

A particularly momentous discovery on Mars would be the existence of active volcanism. Many scientists acknowledge that it could well be there, but finding evidence for it is another matter. Leonard J. Martin of Lowell Observatory cites Viking orbiter photos of near-surface clouds, dark radial streaks on the surface and other features as possible indications of volcanic venting, which, he says, might be the trigger for some of the vast Martian dust storms. His *DRS* report drew more skepticism than acceptance, although, as one skeptic acknowledged, finding real proof of Martian volcanism would be "a plum."

• **Jupiter:** In view of Jupiter's powerful magnetic field, radiation belts, radio emissions and other electromagnetic phenomena, it is not surprising that the planet has prompted expectations of vast numbers of huge lightning bolts. Based on acetylene measurements, one researcher made a pre-Voyager estimate of 245 bolts per square kilometer per year in the Jovian cloud tops (SN: 5/12/79, p. 312), and Voyager photographed bolts as big as earth's biggest. Analyzing Voyager's lightning photos and plasma-wave data, however, John Lewis of MIT reports that "the chemical consequences of Jovian electrical discharges are negligible." □

## SOS boycotts Moscow

The ranks of those banning scientific relations with the Soviets have swelled to about 7,900 since an organized campaign to cold-shoulder Moscow began 18 months ago (SN: 3/17/79, p. 168). Propelled by disgust at the Soviets' jailing and oppression of dissident scientists, *sos* (for jailed or exiled dissidents A. Shcharansky, Y. Orlov and A. Sakharov) was created. Next month, 35 signatories of the 1975 Helsinki human-rights pact will review each other's compliance. Whether *sos* decides to end its ban "will depend partly on actions taken at that conference, says *sos* organizing chairman Morris Pripstein." □

## Gene advisers narrow role

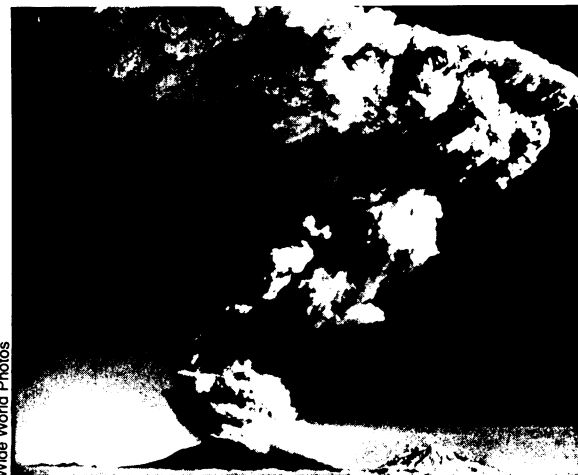
The national committee that oversees research with recombinant DNA has proposed a further reduction of its regulatory role. If approved by the director of the National Institutes of Health, another 17 percent of all recombinant DNA research would be evaluated by local biosafety committees. The only research to be reviewed by the NIH committee would be approximately 3 percent for which safety requirements are not clear from the guidelines. The committee also proposed that it no longer review fermenter design and containment hardware as part of scale-up proposals by industry. Members of the committee felt they did not have the expertise for such evaluations, which will be left to local biosafety committees. □

## Mt. St. Helens does it again

Like the readers of a John Le Carré novel, geologists at Mt. St. Helens are finding that they have to be well into the story before they can figure out what's going on. Now, five months into the "story" of the volcano, scientists discovered that it is still capable of twists that are both new and yet tantalizingly familiar.

The most recent twist began midafternoon Oct. 16 when seismologists at the University of Washington in Seattle noted an increase in the frequency and intensity of earthquakes beneath the volcano. By 8:30 p.m. local time, according to U.S. Geological Survey volcanologist Susan Russell-Robinson, the continued activity prompted the seismologists to issue an alert saying that an eruption was possible within 24 hours. At 9:58 p.m., accompanied by a brief burst of seismic activity, a 42,000-foot cloud of ash shot from the volcano. This eruption, the first major blast since Aug. 7, was followed by a larger one at 9:28 a.m. Oct. 17, a third at 9:14 p.m. that day and two smaller blasts at 12:35 p.m. and 2:28 p.m. on Oct. 18.

On Oct. 16, says University of Washington seismologist Steve Malone, the pattern seemed a familiar one, much like that seen before the eruption of July 22. So far, he says, the volcano has shown two types of precursory activity: The July 22 type of build-up in the size and number of shallow



Wide World Photos

Oct. 17: Mt. St. Helens reruns with a bang.

quakes with few harmonic tremors (caused by the movement of magma) or, like that seen before eruptions on June 13 and Aug. 7, a lot of harmonic tremors and few shallow quakes.

Yet the most recent spate of activity differs from that of July 22, Malone notes, because of the long periods between individual explosions and the lack of precursory signals before each subsequent blast. For these reasons, the volcano sitters have dubbed this round an "eruptive sequence." Despite the lull since Oct. 18 and the growth of a new lava dome in the crater — usually a sign of quiet — they were not ready to close this chapter until a deep quake was detected on Oct. 21. Malone says that this seismic sign-off — that tells, like distant thunder, of the passing storm — has been noted after each previous eruption. □

## Spliced genes make splash on market

Genes were hot on Wall Street last week when, for the first time, a genetic engineering company went public. Sale of stock of Genentech, a San Francisco-based company (SN: 3/29/80, p. 202), provided the most striking price explosion of a new stock in at least a decade, analysts say. Before selling began it was clear that demand far exceeded the 1 million shares of Genentech offered at \$35 each. One securities firm alone had customer requests for more than 3 million shares. The Washington office of E. F. Hutton had requests for more than 100,000 shares and was allotted only 50. Those went to one customer whose name was drawn from a hat.

Thousands of investors who did not get stock at the offering price immediately bid higher. In the first over-the-counter trading, the price of Genentech stock was \$80 per share and it climbed to \$89 within 20 minutes. After a week of busy trading, it stabilized at about \$56. At the peak in stock price, Genentech was valued at \$650 million, approximately the same as the Chrysler Corp., for example, or about a third the market value of the major chemical company Monsanto. Even at \$56 per share, the market value of Genentech is well above that of American Airlines. In

addition to the million shares now owned by public investors, 6.5 million shares of Genentech are owned by its founders, directors and employees and early private shareholders. Herbert W. Boyer, the University of California scientist who did early gene-splicing work and who was co-founder of the company, has 925,000 shares, now worth \$52 million.

The four-year-old company still has no product on the market, although it did make a small profit (\$80,000) during the first six months of 1980. In its most advanced projects, Genentech has pilot-plant-level production of such scarce materials as human insulin and human growth hormone, which are expected to be clinically valuable.

The activity of the Genentech stock may have as much to do with the psychology of the market as with public confidence in gene-splicing, stock analyst Nelson Schneider of E. F. Hutton says. He reports that recently there have been other large increases in value of new stocks oriented toward novel technologies, but the dramatic Genentech action is the first to catch public attention. Schneider speculates, "It may be a signal of a whole new bull market on Wall Street." □