

## CRYSTALLOGRAPHY AT CALTECH 1980-1986

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Dick Marsh enjoyed working on puzzles. I often recall him working on crossword puzzles, and he excelled at deciphering difficult and cryptic clues. I never understood how he so easily worked out the “Atlantic Puzzler” from the last page of *The Atlantic Monthly* magazine, but he enjoyed the double definition clues, homophones, reversed clues, embedded anagrams, and hidden answers within a longer phrase clue. That’s why he also enjoyed crystallography so much, from complicated diffraction patterns, Fourier transforms, and columns of numbers. It’s also why he could browse through an issue of the *Journal of the American Chemical Society*, *Inorganic Chemistry*, or other journals, visually inspect columns of atomic coordinates, and propose that a crystal structure was determined in an incorrect space group. I’ll share some remembrances of those years from 1980-1986 with the transition to modern diffractometry, work on converting CRYM from the IBM-7094 to VAX/VMS, and collaborations with Bill Schaefer, Sten Samson, Verner Schomaker, and others.