no music department" in the September issue of Choral Journal. Writes Caldwell of his eight years with Caltech's ad hoc singers: "Fearful and wonderful seem to be the best description . . . One is immediately struck by . . . the amazing capacity to absorb new concepts and apply them almost immediately with scant necessity for repetition, and the startling ability to remember. In my first year at Caltech we had to learn several new pieces for a single early November performance, and the music would not be needed again until March. Upon singing them in rehearsal after four months, I was flabbergasted to discover that [the glee club] was literally at the same level at which we had left them, a feat I had never encountered in my previous experience working exclusively with music majors!" Caldwell's piece is the first in a series of profiles the journal plans to run on "selected successful choirs across the United States."

• As if museum curators didn't already have NEA funding and Jesse Helms to worry about, now comes word that very low levels of nitric oxide, a ubiquitous constituent of smog, might be enough to seriously damage some pigments in precious artworks. A recent issue of *Science News* cites a study by Caltech researcher Lynn Salmon, who has found that "this pollutant—one of the more reactive nitrogen oxide species—not only causes fading but



turns one green pigment purple." Salmon's results, based on research she conducted at four Los Angeles museums, were reported in full in the July issue of *Environmental Science*.

• Spectacular material failures, such as the fracture of an airplane fuselage, can lead to catastrophic consequences. The cracks that cause these failures move so quickly that laboratory mathods become



are forced slightly out of phase as the optically flat test material breaks. The second method measures the transient temperature changes at the crack's tip with indium-antimonide infrared detectors.

Green Initiative to be debated on campus

The much-debated Initiative 128, commonly referred to as the Green Initiative, which will be on the California ballot in November, will be the subject of a panel discussion on campus, on Sunday, October 21, at 2 p.m. on the Beckman Institute lawn (the corner of Wilson Ave. and Lura St.). The event is being sponsored by the Caltech Environmental Task Force (CETF), with financial support from the Caltech Y and the GSC, and with other help from Pasadena City College's Environmental Task Force.

Larry Mantle, director of news and public affairs for KPCC-FM will be moderator for the panel.

For further information, call Debbie Bradbury, ext. 3630, or David MacKay, ext. 2805.

Oil recycling center opens on campus

Caltech now has a third recycling center joining its newspaper and office-paper recycling activities. An oil recycling center has been set up by the safety office on the north side of the garage located in the Holliston Avenue parking lot. There are containers for motor oil, brake fluid, and antifreeze, as well as barrels for oil filters and trash.

Established last June for