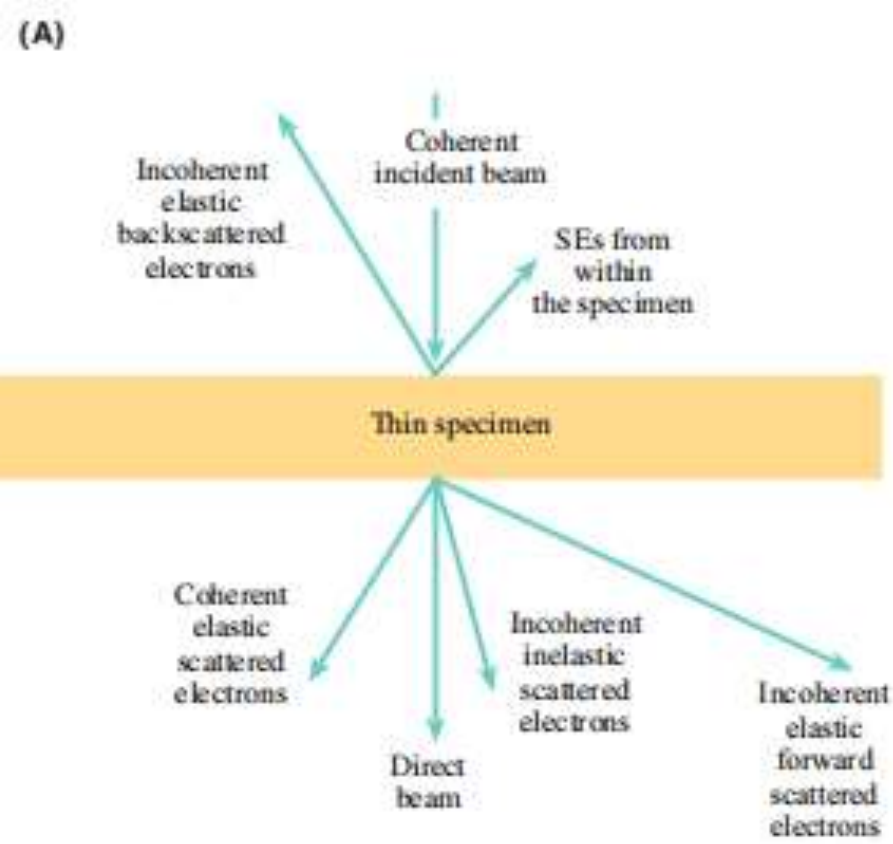
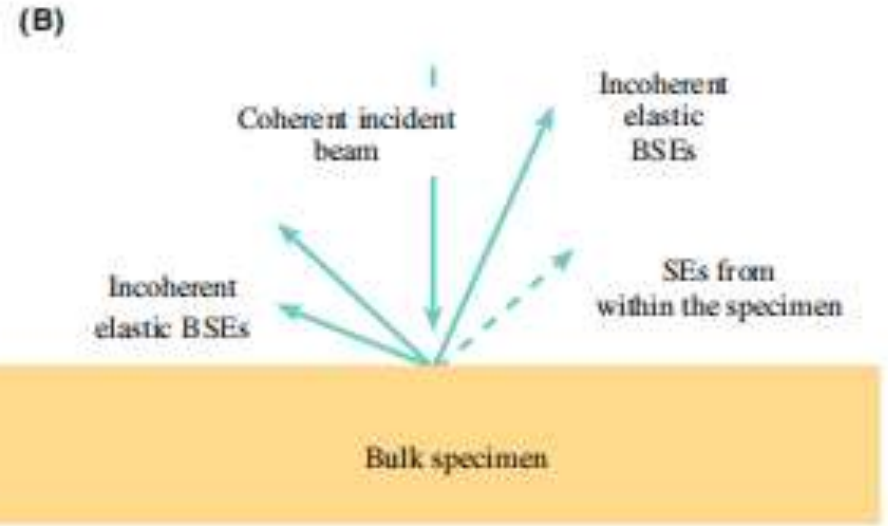
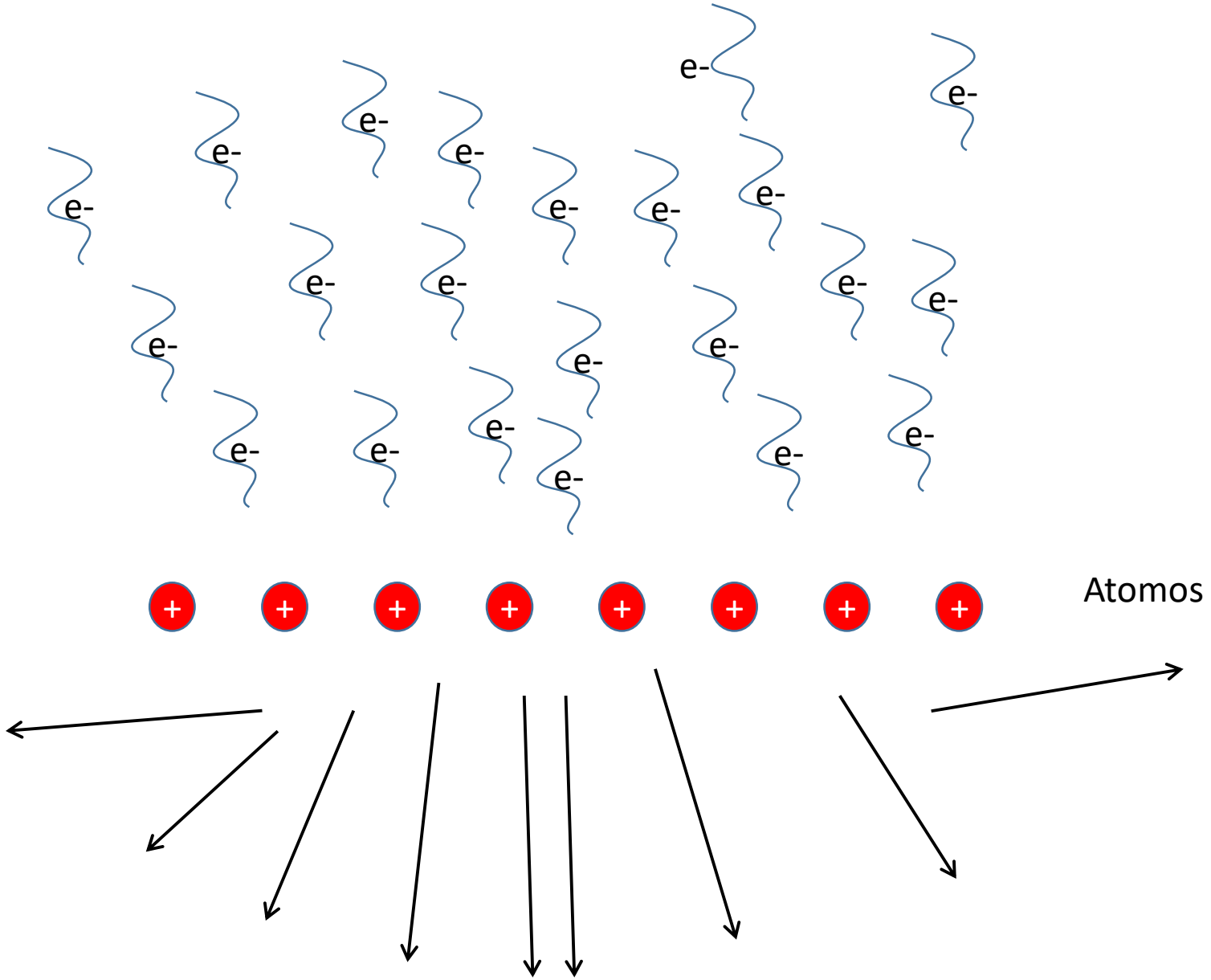
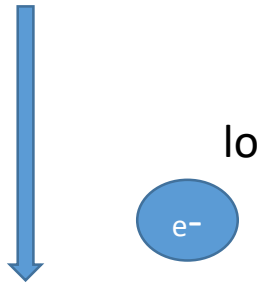

TITAN



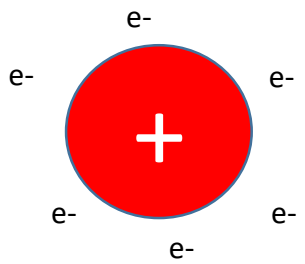


SIMULACION EFECTO DE DISPERSION DEL ELECTRON EN TEM





longitud de onda



Atomo

Electron sufre fuerzas de Coulomb interacciones negativas y positivas.

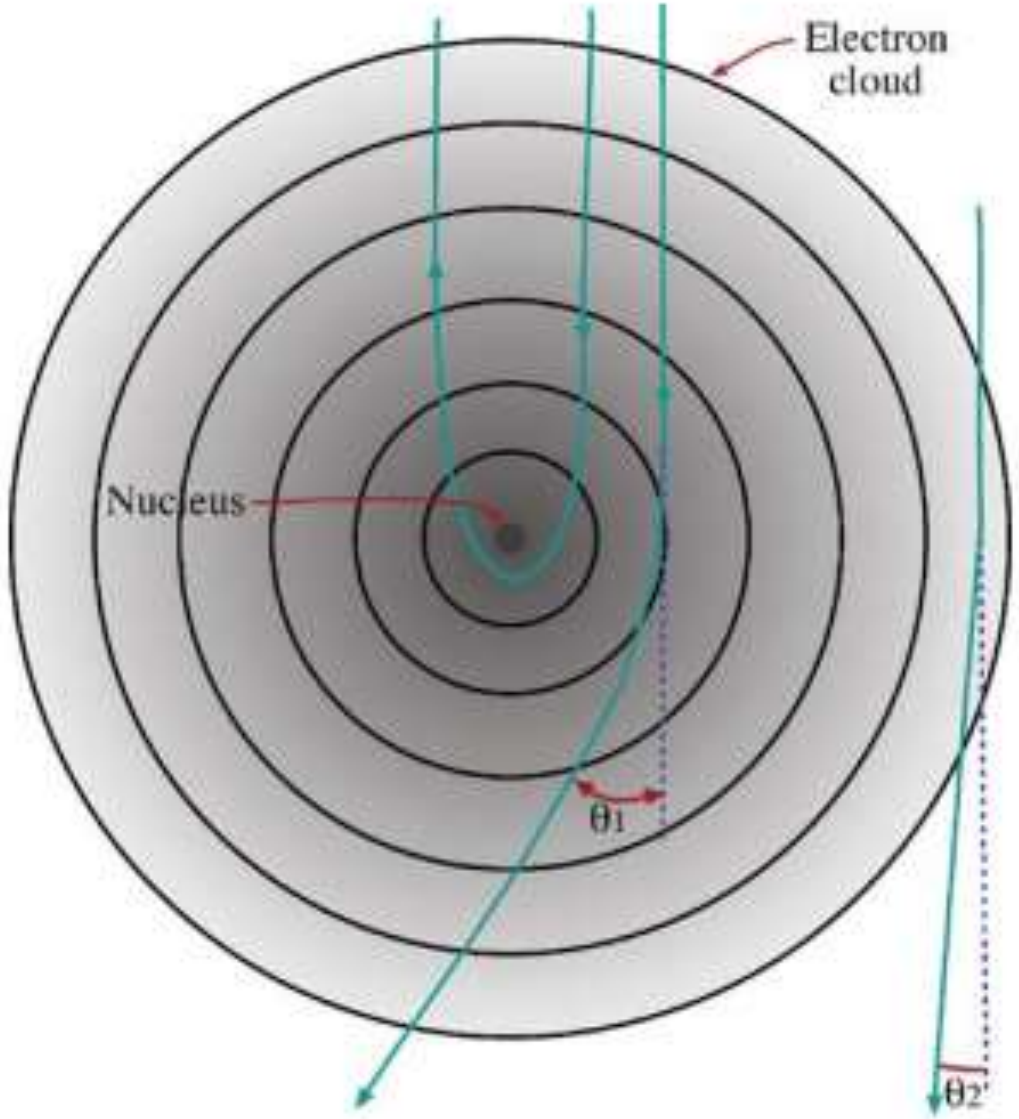


FIGURE 3.1. An isolated atom can scatter a high-energy electron by two mechanisms. Coulombic interaction within the electron cloud results in low-angle scattering; Coulombic attraction by the nucleus causes higher-angle scattering (and perhaps complete backscatter when $\theta > 90°$). The potential within the electron cloud is always positive.

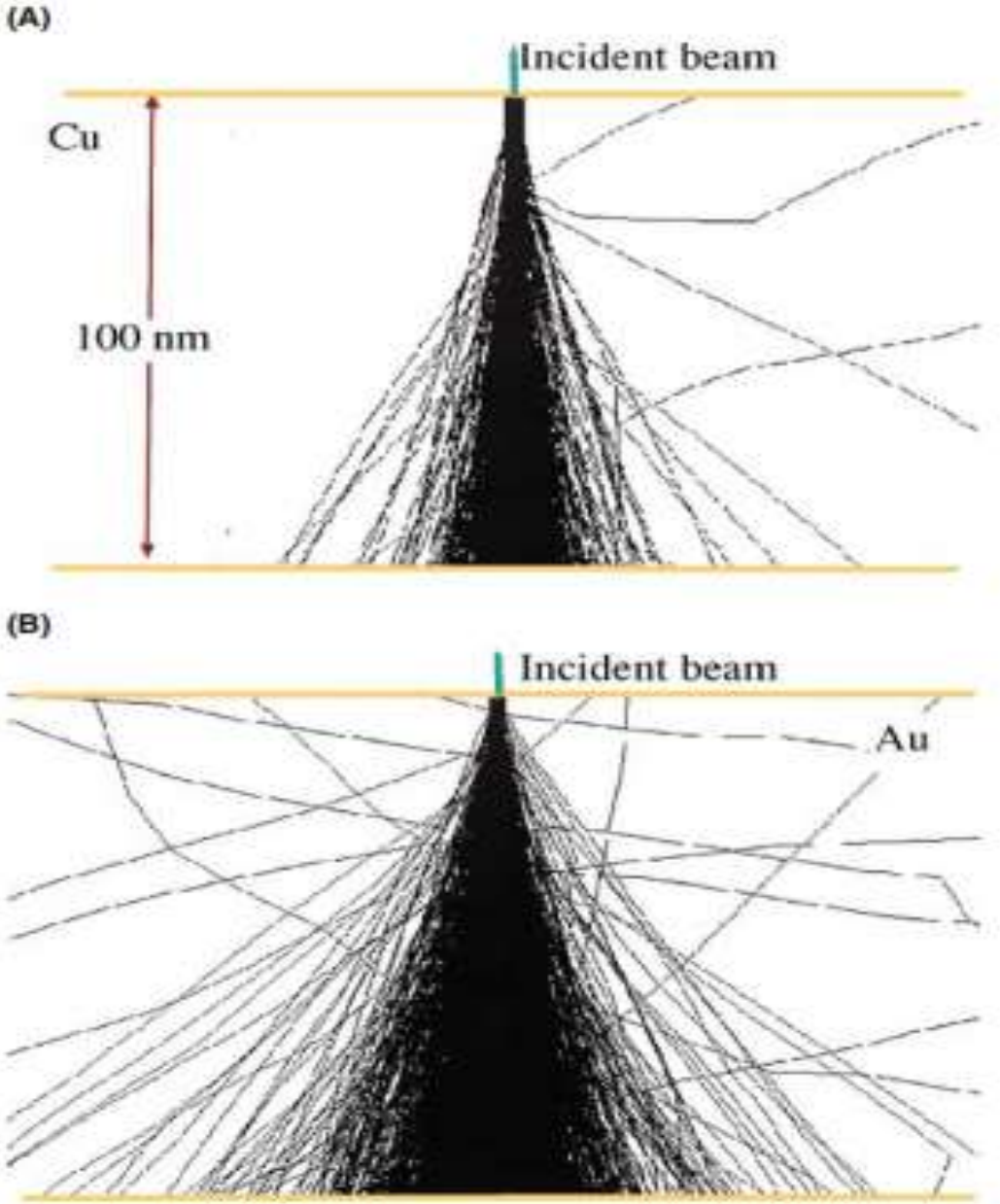


FIGURE 2.4. Monte Carlo simulation of the paths followed by 10^3 100-keV electrons as they pass through thin foils of (A) Cu and (B) Au. Notice the increase in scattering angle with atomic number and the small number of electrons that are scattered through >90°.

Efectos a estudiar

1ra fase (14 pts) a llegar el %85

-Tamaño del átomo (elemento utilizado)
-cantidad de electrones(posiciones random)
-Espesor de la muestra (mas planos se dificulta el paso del electron)

2da fase (16 pts)

-Velocidad de electon(kev)
-Nube de electrones del atomo