

Hayes resigns in 'SERI'-ous shakeup

One of solar energy's sunniest and most visible advocates is about to be eclipsed, at least in terms of federal influence. Denis Hayes, director of the Solar Energy Research Institute since September 1979, has been asked by the Midwest Research Institute to step down from his post. MRI, which operates the federal facility for the Department of Energy, is said to be seeking someone with more research and laboratory experience since SERI is expected to take on a more laboratory-oriented role in the future.

But rumors and undertones attending the announcement also suggest MRI's role may be little more than that of a puppet whose strings are pulled from Washington. The Reagan administration is more than rumored to be plotting changes in the laboratory's intended mission and size. Most important, Hayes's ideology — that solar energy is not only a technology for the future, but also one capable of contributing mightily today — does not mesh with Ronald Reagan's conservative solar posture. And that ideological conflict is one explanation being offered to explain why DOE attempted, unsuccessfully, to withhold publication of a SERI study (SN: 5/2/81, p. 276) suggesting that stronger commitments to solar energy and to conservation would improve the economy.

SERI has come under fire repeatedly in the past 10 months for not being "effectively integrated into the federal solar program" nor coordinated adequately with activities of regional solar-energy centers. Consistent with that, administration budget carvers have drastically whittled down SERI's proposed funding for the coming fiscal year, and deferred indefinitely plans for a permanent SERI facility until conflicts over its size and mission are resolved. □

Only weak links: Bendectin, defects

Two reports in the June 12 JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION may soften the blows responsible for Bendectin's black eye. Bendectin, a widely prescribed drug for treating the nausea and vomiting of pregnancy, is the subject of about 60 lawsuits charging that it causes birth defects. (SN: 12/27/81, p. 395; 6/13/81, p. 376). But both recently published JAMA studies concluded there is no significant link between the controversial drug and birth deformities.

One of the studies — reported by José F. Cordero and colleagues of the Centers for Disease Control in Atlanta, Ga. — involved determining whether mothers of 1,231 infants born with birth defects between 1968

and 1978 were exposed to Bendectin. In this analysis, Cordero and co-workers found weak associations between Bendectin exposure and cases of amniotic bands (a type of limb reduction), esophageal atresia (absence of the normal esophageal opening) and encephalocele (protrusion of the brain through a gap in the skull). But the three weak associations "do not establish a causal relationship between Bendectin and the birth defect categories we studied," Cordero and colleagues conclude. In a similar study — conducted by Allen A. Mitchell of Harvard Medical School in Boston and colleagues — researchers conclude that Bendectin exposure does not appreciably increase the risk of oral clefts or selected cardiac defects.

In both the Harvard and CDC studies, researchers compared incidence of Bendectin exposure in each birth defect category with that in a control group composed of birth defects other than the one being evaluated. This study design was employed to control for maternal-recall bias — the "greater tendency of women who have had an abnormal child to review events that occurred during pregnancy."

But does using infants with other defects as the comparison group preclude finding any associations should Bendectin uniformly increase the risk of all birth defects studied? "While theoretically possible, we believe the existence of such a teratogen would be unlikely," Cordero explains. "Known human and animal teratogens cause specific birth defects or patterns of birth defects; they do not uniformly increase the rate of all birth defects." □

Solar Max rescue

The possibility of repairing the ailing Solar Maximum Mission spacecraft in orbit during one of the space shuttle's three remaining test flights (SN: 5/23/81, p. 324) has been ruled out by NASA. Built with modular, plug-in components specially designed for easy replacement, "Solar Max" was launched Feb. 14, 1980, but suffered a malfunction in its attitude-control system after nine months aloft. Space agency engineers who have studied the problem believe that the faulty module could be replaced by use of a repair system flown aboard the shuttle, but the three flights remaining before the shuttle goes on full — and busy — operational status are taken up not only with checking out the vehicle itself but with two groups of scientific experiments and a classified Defense Department project. As for trying the rescue on a later flight (it would have to take place before Solar Max burns up on atmospheric reentry in 1984), NASA Associate Administrator for Space Transportation Operations Stanley Weiss calls it only a "remote possibility" that "doesn't have priority." □

Half an abortion in a case of twins

What is to be done when amniocentesis shows that one twin has a major congenital defect and the other twin is normal? In the June 18 NEW ENGLAND JOURNAL OF MEDICINE Thomas K. Kerenyi and Usha Chitkara report what they call "selective birth" of only the normal twin.

A procedure carried out last year at Mt. Sinai School of Medicine in New York destroyed the defective fetus in a pair of fraternal twins by drawing blood from its heart. The normal twin was born four months later and is now reported healthy at more than seven months of age. This is the first reported case of "selective termination" of an abnormal twin fetus in the United States. There has been one successful case in Sweden and an unsuccessful case in Denmark in which both twins were aborted after attempted cardiac puncture. In another recent case, in which only one twin had a major malformation, the parents opted for abortion of both twins. In three cases in which the pregnancies went to term, one abnormal twin was stillborn, one died days after birth and one with Down's syndrome survived.

Down's syndrome and fraternal twinning are both common in pregnancies of women nearing the age of forty. "The highest frequency of dizygotic twins occurs between the ages of 37 and 40," Kerenyi and Chitkara point out. "Therefore, with the increasing use of genetic amniocentesis, one may expect to be faced with the possibility of detecting Down's syndrome in one twin but not in the other."

In the recent New York case, the mother was 40 years old, childless and had had infertility problems. According to Kerenyi and Chitkara, "The mother desperately wanted to have the normal child but could not face the burden of caring for an abnormal child for the rest of her life." She was told about the Swedish success and requested a similar procedure. "If it had been refused, she would have chosen to abort both fetuses," the physicians report. They obtained confirmation from a court of law of the parents' right to consent to the operation on behalf of the normal fetus who was put at some risk.

The most serious problem in such procedures is distinguishing between the normal and defective fetuses. In the New York case, Kerenyi and Chitkara were "reasonably certain" that the twins' relative positions in the womb had not changed in the several weeks after the amniocentesis. The correct selection could not be verified until three days after the blood removal, when the fetus was already dead. The physicians did not consider the death of one fetus likely to harm the other because normal pregnancies have been observed following the natural death *in utero* of one fetus of a multiple gestation. □