

three-hour address at the conference, Gorbachev characterized the scientific enterprise as "the backbone of our economic development."

By way of consolidating Gorbachev's ambitious plans, the delegates adopted a revealing resolution. While *perestroika* is "already transforming the life of Soviet society," a key section of the resolution states, "severe problems" need to be solved: "The economic structure remains, on the whole, cost intensive. Scientific and technological progress is still slow. The plans for increasing the national income and productivity are not fulfilled. There is no noticeable improvement in product quality. The country's finances are in a bad state. Tensions exist between the supply of foodstuffs and consumer goods and the demand for these things. The housing problem remains acute."

"At all stages of public, state and economic activity there are many people who are unwilling or unable to abandon bureaucratic management methods. Many react painfully to everything new. They are frightened by the scope and depth of *perestroika* and would prefer to stop halfway and limit the revolutionary content of *perestroika* by half measures."

The words seem to come right out of Gorbachev's speech last year on the 70th anniversary of the October Revolution. Neither Gorbachev's address on that occasion nor the conference resolution sought to place blame on scientific research for the nation's economic failings, but both suggest the scientific system is mired in malaise, essentially because it is mismanaged from the top.

Thus one key paragraph of the resolution asserts that *perestroika* cannot be achieved "without invigorating in every way the intellectual and cultural potential of society, without advancing science and technology, without stimulating greater contributions by scientists, engineers and other technical workers, without raising their prestige and improving their working conditions and without elevating the entire educational system." To attain these ends the party favors "democratizing" the organization and management of Soviet science. One way is to "eliminate the vestiges of bureaucracy."

The resolution also calls for meeting the scientific community's urgent need for more and better research equipment and for loosening control on scientists so that they "can proceed with the high purpose of discovery of truth and understanding." At the same conference, Guri I. Marchuk, president of the USSR Academy of

Sciences, told delegates that Gorbachev's analysis of the problem "is absolutely correct." The All-Union Council of Ministers, Marchuk said, was examining proposals to substantially increase the funds for basic research over the next two years—a tacit acknowledgement that even though the Soviet Union has some world-class scientific institutes, the gap between Soviet and Western science is widening. "The fall in our proportional contributions to world science cannot fail to be alarming," said Marchuk. "The desire not to be isolated from world science is a no less important aim than holding on to the lead in a particular area."

Sharing science and technology

This inward look at Soviet science is pivotal for political and economic reasons. Dimitri K. Simes, a Sovietologist at the Carnegie Endowment for International Peace in Washington, points out that "worst-case preoccupations have proved a blessing to Gorbachev" because he believes these

will lead to opportunities to "correct the problems at home while encouraging the West, meaning the US in particular, to share its research from abroad." Before the US provides scientific and technological access, says William R. Graham, President Reagan's science adviser, "there must be something comparable given by the Soviets. We must be extremely cautious about exchange programs. We need to remember that the scientific shortcomings in the Soviet Union have a more serious effect on the military system than on its civilian economy."

Indeed, says another Carnegie Endowment senior analyst, Andrew Nagorski, Soviet science is compartmentalized, "so that military applications get first call and the civilian economy is left to rot. The Soviet Union is a military superpower, but not an economic superpower." It is somewhat ironic, he observes, that in order to save his science establishment, Gorbachev must first buck it.

—IRWIN GOODWIN

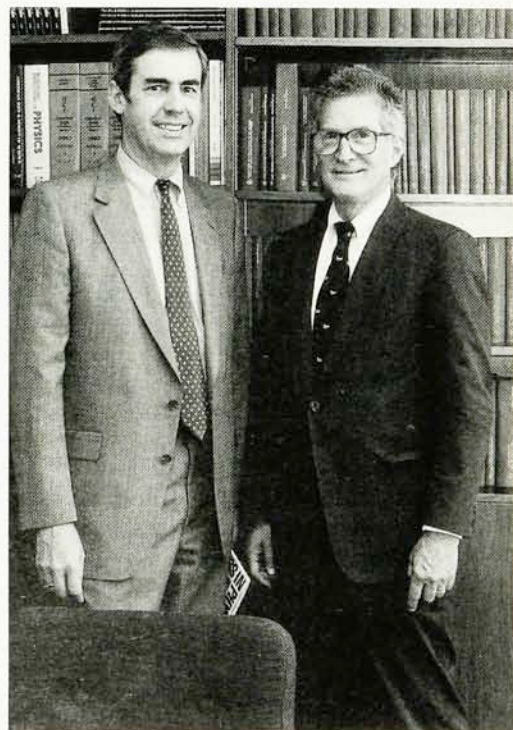
BAENSCH IS AIP'S NEW DIRECTOR OF PUBLISHING

Robert E. Baensch, a publishing executive who has held positions at Macmillan, Springer-Verlag, Harper & Row and McGraw-Hill, took office on 22 August as director of publishing for the American Institute of Physics. Baensch succeeds Robert Marks, who left AIP in April after 18 years as publishing director to join the American Chemical Society in Washington, DC, as director of publications.

At AIP Baensch will preside over the largest physics publishing operation in the United States. He will be responsible for Publishing Branch I, which produces the 6 archival journals owned by AIP, 19 translation journals and 10 journals AIP publishes for various member or affiliated societies, and Publishing Branch II, which produces 7 journals published by The American Physical Society. He also will oversee the book publishing program, the advertising and exhibits division, marketing, and *Computers in Physics*, the bimonthly magazine launched by AIP last year.

Baensch did his undergraduate work at Johns Hopkins University, earning his bachelor's degree in 1957, and he participated in the Stanford Executive Program at Stanford University's Graduate School of Business in 1980. He helps teach the professional publishing course at Stanford

and is a faculty member at New York University's Management Institute



Robert E. Baensch (left), AIP's new director of publishing, and AIP Executive Director Kenneth Ford.

and Center for Publishing. He also has taught at the University of Denver's Publishing Institute and the graduate school and university center at the City University of New York.

From 1960 to 1968 Baensch worked for McGraw-Hill Book Company, where he was manager of an information systems reference business, editorial director of the international division, manager of the foreign rights department and sponsoring editor of the medical books division. From 1968 to 1980 he was vice president and director of the international divi-

sion at Harper & Row Publishers Inc. From 1980 to 1982 he was president and chief executive officer of Springer-Verlag of New York, the US subsidiary of Germany's leading scientific and technical publisher. From 1983 to 1988 he was vice president for marketing at the Macmillan Publishing Company.

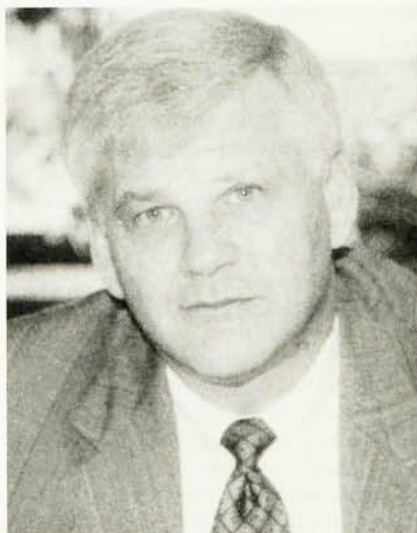
Baensch is chairman of the executive council of the professional and scholarly publishing division of the Association of American Publishers and is on the board of directors of the Society for Scholarly Publishing.

KIRWAN NAMED MANAGER OF AIP'S EDUCATION DIVISION

Donald F. Kirwan of the University of Rhode Island has become the manager of the education division of the American Institute of Physics, effective 1 September. The education division is being expanded and relocated from Woodbury, Long Island, to AIP's offices in Washington, DC. The division's responsibilities include administering the Society of Physics Students. In Washington, the division is to become more active in fostering cooperation and communication among AIP's ten member societies and will develop stronger relations with educational associations and governmental education agencies.

In the estimation of John Rigden, AIP's director of physics programs, education unites the physics societies more than any other single concern. Hence, Rigden says, it will be Kirwan's mission to work closely with the societies, both individually and collectively, and to initiate educational activities that complement those of the member societies.

Kirwan received his degrees in physics at the University of Missouri, Columbia (BS, 1963, MS, 1964, and PhD, 1969). He joined the faculty at the University of Rhode Island in



Donald F. Kirwan

1967 and became a full professor there in 1981. Kirwan is editor of *The Physics Teacher* magazine, which is published by the American Association of Physics Teachers. He has served on the AAPT and SPS executive boards.

Education fellow

In other AIP education news, Jorge Barojas of the University of Mexico has joined the staff at the Washington office as 1988-89 senior education fellow, succeeding Sallie A. Watkins. Watkins was the first AIP senior education fellow, a newly created position. She had "no shoes to step into," Rigden observes, and "she did a marvelous job."

In addition to continuing some of the activities initiated by Watkins, who sought to foster greater participation of women and minorities in physics, Barojas will be involved in an effort to reformulate the introductory college-level physics curriculum—an

NSF-supported endeavor that Rigden has been working on with Robert Resnick of Rensselaer Polytechnic Institute and Donald Holcomb of Cornell University (see *PHYSICS TODAY*, October 1987, page 107, and May 1987, page 87).

Barojas earned his bachelor's degree in 1966 and his master's in 1968 at the Autonomous National University of Mexico and his PhD at the Faculté des Sciences in Paris in 1970. He was an instructor at the Autonomous University's national high school in 1961-62, an assistant professor at the university from 1963 to 1968, head of the undergraduate laboratories in 1964-65 and a professor of physics in 1974-75. Since 1975 he has been a professor of physics at the Autonomous Metropolitan University of Iztapalapa. He was head of the molecular physics group at Iztapalapa from 1977 to 1985, and he has been director of the university's group on science and technology education since 1986.

Barojas has done research in liquid-state theory, small-particle systems and double-layer problems. In physics education, his interests include teacher training, cognitive development, educational uses of microcomputers and curriculum development.

Barojas is editor of *Contactos*, a Spanish-language journal of science and technology. He is the coordinator of a physics teacher training program sponsored by the Mexican Ministry of Education.

Condell retires

William J. Condell retired at the end of May as manager of AIP's Washington office. A former staff member of the Office of Naval Research, Condell joined the DC office two years ago, shortly after its establishment in the American Geophysical Union's building on Florida Avenue. In addition to helping organize the office, Condell revived AIP's visiting scientist program and prepared a book on the Federal budgetary process.

AIP ANNOUNCES MEGGERS EDUCATION AWARD WINNERS

Five individuals have been named winners of AIP's 1988 Meggers Project Award, a biennial grant designed to support the improvement of high school physics teaching in the United States. The newly established award consists of a total of \$25 000 to be divided among one or more outstanding projects. Applications for the

Physics Teacher Search

A search committee has been established to recommend a new editor for *The Physics Teacher*, which is published by the American Association of Physics Teachers. The current editor, Donald F. Kirwan, has resigned effective 1 July 1989. The head of the search committee is Joe F. Pizzo of Lamar University in Beaumont, Texas. Nominations and applications should be addressed to J. F. Pizzo, Box 10046, Lamar Station, Beaumont TX 77710.