I will try to formulate thoughts about how first experiments at LCLS-II could help initiating a new approach to understanding the activity of transition metals in chemistry and biology. Starting from photochemical reactions of simple metal complexes, time-resolved soft x-ray spectroscopy at LCLS-II could help advancing our knowledge of how to activate bonds and molecules with metal complexes. This may complement future soft x-ray spectroscopy experiments of bond-activating metalloproteins at LCLS-II. Resonant inelastic x-ray scattering (RIXS) at the L-edges of 3d transition metals will be highlighted as one of the methods that benefit from the unprecedented average brilliance with x-ray pulses of femtosecond duration at LCLS-II.