- F. Wudl, O. Dautel, and H. Duong (University of California)

New derivatives of C₆₀ for biological studies and for photophysical studies were prepared by cycloaddition reactions and dipolar addition reactions. Diels-Alder-type cycloaddition reactions with mesionic dienes which are usually considered poor dienes were examined to learn more about the reactivity of fullerene as a dienophile. A cycloadduct with a novel heterocyclic four-electron dipole will also be described. One unusual adduct was found to be chiral due to conformational restrictions in the solid state.