Early Days of Biologically Oriented XAS at SSRL

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From the first days of operation of the Stanford Synchrotron Radiation Laboratory (SSRL) (then known as SSRP) in 1974, it was evident that the new understanding of XAFS proposed by Sayers, Stern, and Lytle in 1971, coupled with the tunability of intensity of the x-rays from a synchrotron source, would make XAS an important tool for studying complex structures. One of the initial experiments using XAS was on a Cu-etioporphyrin, which demonstrated the potential application to metaloproteins. Shortly thereafter, several groups began experimental programs on a variety of biologically oriented problems. These groups not only provided new science but also demonstrated the capability of doing XAS on dilute systems. This talk will review some of the early contributions of several of the groups working at SSRL in the mid to late 1970's, particularly in the context of the subsequent development of this field.