finger. In his News & Comment article about the XI International AIDS Conference (19 July, p. 302), Jon Cohen refers to multi-drug AIDS therapy as "Shooting for the moon with drugs."

Cures for AIDS and for a majority of cancers have not been realized, despite the expenditure of vast amounts of resources both in terms of money and manpower. Although some tumors can be effectively treated with surgery and chemotherapy, and recent suggestions of combinations of antiretroviral drugs hold promise for the extended survival of patients who have AIDS, these should not be considered as cures. Efforts have concentrated on treating the consequences of these conditions without focusing on more fundamental aspects of the problem. Thus, antitumor therapy is aimed at reducing or eliminating the tumor mass, and drug therapy for human immunodeficiency virus (HIV) is targeted at decreasing viral load (particularly free virus in plasma) and at increasing CD4 counts.

Because HIV proviral DNA is incorporated into the genome of the infected host and can be activated later, effective antiviral drugs might eliminate HIV only if administered for the lifetime of the patient. Such an approach is expensive, induces toxic side effects, and selects for resistant variants.

We suggest a major strategy of restoring and strengthening cellular immunity, supplemented when practical with limited drug therapy. We view chemotherapy as the finger and immune-based therapy as the moon.

Gene M. Shearer Experimental Immunology Branch, National Cancer Institute, National Institutes of Health, Bethesda, MD 20892, USA Mario Clerici

Universita degli Studi di Milano, Milano 20133, Italy

## Evidence of Single-File Diffusion in Zeolites

In the report "NMR studies of single-file diffusion in unidimensional channel zeolites" (3 May, p. 702), Volker Kukla *et al.* state that their study is the first direct evidence of single-file diffusion. A paper by our group ["Evidence for single-file diffusion of ethane in the molecular sieve AIPO<sub>4</sub>-5" (1)], which appeared just after the report by Kukla *et al.* was submitted to *Science*, demonstrated that the mean square displacement of ethane in the one-dimen-

sional molecular sieve AlPO<sub>4</sub>-5 varies as the square root of the observation time. The single-file mobility factor (F) was found to be  $1.4 \times 10^{-11}$  m<sup>2</sup> s<sup>-0.5</sup>, as compared with the value of  $6 \times 10^{-11}$  m<sup>2</sup> s<sup>-0.5</sup> determined by Kukla *et al.* for methane in AlPO<sub>4</sub>-5.

In a previous paper (2), we found that while methane underwent unidirectional diffusion in AlPO<sub>4</sub>-5, the behavior of the mean square displacement with time was not representative of single-file diffusive behavior. However, for the same system, Kukla *et al.* have reported single-file diffusive behavior. The reasons for this discrepancy are unclear.

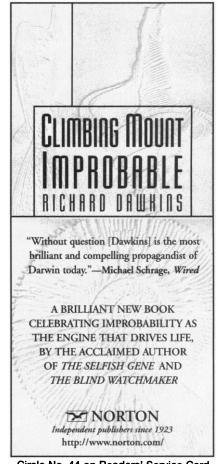
Vishwas Gupta Sriram S. Nivarthi David Keffer Alon V. McCormick H. Ted Davis

Department of Chemical Engineering and Materials Science, University of Minnesota, 421 Washington Avenue S.E., Minneapolis, MN 55455, USA

## References

- V. Gupta, S. S. Nivarthi, A. V. McCormick, H. T. Davis, Chem. Phys. Lett. 247, 596 (1995).
- S. S. Nivarthi, A. V. McCormick, H. T. Davis, *ibid.* 229, 297 (1994).

## 40,000 SAMPLES PER DAY FLUORESCENCE POLARIZATION WILL REDEFINE PROTEASE AND PROTEASE INHIBITOR ASSAYS FLUORESCENCE POLARIZATION ALLOWS FOR SIMPLE, QUICK AND PRECISE ASSAYS OF PROTEASES AND THEIR INHIBITORS OF UP TO 40,000 SAMPLES/DAY. FP IS HOMOGENEOUS. YOU CAN MAKE UP YOUR OWN REAGENTS OR BUY THEM OFF THE SHELF. AS DEMONSTRATED AT LEFT, THE FPM-1™ ANALYZER PRODUCES A KINETIC MAPPING OF PROTEASE ACTIVITY IN UNDER 5 MINUTES, DETECTING THE ACTIVITY AT A **BODIPY-FL-CASEIN AND** VARIETY OF CONCENTRATIONS TRYPSIN AT pH 7.4 AND PH VALUES. TO LEARN MORE 225 ABOUT (FP) AND TRANSFORM 200 THE WAY YOU DO ASSAYS-175 150 CALL AND REQUEST AN INTER-125 ACTIVE FP MULTIMEDIA DISK. 100 IMAGINE 40,000 PROTEASE SAMPLES PER DAY! BODIPY-FL\* IS A TRADEMARK OF MOLECULAR PROBES, EUGENE, OR JOLLEY CONSULTING AND RESEARCH, INC. USA AND CANADA: 1-800-685-0401 | 847-548-2330 | FAX: 847-548-2984 E-MAIL: info@iollev.com | ENGLAND: 44-01708-476-162 DYNATECH EUROPE GERMANY: 49-711-346-1078 Circle No. 1 on Readers' Service Card



Circle No. 44 on Readers' Service Card