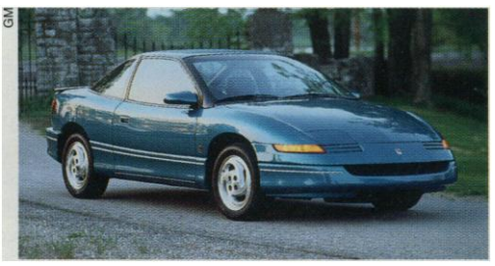
General Motors to Turn to the National Labs for a Technological Boost

■ In an action unprecedented among American companies—much less the Big Three automakers—General Motors is moving to exploit the resources and talents of nine major federal laboratories on a massive scale.

Later this month teams of top researchers and technology transfer officers will gather at GM's technical center in Warren, Michigan, for 4 days of schmoozing. The 21-24 January meeting is the culmination of a year's planning by GM's advanced technology division, which sent teams on repeated visits to survey research activities, engineering capabilities, and unique experimental facilities at the laboratories. Representatives from organizations such as Sandia National Laboratory, the National Institute for Standards and Technology, and Argonne National Laboratory will be in attendance.

GM is aiming for intensive and far-reaching cooperation between its scientists and engineers and their counterparts at the federal laboratories. The entire GM technical community must "understand that what goes on at the national laboratories is more than sandbox experiments," says one GM official who asked not to be identified.


GM

GM is hoping that a technological infusion from the national laboratories can improve its vehicle design and manufacturing processes.

In addition to motivating its technical staff to apply the national labs' ideas and technology to routine tasks, GM is expected to engage the labs in some major technology initiatives. Described in-house as the equivalent of "moon shot" projects, these ventures are said to include the development of advanced manufacturing and assembly-line simulation, automated highway systems, and auto safety technologies such as automatic braking systems and drive-by-wire technology. These large-scale research efforts could include Chrysler and Ford research teams too.

Bellcore Basic Researchers Out of Work

■ In another sign that industrial laboratories are retrenching, Bellcore has begun phasing out its basic research effort and closing some facilities in New Jersey. According to company spokeswoman Rose Cofone, Bellcore took steps in December to "restructure" its 8600-member workforce so as to focus more intently on applied projects of immediate value to regional telephone companies, the "baby Bells" that fund Bellcore's operations. The changes at Bellcore have not been publicly announced, although the Newark *Star-Ledger* has reported on the shakeup.

The news fell especially hard on Bellcore's researchers in high-temperature superconductivity, who saw their own jobs eliminated just as other physicists were reporting that they had hurdled a major barrier to practical uses of these superconductors (see pp. 158 and 165). The 20 to 25 researchers and assistants in Bellcore's superconductivity laboratory have been told they should look for work elsewhere in the company—a transition that for many would mean shifting from basic to applied research. For example, Jean Marie Tarascon, a French physical chemist and a major superconductivity researcher in the Bellcore lab, will now be doing research on batteries, according to the *Star-Ledger*.

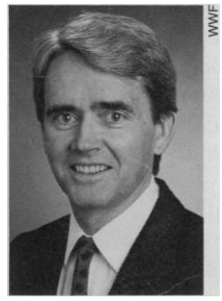
"The superconductor lab is no longer where the emphasis should be," Cofone explains. Restructuring is strictly a business decision, she says—the lab owners simply weren't convinced that superconductivity research would help the "bottom line."

Better Science at EPA?

■ A report due next month from a panel of scientists advising the Environmental Protection Agency (EPA) will criticize the agency for failing to incorporate better science into its policy and regulatory decision-making.

The EPA has not been hiring enough top-notch scientists or contracting for high-quality research outside the agency, the report says. "You need to enlist the best scientists in the country to work on the problems...but so far, that has not been achieved," says Bernard Goldstein, director of the Environmental and Occupational Health Sciences Institute at Rutgers University and a member of the panel, which EPA administrator William K. Reilly assembled last May. As for the quality of EPA science, "The EPA doesn't look like it's in the same level of excellence as the NIH or the NSF," Goldstein says.

In addition, the report cites a need for scientific information to reach administrators "early and often" during policy-making, especially when officials are gearing up to tackle long-range environmental problems.


WWF

William K. Reilly

Although the report outlines few concrete steps the agency might take to effect these changes, EPA has already indicated it will be taking its experts' advice seriously. "We'll follow up as vigorously as possible," says Wendy Cleland-Hamnett, EPA's special assistant to the administrator. She predicts the report will spur "a lot of agency activity" in the next year.

Deputy Fission at NIH

■ Once there was one deputy director for NIH, but soon there'll be four. With the recent departure of former deputy William Raub for the White House, NIH director Bernadine Healy has decided that the complexities of running her $9-billion agency will be met best by an "executive council," all of whose members will have the status of deputy director.

Associate director for science policy and legislation Jay Moskowitz, whose star has been shining brightly since Healy took over, will be *primus inter pares*, officially in charge whenever Healy is out of the picture. Also on the council will be John Diggs, deputy director for intramural research, Carl Kupfer, acting deputy director for intramural affairs, and Jack Mahoney, associate director for administration.

Healy has evidently been pleased with the work Moskowitz has done in preparing NIH's strategic plan, a document intended to serve as a blueprint for the agency's future. Mahoney, too, has been playing a key role in some of NIH's thorniest issues—specifically budgets and misconduct procedures. Kupfer, who is head of the National Eye Institute, will be off the executive body as soon as a permanent intramural chief is found.

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