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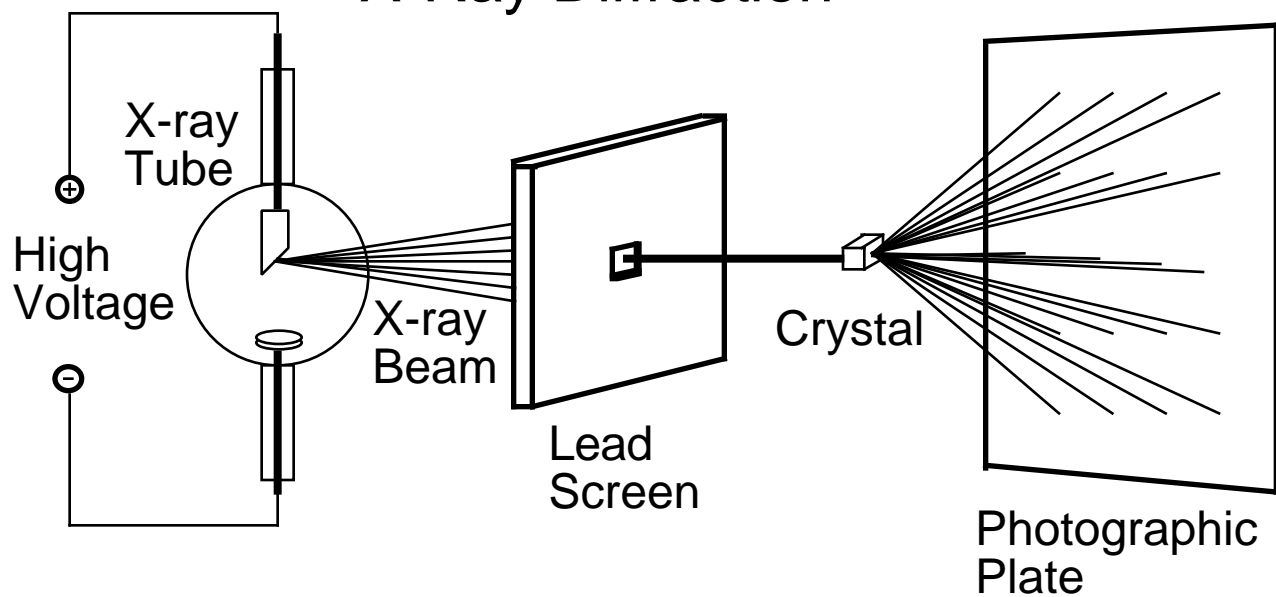
Laboratory Safety

DISCLAIMER

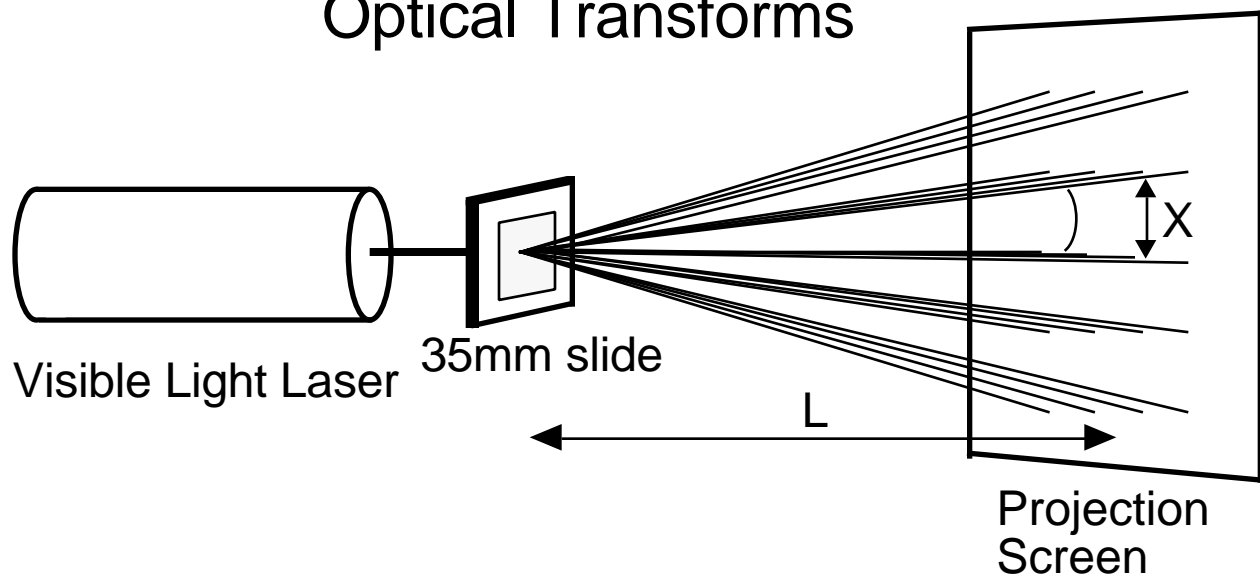
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Structure Determination

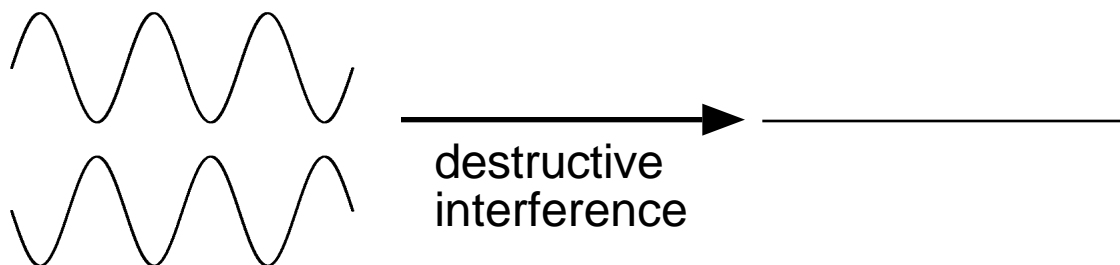
X-Ray Diffraction



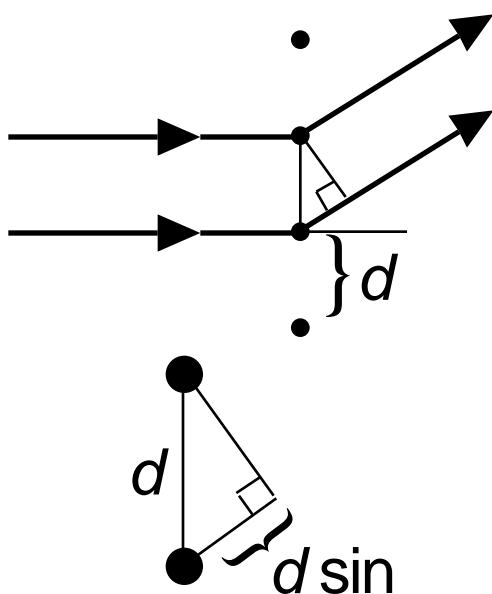
Optical Transforms



Diffraction Conditions

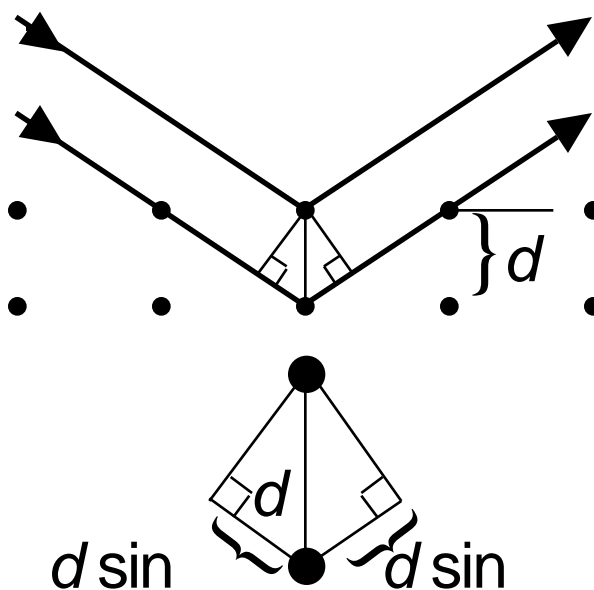


Fraunhofer diffraction

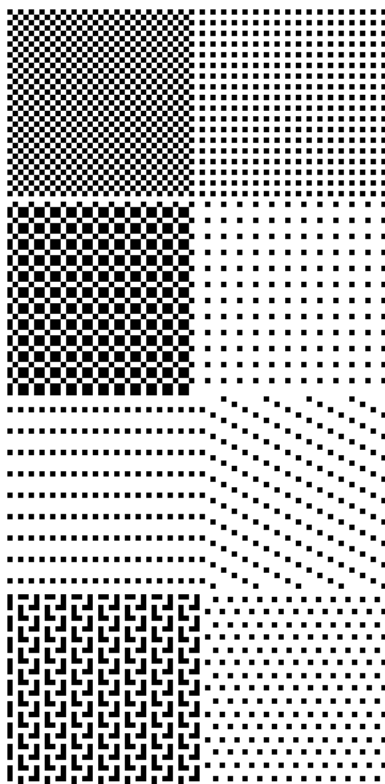


For constructive interference,
 $d \sin \theta = n$

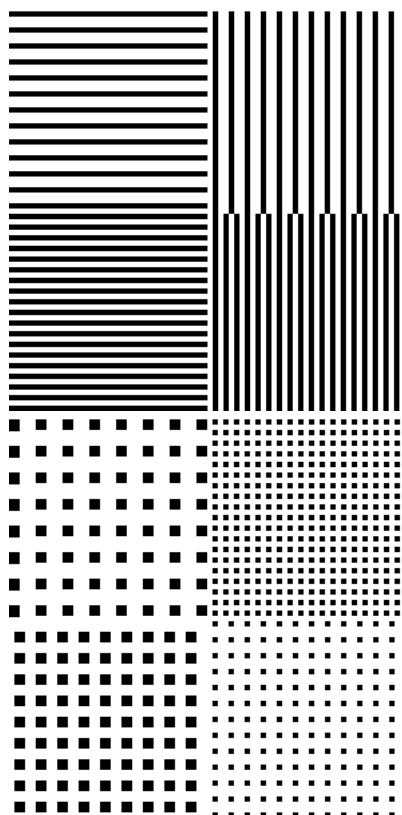
Bragg diffraction



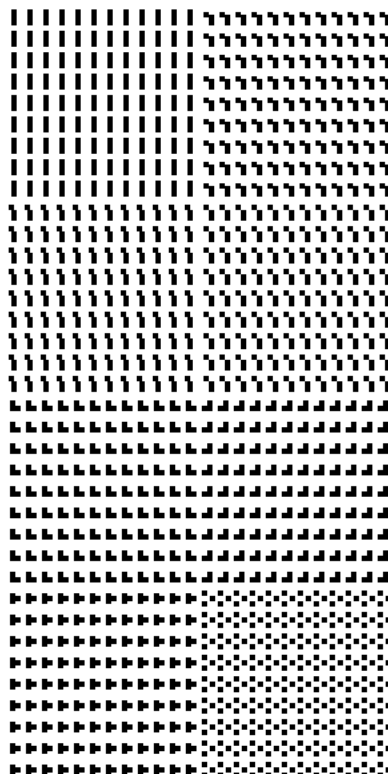
For constructive interference,
 $2(d \sin \theta) = n$



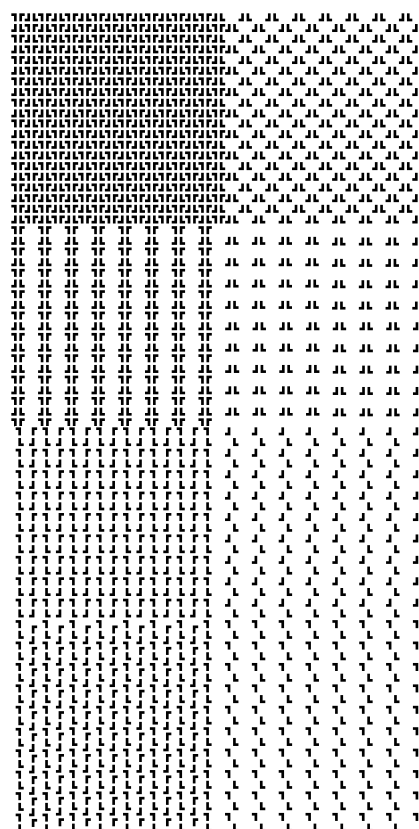
ICE



ICE

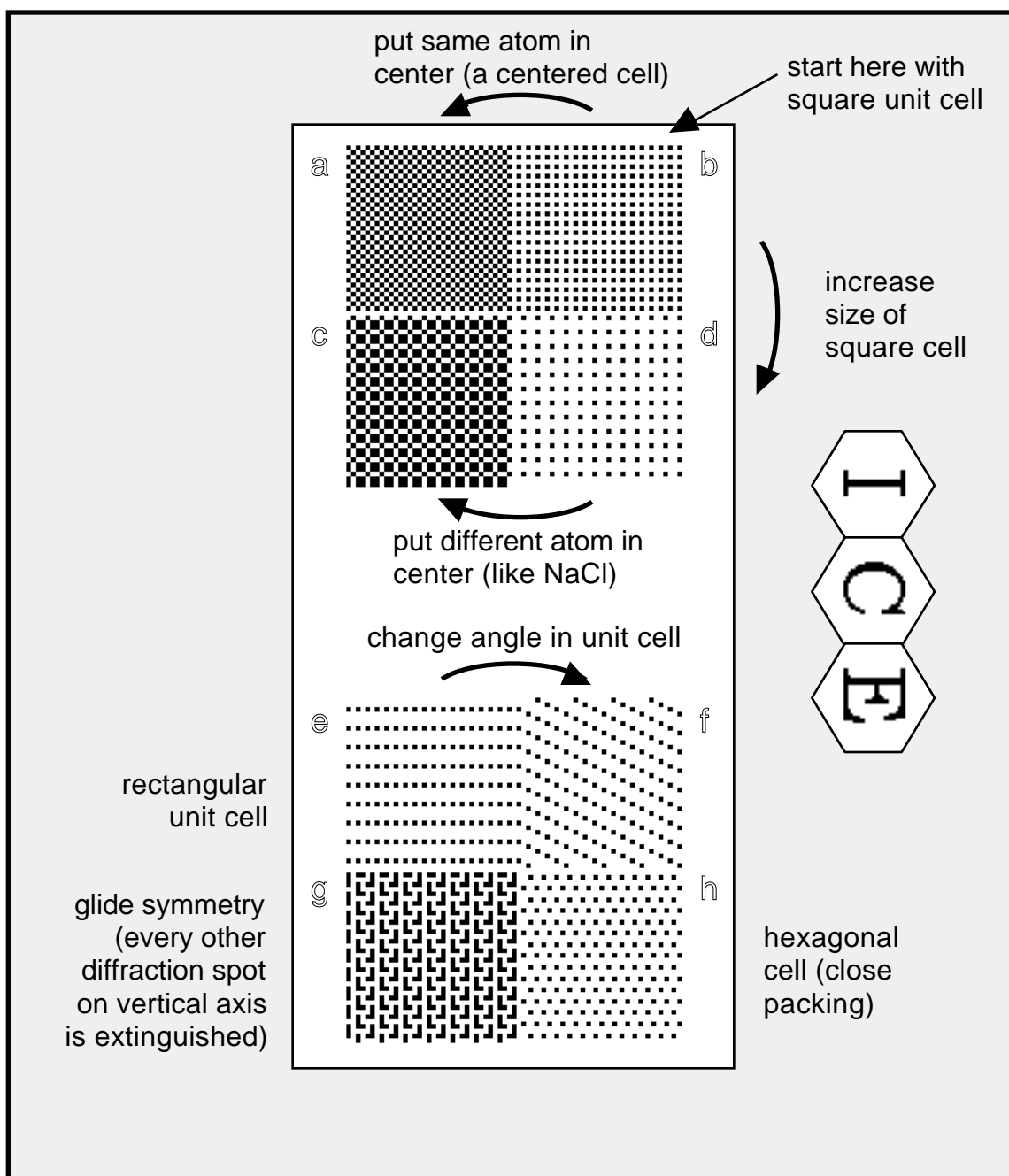


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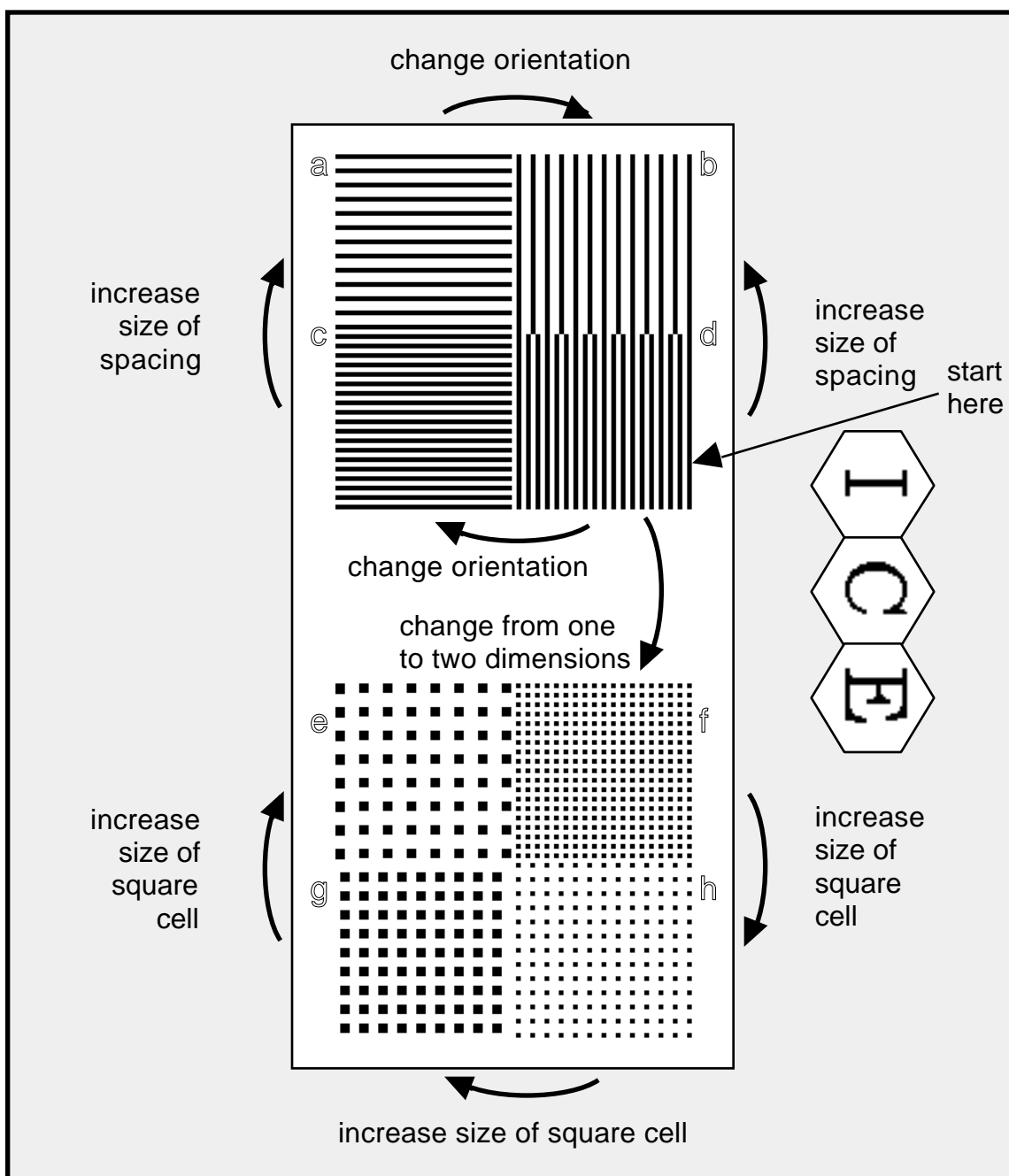


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Unit-Cell Slide

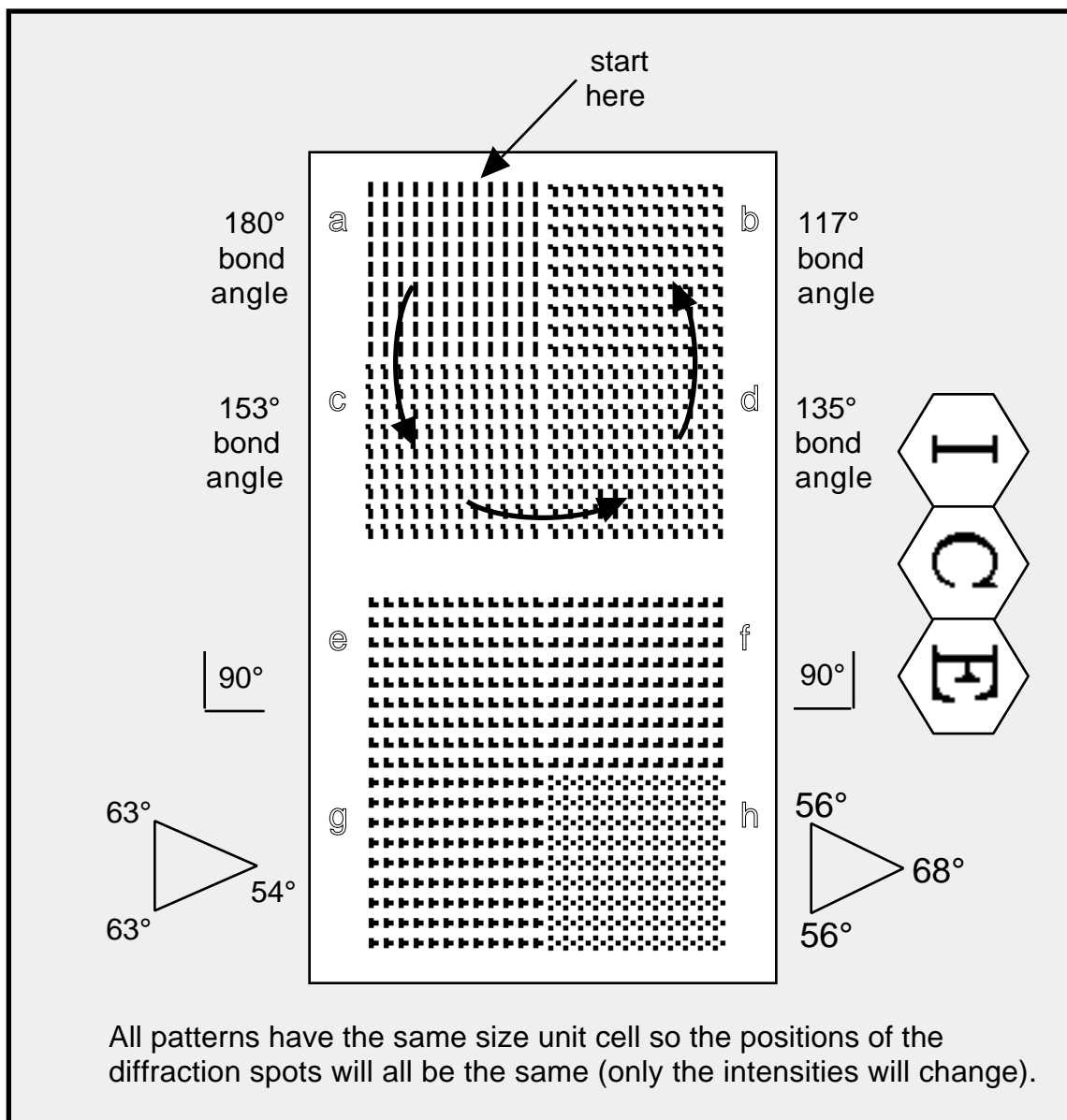


Discovery Slide

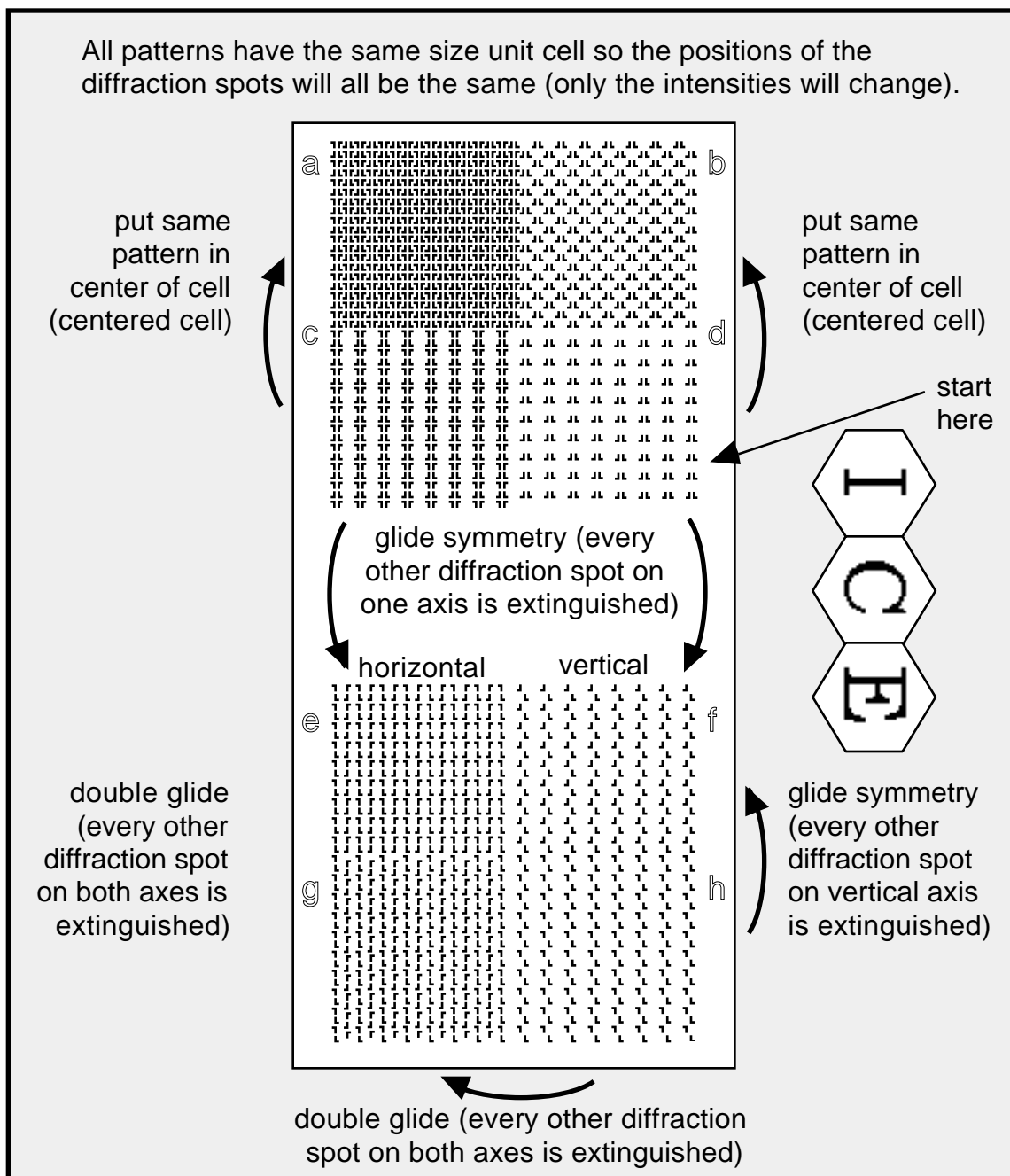


VSEPR Slide

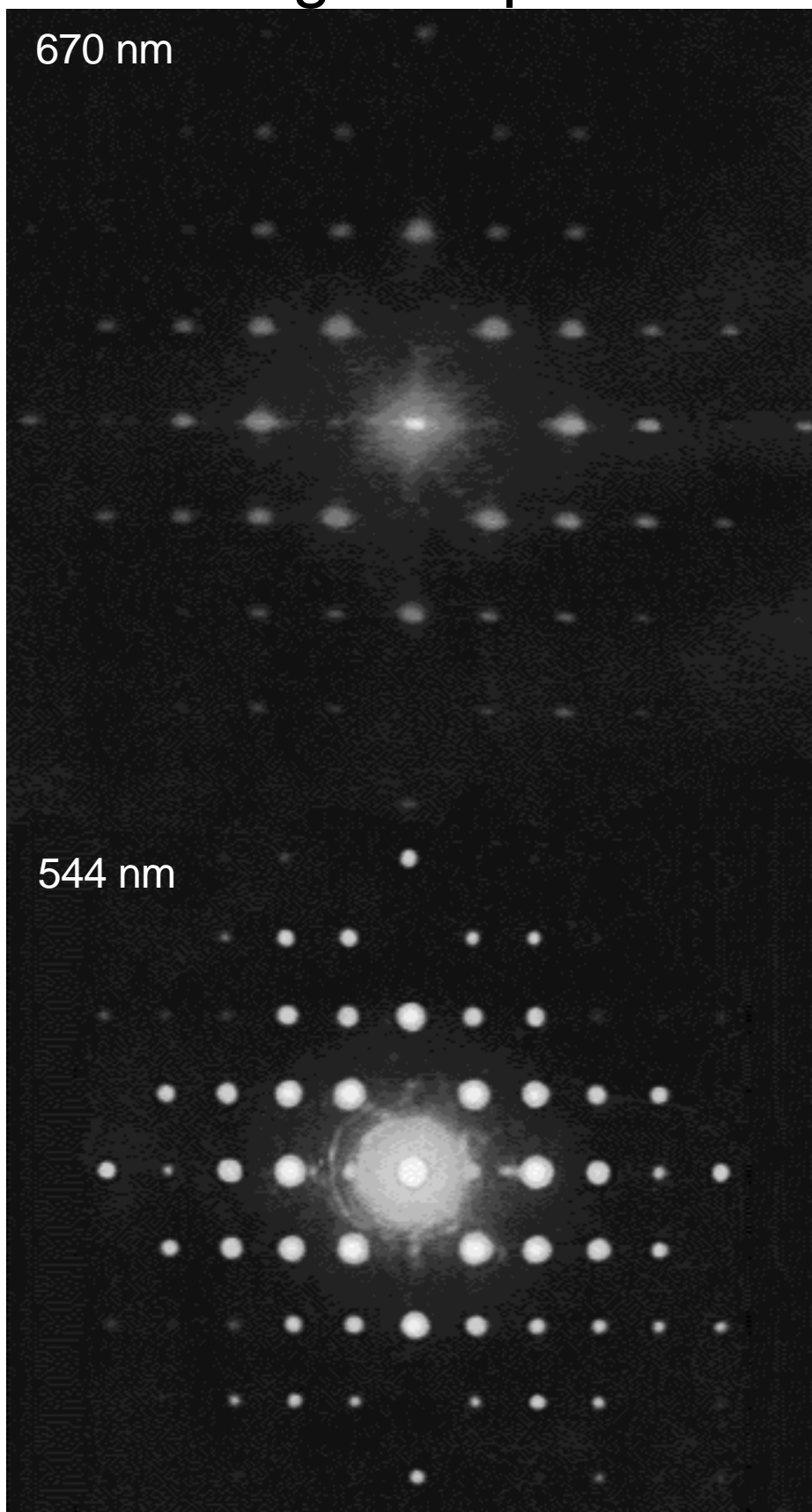
(structures of triatomic molecules)

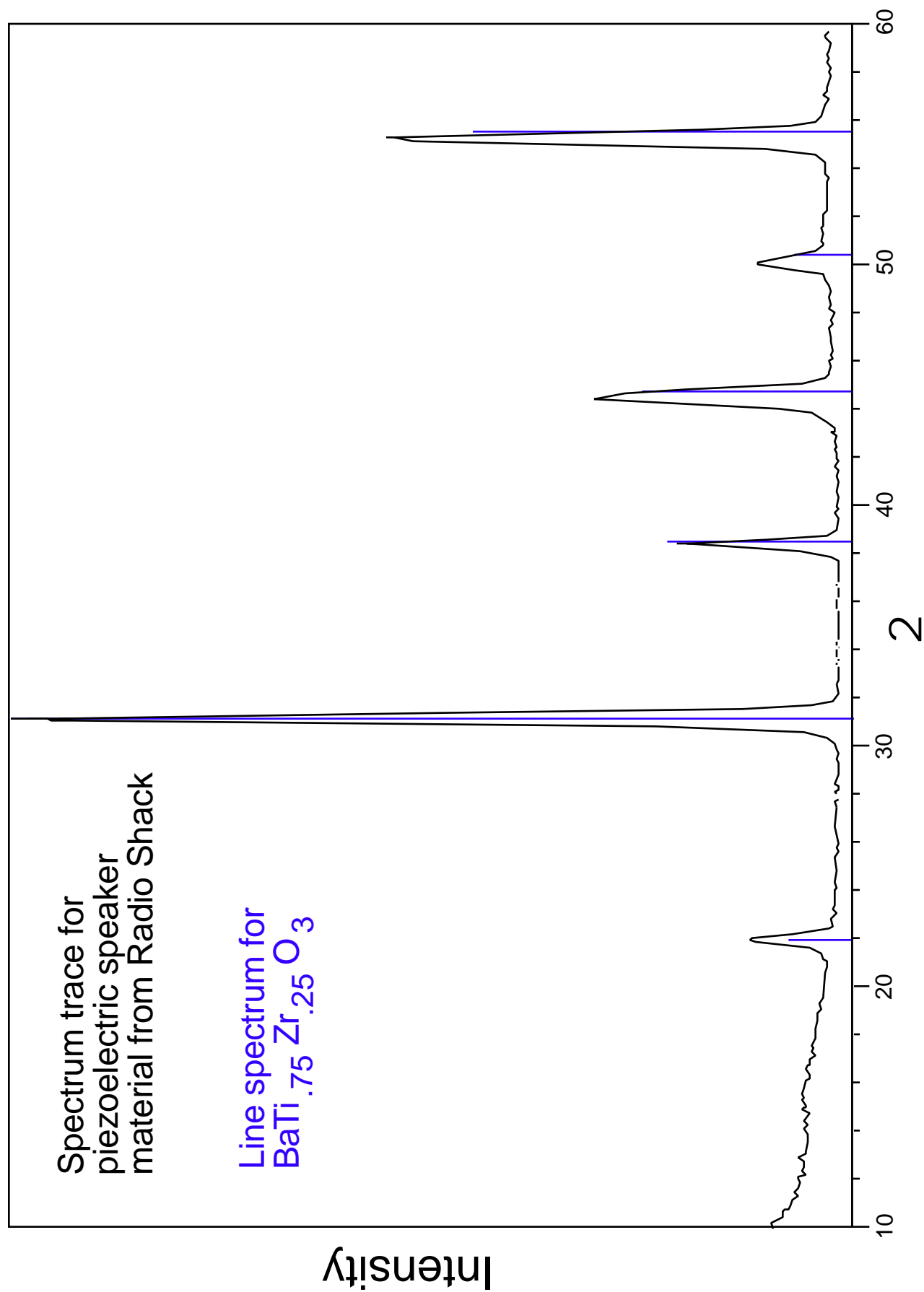


Plane Groups

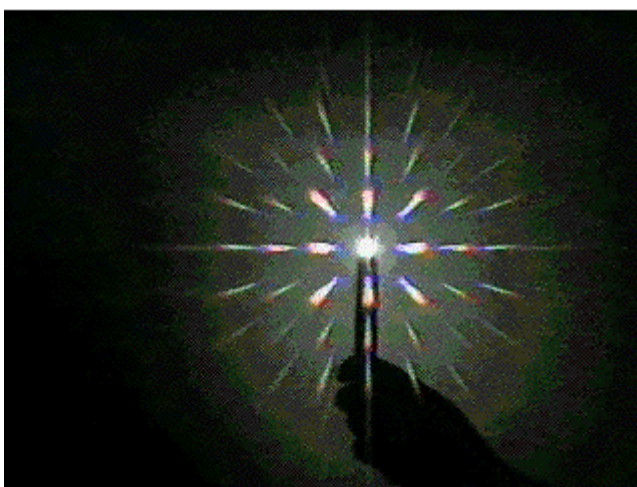
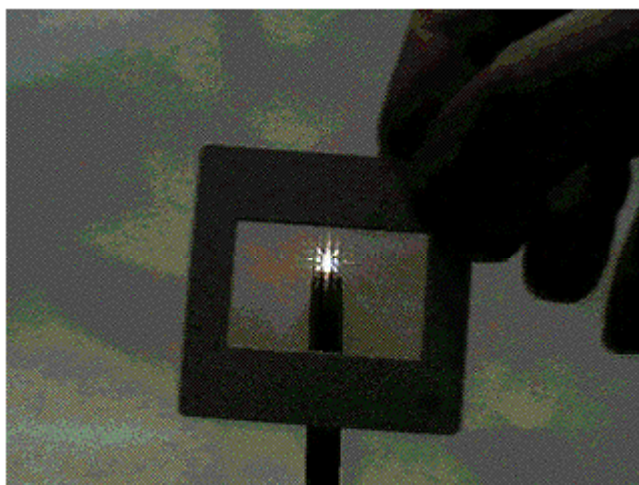


Wavelength Dependence





Why use monochromatic light?



Powder Diffraction

