## **Bonds Required for Tests**

Researchers seeking to conduct field tests of genetically engineered microorganisms in Shamong Township, New Jersey, will have to post a minimum of \$6 million in bonds before they can proceed. The requirement is part of a larger ordinance adopted by the town last month to regulate any future experiment.

Municipal Clerk Lynn Heinold says town officials decided to adopt regulations because the 46-square-mile township could be a candidate for tests in the future. He says there are no pending proposals to conduct experiments at this time. Officials of DNA Plant Technology of nearby Cinnaminson say they are not affected by the law since their work does not involve microorganisms. Under the ordinance, the sponsor of the field test could forfeit the personalliability and property-damage bonds if any condition or provision of the ordinance is violated. **• M.C.** 

## Ionson to Leave SDI Organization

James A. Ionson, director of Innovative Science and Technology (IST) research for the Strategic Defense Initiative Organization, will leave SDIO on 8 April to found his own company, called JDC Enterprises. "It'll be like a commercial IST," said Ionson in describing his new firm. "I'm going to take this technology and focus it on commercial applications. We're not going after DOD [Department of Defense] markets at all."

Ionson, 37, came to the Pentagon from NASA and oversaw a rapidly growing research budget that reached \$143 million in fiscal year 1988. About 60% of these funds go to university researchers. During his tenure, Ionson clashed with prominent scientists who oppose university participation in the SDI program, calling them unrepresentative of the broader scientific and technical community.

The new firm, based in Columbia, Maryland, will start with "a handful of people," said Ionson. "But then, a handful of people started IST." According to Ionson, several companies have been lined up who will help finance the venture, but he declined to name them. **D.C.** 

## NAE Elects New Members

The National Academy of Engineering has elected 85 new members and seven foreign associates, including one who was honored posthumously. This brings total U.S. membership to 1417 and the number of foreign associates to 118. The newly elected are:

Laurence J. Adams, Martin Marietta Corp.; Richard C. Alkire, University of Illinois, Urbana; Frederick T. Andrews Jr., Bell Communications Research Inc.; William F. Ballhaus Jr., NASA Ames Research Center; Robert R. Berg, Texas A&M University; Howard K. Birnbaum, University of Illinois; Kenneth B. Bischoff, University of Delaware, Newark; Robert W. Brodersen, University of California, Berkeley; Ben H. Caudle, University of Texas, Austin; Leroy L. Chang, IBM Thomas J. Watson Research Center; Praveen Chaudhari, IBM Thomas J. Watson Research Center; Hsien K. Cheng, University of Southern California, Los Angeles.

Jon F. Claerbout, Stanford University; Keith H. Coats, Intercomp Inc., Houston; Aaron Cohen, NASA Johnson Space Center; Neville G. W. Cook, University of California, Berkeley; Edward J. Cording, University of Illinois, Urbana; James B. Coulter, Maryland Department of Natural Resources; Norval H. Curry, Curry-Wille & Associates, Ames, IA; Lawrence B. Curtis, Conoco, Houston; Ernest L. Daman, Foster Wheeler Corp., Livingston, NJ; H. Ted Davis, University of Minnesota, Minneapolis; Chieh-Su Hsu, University of California, Berkeley; Marvin E. Jensen, Department of Agriculture, Fort Collins, CO; James O. Jirsa, University of Texas, Austin; Ellis L. Johnson, IBM Thomas J. Watson Research Center; Frank D. Judge, General Electric Co., San Jose, CA.

Jerry R. Junkins, Texas Instruments Inc.; Joseph M. Juran, Juran Institute Inc., Wilton, CT; George E. Keller II, Union Carbide Corp., South Charleston, WV; Bernard L. Koff, Pratt & Whitney, West Palm Beach, FL; Lester C. Krogh, Minnesota Mining & Manufacturing Co.; Louis J. Lanzerotti, AT&T Bell Laboratories; James U. Lemke, Recording Physics Inc., San Diego, CA; Gerald A. Leonards, Purdue University; Barbara H. Liskov, Massachusetts Institute of Technology (MIT); Albert Macovski, Stanford University; George A. Maneatis, Pacific Gas and Electric, San Francisco; John L. Mason, The Garrett Corp., Los Angeles.

Bill B. May, ARGOSystems Inc., Sunnyvale, CA; Duane T. McRuer, Systems Technology Inc., Hawthorne, CA; Lawrence M. Mead Jr., Grumman Corp., Bethpage, NY; Sanjoy K. Mitter, MIT; Joe H. Mize, Oklahoma State University, Stillwater; Rear Admiral John B. Mooney Jr., Department of the Navy; Clayton D. Mote Jr., University of California, Berkeley; Robert M. Nerem, Georgia Institute of Technology; William C. Norris, Control Data Corp., Minneapolis; John T. Oden, University of Texas, Austin; Carel Otte Jr., Unocal Corp., Los Angeles.

Frank L. Parker, Vanderbilt University; Ronald R. Parker, MIT; Donald R. Paul, University of Texas, Austin; Val P. Peline, Lockheed Corp., Sunnyvale, CA; Donald E. Petersen, Ford Motor Co.; Theodore H. Pian, MIT; James H. Pomerene, IBM Thomas J. Watson Research Center; Donald E. Procknow, AT&T Technologies Inc.; Robert A. Rapp, Ohio State University, Columbus; Joseph G. Richardson, Richardson, Sangree and Sneider, Houston; Dennis M. Ritchie, AT&T Bell Laboratories; Enders A. Robinson, Tulsa University; Don W. Shaw, Texas Instruments Inc.

Leonard M. Silverman, University of Southern California, Los Angeles; Joanne Simpson, NASA Goddard Space Flight Center; John A. Simpson, National Bureau of Standards; Gaithersburg, MD.; Richard Skalak, Columbia University; Leroy H. Smith Jr., General Electric Co.; William J. Spencer, Xerox Corp.; Robert E. Tarjan, Princeton University; David A. Thompson, IBM Thomas J. Watson Research Center; Neil E. Todreas, MIT; Julia R. Weertman, Northwestern University; Irwin Welber, Sandia National Laboratories; Forman A. Williams, Princeton University; Ward O. Winer, Georgia Institute of Technology, Atlanta.

## The foreign associates are:

Daniel N. Dietz, Delft University of Technology, The Hague, Netherlands; John H. Horlock, The Open University, Milton Keynes, England; Kurt Lange, University of Stuttgart, Stuttgart, West Germany; Robert F. Legget, Canadian Academy of Engineering, Ottawa; Ignacio Rodriguez-Iturbe, Institudo Internacionel de Estudios Avanzados, Caracas, Venezuela; Jacov Ziv, Technion-Israel Institute of Technology, Haifa.

Elected posthumously as a foreign associate was: Sachio Matoba, Nippon Steel Corp., Tokyo, Japan.