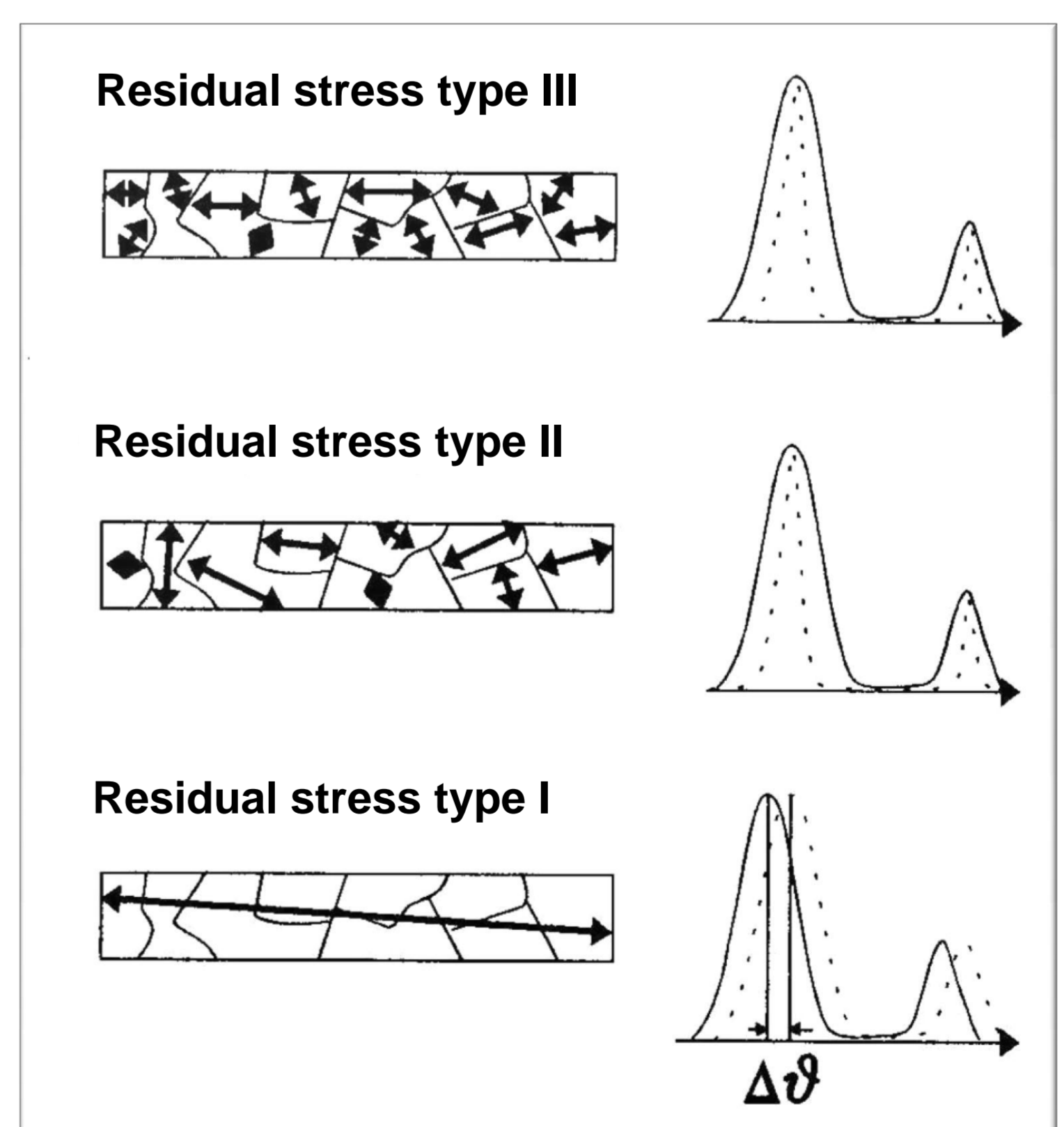
Legend: LDE1 (green), LDE2 (yellow), TAPJ (orange), PETJ (red), PETHS (purple), LIFJ (blue), LIFHS (pink).



## X-Ray Diffraction (XRD) Bruker D8 Advance



- ### Configuration options
- ✓ Standard Bragg-Brentano mode
  - ✓ Grazing incidence
  - ✓ Residual stress
  - ✓ Göbel mirror
  - ✓ Cu or Co X-ray source
  - ✓ Line focus / point focus
  - ✓ XYZ stage
  - ✓ High temperature stage (max. 1100 C)



**Example: Phase analysis of Alloy 600 with NiSnAl coating, diffusion at 1000h / 620 C / air**

