

What technique(s) could you use to distinguish the mechanism?

Ask it nicely isopototic labelling isotope effect measurement Raman
 Mass Spec NMR Pint of tennents Raman EIS x-ray
 cyclic voltammetry TEM XRD compchem EPR Crystallography Voltammetry
 X-ray diffraction Skulls SEM isotopic labelling Relative speed
 Magnetic moment Uv-vis Photo-spectroscopy Neutron diffraction Ion swap (changes mobility)
 filling the vacancy Activation energy