

Bulletin



NATIONAL SCIENCE FOUNDATION

Office of Legislative and Public Affairs

Volume 24, No. 9, May 1997

NSF Announcements for May 1997

The NSF Bulletin provides monthly news about NSF programs and funding opportunities, deadline and target dates for submission of proposals, current publications, and meetings and conferences as well as sources for more information. Telephone numbers are the Arlington, VA, area code 703 unless otherwise indicated. Individuals who are hearing-impaired should call either NSF's Telephonic Device for the Deaf (TDD) at 306-0090 or the Federal Information Relay Service (FIRS) at 1-800-877-8339 for further information.



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NOTE: The CFDA numbers that appear under each directorate heading are taken from the Catalog of Federal Domestic Assistance, a publication issued annually by the Office of Management and Budget and available from the Government Printing Office at (202) 512-1800.

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■ BIO Awards Lists Available

The fiscal year 1996 (FY96) Summary of Awards for each division in the Directorate for Biological Sciences (BIO) is now available in print and electronic format. Each summary provides the scientific and engineering communities with information about awards made in the division during FY 96. Information includes the principal investigator's name, the award title, the amount, and the duration of the award.

The following information includes the publication number and the Web address where each summary can be accessed:

- **Division of Biological Infrastructure (DBI)** (NSF 97-65), <http://www.nsf.gov/bio/pubs/awards/dbiawd96.htm>.
- **Division of Environmental Biology (DEB)** (NSF 97-66), <http://www.nsf.gov/bio/pubs/awards/debawd96.htm>.
- **Division of Integrative Biology and Neuroscience (IBN)** (NSF 97-68), <http://www.nsf.gov/bio/pubs/awards/ibnawd96.htm>.
- **Division of Molecular and Cellular Biosciences (MCB)** (NSF 97-67), <http://www.nsf.gov/bio/pubs/awards/mcbawd96.htm>.

Printed copies are available from the Forms and Publications Unit and can be ordered using the information on the Publications Order form in the back of this Bulletin.

Program Deadlines and Target Dates for Proposals

The Bulletin gives key dates on which grant proposals are due at NSF for the next 4 months. These dates are subject to change. Further information on the programs in this publication is available from the staff members or offices listed for each entry; from the NSF Guide to Programs (NSF 97-30); or from the NSF Home Page on the Web. Unless otherwise indicated, brochures in parentheses are available from NSF's Publications Office and may be requested by filling out the Publications Order Form located in the back of this Bulletin. In addition, many of NSF's publications are available electronically on the Web. The number and letter codes after some announcements refer to listings in the publication Keyword Thesaurus. They are used by the research management offices of colleges and universities to target NSF Bulletin information to potential users.



Program Deadlines: Unless otherwise stated in announcements or solicitations, proposals postmarked after these cutoff dates generally will be returned to the proposer.

Target Dates: Unless otherwise stated in announcements or solicitations, proposals postmarked after these cutoff dates will be reviewed, although they may miss a particular panel meeting.

Most NSF programs that do not have a specific deadline or target date will accept proposals at any time of the year. These programs do not appear in the Bulletin. It takes approximately 6 months to process a proposal.

Biological Sciences

CFDA #47.074

Further information on the programs in this section can be found in the NSF Guide to Programs (NSF 97-30), or on the BIO Directorate Home Page at <http://www.nsf.gov/bio/start.htm>.

PROGRAM DEADLINES:

May 2, 1997----

Fifth Competition for Long-Term Ecological Research (LTER)—Urban LTER. (Brochure NSF 97-53, available in electronic format only.) Contact Dr. Scott Collins in the Division of Environmental Biology by phone, 306-1482, or by e-mail, scollins@nsf.gov. [PT.34; K.W.1002000,1007001.]

May 15, 1997—

Learning and Intelligent Systems. Full Proposals. (Brochure NSF 97-18.) For biologically related projects, contact Dr. Walter Wilczynski in the Division of Integrative Biology and Neuroscience by phone, 306-1416, or by e-mail, wwilczyn@nsf.gov. For general information, send an e-mail message to lis@nsf.gov. [PT.34.]

July 15, 1997—

Research Collections in Systematics and Ecology. (Brochure NSF 93-116, in revision.) Contact Dr. Meredith Lane in the Division of Environmental Biology by phone, 306-1483, or by e-mail, malane@nsf.gov. [PT.20,34; K.W.1002011,1002016.]

July 22, 1997—

FOUNDATION WIDE

Faculty Early Career Development (CAREER) Program. The CAREER Program guidelines (NSF 97-87) and the FAQ (Frequently Asked Questions) document are now available on the NSF Home Page (www.nsf.gov/) under the heading "Cross-Cutting Programs." The FAQ document is available in electronic format only. The guidelines are also available in printed format and can be ordered

from the NSF Forms and Publications Unit using the order form in the back of this Bulletin. For general inquiries, contact Dr. Fred Stollnitz in the Division of Integrative Biology and Neuroscience by phone, 306-1413, or by e-mail, fstollni@nsf.gov. [PT.34; K.W.0502006.]

July 28, 1997----

Multi-User Biological Equipment and Instrumentation Resources. (Brochure NSF 96-91, available in electronic format only.) Contact Dr. Barry Masters or Dr. Karl Koehler in the Division of Biological Infrastructure by phone, 306-1472, or by e-mail, bmasters@nsf.gov or kkoehler@nsf.gov. [PT.18,34; K.W.1002000,1002024.]

August 25, 1997—

Instrument Development for Biological Research. (Brochure NSF 96-90, available in electronic format only.) Contact Dr. Barry Masters or Dr. Karl Koehler in the Division of Biological Infrastructure by phone, 306-1472, or by e-mail, bmasters@nsf.gov or kkoehler@nsf.gov. [PT.18,34; K.W.1002000,1002024.]

DATE TO BE ANNOUNCED----

Environmental Geochemistry and Biogeochemistry. (Brochure NSF 96-152.) Unsolicited proposals for this specific component may be submitted to any of the following divisions: **Earth Sciences**, contact Dr. Maryellen Cameron by phone, 306-1554, or by e-mail, mcameron@nsf.gov; **Ocean Sciences**, contact Dr. Ken Buesseler by phone, 306-1589, or by e-mail, kbuessel@nsf.gov; **Chemistry**, contact Dr. Margaret Cavanaugh by phone, 306-1842, or by e-mail, mcavanau@nsf.gov; **Chemical and Transport Systems**, contact Dr. M.C. Roco by phone, 306-1371, or by e-mail, mroco@nsf.gov; **Atmospheric Sciences**, contact Dr. Anne-Marie Schmoltner by phone, 306-1528, or by e-mail, aschmolt@nsf.gov; **Environmental Biology**, contact Dr. Gavis Shaver by phone, 306-1479, or by e-mail, gshaver@nsf.gov; **Molecular and Cellular Biosciences**, contact Dr. Charles Liarakos by phone, 306-1441, or by e-mail, clarako@nsf.gov; and contact the **Division of Mathematical Sciences** at 306-1870. [PT.18,34,40,42; K.W.1002016,1002027,1005002,1007001,1007002.]

TARGET DATES:

June 15, 1997—

Ecological Studies. In the **Ecosystems Program**, contact Dr. Gavis Shaver or Dr. James Callahan; and in the **Ecology Program**, contact Dr. Penelope Firth or Dr. Taber Allison; Division of Environmental Biology, 306-1479. [PT.34; K.W.1002016.]

Systematic and Population Biology. In the **Systematics Program**, contact Dr. John Gold, Dr. Charles O'Kelly, or Dr. James Rodman; and in the **Population Biology Program**, contact Dr. Elizabeth Lyons, Dr. Mark Courtney, or Dr. Lisa Brooks; Division of Environmental Biology, 306-1481. [PT.34; K.W.0413004,1002011.]

July 10, 1997—

Animal Behavior. Contact Dr. George Uetz in the Division of Integrative Biology and Neuroscience by phone, 306-1419, or by e-mail, guetz@nsf.gov. [PT.34; K.W.0201009,0404000.]

Animal Development. Contact Dr. Judith Plesset in the Division of Integrative Biology and Neuroscience by phone, 306-1417, or by e-mail, jplesset@nsf.gov. [PT.34; K.W.1002052.]

Behavioral Neuroscience. Contact Dr. Walter Wilczynski in the Division of Integrative Biology and Neuroscience by phone, 306-1416, or by e-mail, wwilczyn@nsf.gov. [PT.34; K.W.0404000,1002030.]

Bulletin



NATIONAL SCIENCE
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Arlington, VA. 22230

Neal Lane, *Director*

Joseph Bordogna, *Acting Deputy Director*

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Editor: Christina Bartlett-Whitcomb
Assistant to the Editor: Brian Lombard
Office of Legislative and Public Affairs
(306-1070) or cbartlet@nsf.gov
TDD (306-0090)

Biomolecular Processes. For **Biochemistry of Gene Expression**, contact Dr. Charles Liarakos or Dr. Susan Porter Ridley; and for **Metabolic Biochemistry**, contact Dr. Rona Hirschberg or Dr. Susan Porter Ridley; Division of Molecular and Cellular Biosciences, 306-1441. [PT.34; K.W. 1002000.]

Biomolecular Structure and Function. For **Molecular Biochemistry**, contact Dr. Marcia Steinberg or Dr. P.C. Huang by phone, 306-1443, or by e-mail, msteinbe@nsf.gov or phuang@nsf.gov; and for **Molecular Biophysics**, contact Dr. Kamal Shukla or Dr. Dagmar Ringe by phone, 306-1444, or by e-mail, kshukla@nsf.gov or dringe@nsf.gov; Division of Molecular and Cellular Biosciences. [PT.34; K.W.1003001,1003002.]

Cell Biology. For **Signal Transduction**, contact Dr. Barbara Zain or Dr. Eliot Herman; and for **Cellular Organization**, contact Dr. Eve Barak or Dr. Eliot Herman; Division of Molecular and Cellular Biosciences, 306-1442. [PT.34; K.W.1002004.]

Computational Neuroscience. Contact Dr. Raymon Glantz in the Division of Integrative Biology and Neuroscience by phone, 306-1416, or by e-mail, rglantz@nsf.gov. [PT.34; K.W.1002030.]

Developmental Neuroscience. Contact Dr. Susan Volman in the Division of Integrative Biology and Neuroscience by phone, 306-1423, or by e-mail, svolman@nsf.gov. [PT.34; K.W. 1002030.]

Ecological and Evolutionary Physiology. Contact Dr. John Phillips in the Division of Integrative Biology and Neuroscience by phone, 306-1421, or by e-mail, jphillip@nsf.gov. [PT.34; K.W.1002044,1002062.]

Genetics. For **Microbial Genetics**, contact Dr. Philip Harriman; and for **Eukaryotic Genetics**, contact Dr. DeLill Nasser; Division of Molecular and Cellular Biosciences, 306-1439. [PT.34; K.W.0760053,1002019,1003002.]

Integrative Animal Biology. Contact Dr. Stacia Sower or Dr. Elvira Doman in the Division of Integrative Biology and Neuroscience by phone, 306-1421, or by e-mail, ssower@nsf.gov. [PT.34; K.W.0201018,0201019.]

Integrative Plant Biology. Contact Dr. Hans Bohnert in the Division of Integrative Biology and Neuroscience by phone, 306-1422, or by e-mail, hbohnert@nsf.gov. [PT.34; K.W. 1002040.]

Neuroendocrinology. Contact Dr. Kathie Olsen in the Division of Integrative Biology and Neuroscience by phone, 306-1423, or by e-mail, kol sen@nsf.gov. [PT.34; K.W.0785105.]

Neuronal and Glial Mechanisms. Contact Dr. Raymon Glantz in the Division of Integrative Biology and Neuroscience by phone, 306-1416, or by e-mail, rglantz@nsf.gov. [PT.34; K.W. 1002030.]

Plant and Microbial Development. Contact Dr. J. Lynn Zimmerman in the Division of Integrative Biology and Neuroscience by phone, 306-1417, or by e-mail, jzimmerm@nsf.gov. [PT.34; K.W.1002027,1002040.]

Sensory Systems. Contact Dr. Christopher Platt in the Division of Integrative Biology and Neuroscience by phone, 306-1424, or by e-mail, cplatt@nsf.gov. [PT.34; K.W.0705070.]

Computer and Information Science and Engineering

CFDA #47.070

Further information on the programs in this section can be found in the NSF Guide to Programs (NSF 97-30), or on the CISE Directorate Home Page at <http://www.cise.nsf.gov/>.

PROGRAM DEADLINES:

May 1, 1997---

Networking and Communications Research. (Brochure NSF 89-110.) Contact Dr. Thomas Fujja or Dr. Tatsuya Suda in the Division of Networking and Communications Research and Infrastructure by phone, 306-1949, or by e-mail, tfujja@nsf.gov or suda@nsf.gov. [PT.34; K.W.0405000, 1004055.]

July 31, 1997---

Connections to the Internet. (Brochure NSF 96-64.) Contact Mr. David Staudt or Mr. Douglas Gatchell in the Division of Networking and Communications Research and Infrastructure by phone, 306-1949, or by e-mail, dstaudt@nsf.gov or dgatchell@nsf.gov. [PT.18,36; K.W.1103008.]

NSF funds research and education in most fields of science and engineering. Grantees are wholly responsible for conducting their project activities and preparing the results for publication. Thus the Foundation does not assume responsibility for such findings or their interpretation.

NSF welcomes proposals on behalf of all qualified scientists, engineers, and science educators and strongly encourages women, minorities, and persons with disabilities to participate fully in its programs.

In accordance with federal statutes, regulations, and NSF policies, no person on grounds of race, color, age, sex, national origin, or disability shall be excluded from participation in, be denied the benefits of, or be subject to discrimination under any program or activity receiving financial assistance from NSF.

Facilitation Awards for Scientists and Engineers with Disabilities provide funding for special assistance or equipment to enable persons with disabilities to work on NSF-supported projects. For more information, see the program announcement (NSF 91-54), or contact the program coordinator at 306-1636.

Privacy Act and Public Burden. The information requested on proposal forms is solicited under the authority of the National Science Foundation Act of 1950, as amended. It will be used in connection with the selection of qualified proposals and may be disclosed to qualified reviewers and staff assistants as part of the review process; to applicant institutions/grantees to provide or obtain data regarding the application review process, award decisions, or the administration of awards; to government contractors, experts, volunteers, and researchers as necessary to complete assigned work; and to other government agencies in order to coordinate programs. See Systems of Records, NSF-50, "Principal Investigators/Proposal File and Associated Records," 60 Federal Register 4449 (Jan. 23, 1995), and NSF-51, "Reviewer/Proposal File and Associated Records," 59 Federal Register 8031 (Feb. 17, 1994). Submission of the information is voluntary. Failure to provide full and complete information, however, may reduce the possibility of your receiving an award.

The public reporting burden for this collection of information is estimated to average 120 hours per response, including the time for reviewing instructions. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Herman G. Fleming, Reports Clearance Officer, Contracts, Policy, and Oversight, National Science Foundation, 4201 Wilson Boulevard, Arlington, VA 22230.

The National Science Foundation has TDD and FIRS capabilities, which enable individuals with hearing impairment to communicate with the Foundation about NSF programs, employment, or general information. To access TDD, dial 306-0090; for FIRS, dial 1-800-877-8339.

August 6, 1997----

CISE Instrumentation. (Brochure NSF 95-60.) Supports the purchase of special-purpose equipment or instrumentation to be used for research in areas of science and engineering that are supported by the CISE Directorate. This equipment is not intended to provide general computing capacity and should be required by more than one research project or be difficult to justify for one project alone. Contact Ms. Rita Rodriguez in the Office of Cross-Disciplinary Activities by phone, 306-1980, or by e-mail, rrodrigu@nsf.gov. [PT.18; K.W.1014001.]

August 15, 1997----

Experiments in Distributed Design and Fabrication and Rapid Prototyping Using Agile Networking. (Brochure NSF 96-94.) Contact Dr. John Lehmann in the Division of Microelectronic Information Processing Systems by phone, 306-1940, or by e-mail, jlehmann@nsf.gov. [PT.34; K.W.1004055.]

Education and Human Resources

CFDA #47.076

Further information on the programs in this section can be found in the NSF Guide to Programs (NSF 97-30), or on the EHR Directorate Home Page at <http://red.www.nsf.gov/>.

PROGRAM DEADLINES:

May 1, 1997----

Implementation and Development Projects (IDP). Formal Proposals—Over \$100,000. (Brochure NSF 96-131.) This program funds projects that build on existing research about gender and science, engineering, and mathematics infrastructure to create positive, permanent change in academic, social, and scientific climates. Awards will be granted for up to 3 years, with budgets of up to \$300,000 a year. Prospective proposers who did not submit a preliminary proposal by January 2, 1997, are not eligible to submit a formal proposal. Contact the Programs for Women and Girls in the Division of Human Resource Development by phone, 306-1637, or by e-mail, hrdwomen@nsf.gov. [PT.06,12,34,42; K.W.0502023,0502031,0502042.]

June 1, 1997----

Research on Education, Policy, and Practice (REPP). Formal Proposals. (Brochure NSF 96-138.) Supports research in the following areas: **Data, Methodology, and Theory; Policy; Practice;** and **Technology.** Contact Dr. Christopher Dede in the Division of Research, Evaluation, and Communication by phone, 306-1651, or by e-mail, cjdede@nsf.gov. The target date for preliminary proposals was March 15, 1997. [PT.34; K.W.0502023,0502031.]

June 9, 1997----

Course and Curriculum Development. (Brochure NSF 97-29.) This program provides support to improve the quality of courses and curricula in science, mathematics, engineering, and technology. Proposals are encouraged that address the goals of the initiative Mathematical Sciences and Their Application Throughout the Curriculum but that are smaller in scale than those previously supported. Proposals are also encouraged for adopting materials and strategies developed by projects currently funded through the Systemic Changes in the Undergraduate Chemistry Curriculum initiative. Contact the Division of Undergraduate Education at 306-1681. [PT.25; K.W.0500000.]

Undergraduate Faculty Enhancement Program. (Brochure NSF 97-29.) This program supports workshops and other activities that target faculty who are teaching undergraduate students, to inform them about advances in their fields and help them incorporate this knowledge into their instructional material. Contact the Division of Undergraduate Education at 306-1666. [PT.25,42; K.W.0501051,0505015,0901072.]

July 15, 1997----

Information Dissemination Activities for Persons with Disabilities. Preliminary Proposals. (Brochure NSF 96-88.) This effort supports activities designed to disseminate and promote utilization of program results and to promote replication of successful strategies used to increase the recruitment and retention of persons with disabilities in science, mathematics, engineering, and technology (SMET) education and ca-

reer development. Audiences for these activities include precollege school counselors and science and mathematics teachers, college and university SMET faculty, and families of students with disabilities. Formal proposals are due October 1, 1997. Contact the Programs for Persons with Disabilities in the Division of Human Resource Development by phone, 306-1636, or by e-mail, hrdppd@nsf.gov. [PT.16;DD; K.W.0502006,0770010.]

Model Projects for Persons with Disabilities. Preliminary Proposals. (Brochure NSF 96-88.) The intention of this activity is to (a) encourage the design and implementation of innovative and highly focused activities that will improve the access and retention of persons with disabilities in enhanced education and careers in the fields of science, engineering, and mathematics; and (b) demonstrate the effectiveness of existing activities with the same goals. These goals can be achieved through evaluation, refinement, and expansion, or replication with a different population or setting. Formal proposals are due October 1, 1997. Contact the Programs for Persons with Disabilities in the Division of Human Resource Development by phone, 306-1636, or by e-mail, hrdppd@nsf.gov. [PT.12,25;II; K.W.0500000,0502006.]

TARGET DATES:

May 1, 1997----

Instructional Materials Development. Preliminary Proposals. (Brochure NSF 97-20.) This program supports the development of instructional materials that will promote the systemic improvement of science, mathematics, and technology instruction in grades pre-K through 12. The projects emphasize the connections within and among science, mathematics, technology, and other areas of study. The materials should have a broad impact on education and should make positive, long-term changes in student learning. Formal proposals are due August 15, 1997. Contact the Division of Elementary, Secondary, and Informal Education at 306-1614. [PT.25; K.W.0503016.]

June 2, 1997----

Informal Science Education. Formal Proposals. (Brochure NSF 97-20.) This program promotes a better understanding of the process of science and scientific thinking through learning that is voluntary, self-directed, and long term. Informal science programs are often visual or object-oriented and operate through a variety of media and organizations, including television, film, museums, nature centers, parks, and libraries. The projects are designed to reach a large national or regional audience for maximum impact and seek to promote new relationships between informal and formal education. Preliminary proposals were due March 3, 1997. Contact the Division of Elementary, Secondary, and Informal Education at 306-1616. [PT.25; K.W.0502031,0502058,0503003.]

August 1, 1997----

Informal Science Education. Preliminary Proposals. (Brochure NSF 97-20.) This program promotes a better understanding of the process of science and scientific thinking through learning that is voluntary, self-directed, and long term. Informal science programs are often visual or object-oriented and operate through a variety of media and organizations, including television, film, museums, nature centers, parks, and libraries. The projects are designed to reach a large national or regional audience for maximum impact and seek to promote new relationships between informal and formal education. Formal proposals are due November 17, 1997. Contact the Division of Elementary, Secondary, and Informal Education at 306-1616. [PT. 25; K.W.0502031,0502058,0503003.]

August 15, 1997----

Instructional Materials Development. Formal Proposals. (Brochure NSF 97-20.) This program supports the development of instructional materials that will promote the systemic improvement of science, mathematics, and technology instruction in grades pre-K through 12. The projects emphasize the connections within and among science, mathematics, technology, and other areas of study. The materials should have a broad impact on education and should make positive, long-term changes in

student learning. Preliminary proposals were due May 1, 1997. Contact the Division of Elementary, Secondary, and Informal Education at 306-1614. [PT.25; K.W.0503016.]

DATE TO BE ANNOUNCED----

Integrative Graduate Education and Research Training Program (formerly Graduate Research Traineeships (GRTs) and Research Training Grants (RTGs) Programs). (Brochure to be released in late May.) Contact Dr. Paul Jennings in the Division of Graduate Education by phone, 306-1696, or by e-mail, pjenning@nsf.gov. [PT.34,44; K.W.0500000.]

Engineering

CFDA #47.041

Further information on the programs in this section can be found in the NSF Guide to Programs (NSF 97-30), or on the ENG Directorate Home Page at <http://www.nsf.gov:80/eng/start.htm>.

PROGRAM DEADLINES:

June 12, 1997----

Small Business Innovation Research. (Brochure NSF 97-64.) Contact the Division of Design, Manufacture, and Industrial Innovation by phone, 306-1390, or by e-mail, sbir@nsf.gov. [PT.34; K.W.0901043.]

July 22, 1997----

FOUNDATION WIDE

Faculty Early Career Development (CAREER) Program. The CAREER Program guidelines (NSF 97-87) and the FAQ (Frequently Asked Questions) document are now available on the NSF Home Page (www.nsf.gov/) under the heading "Cross-Cutting Programs." The FAQ document is available in electronic format only. The guidelines are also available in printed format and can be ordered from the NSF Forms and Publications Unit using the order form in the back of this Bulletin. For general inquiries, contact Ms. Sharon Middledorf in the Division of Engineering Education and Centers by phone, 306-1384, or by e-mail, engcarr@nsf.gov. [PT.34; K.W.0502006.]

DATE TO BE ANNOUNCED----

Environmental Geochemistry and Biogeochemistry. (Brochure NSF 96-152.) Unsolicited proposals for this specific component may be submitted to any of the following divisions: **Earth Sciences**, contact Dr. Maryellen Cameron by phone, 306-1554, or by e-mail, mcameron@nsf.gov; **Ocean Sciences**, contact Dr. Ken Buesseler by phone, 306-1589, or by e-mail, kbuessel@nsf.gov; **Chemistry**, contact Dr. Margaret Cavanaugh by phone, 306-1842, or by e-mail, mcavanau@nsf.gov; **Chemical and Transport Systems**, contact Dr. M.C. Roco by phone, 306-1371, or by e-mail, mroco@nsf.gov; **Atmospheric Sciences**, contact Dr. Anne-Marie Schmoltner by phone, 306-1528, or by e-mail, aschmolt@nsf.gov; **Environmental Biology**, contact Dr. Gavis Shaver by phone, 306-1479, or by e-mail, gshaver@nsf.gov; **Molecular and Cellular Biosciences**, contact Dr. Charles Liarakos by phone, 306-1441, or by e-mail, cliarako@nsf.gov; and contact the **Division of Mathematical Sciences** at 306-1870. [PT.18,34,40,42; K.W.1002016,1002027,1005002,1007001,1007002.]

Geosciences

CFDA #47.050

Further information on the programs in this section can be found in the NSF Guide to Programs (NSF 97-30), or on the GEO Directorate Home Page at <http://www.geo.nsf.gov/>.

PROGRAM DEADLINES:

June 1, 1997----

Division of Earth Sciences. In the **Continental Dynamics Program**, contact Dr. Leonard Johnson by phone, 306-1559, or by e-mail, lejohnso@nsf.gov; in the **Geology and Paleontology Program**, contact Dr. John Maccini or Dr. Christopher Maples by phone, 306-1551, or by e-mail, jamaccin@nsf.gov or cmaples@nsf.gov; in the **Geophysics Program**, contact Ms. Robin Reichlin or Dr. James Whitcomb by phone, 306-1556, or by e-mail, rreichli@nsf.gov or jwhitcom@nsf.gov; in the **Hydrologic Sciences Program**, contact Dr. L. Douglas James by phone, 306-1549, or by e-mail, ldjames@nsf.gov; in the **Petrology and Geochemistry Pro-**

gram, contact Dr. Sonia Esperanca or Dr. Maryellen Cameron by phone, 306-1554, or by e-mail, sesperan@nsf.gov or mcameron@nsf.gov; and in the **Tectonics Program**, contact Dr. Thomas Wright or Dr. Robert Wintsch by phone, 306-1552, or by e-mail, twright@nsf.gov or rwintsch@nsf.gov. Descriptions of programs are contained in Earth Sciences Research at the NSF (NSF 96-50). [PT. 34; K.W.1005002,1005005,1005013,1005017,1005019,1005024,1005048,1013009.]

DATE TO BE ANNOUNCED---

Cooperative Studies of the Earth's Deep Interior. (Brochure NSF 95-155.) Contact Ms. Robin Reichlin in the Division of Earth Sciences by phone, 306-1556, or by e-mail, rreichli@nsf.gov. [PT.34; K.W.1005000.]

Environmental Geochemistry and Biogeochemistry. (Brochure NSF 96-152.) Unsolicited proposals for this specific component may be submitted to any of the following divisions:

Earth Sciences, contact Dr. Maryellen Cameron by phone, 306-1554, or by e-mail, mcameron@nsf.gov; **Ocean Sciences**, contact Dr. Ken Buesseler by phone, 306-1589, or by e-mail, kbuessel@nsf.gov; **Chemistry**, contact Dr. Margaret Cavanaugh by phone, 306-1842, or by e-mail, mcavanaugh@nsf.gov; **Chemical and Transport Systems**, contact Dr. M.C. Roco by phone, 306-1371, or by e-mail, mroco@nsf.gov; **Atmospheric Sciences**, contact Dr. Anne-Marie Schmoltner by phone, 306-1528, or by e-mail, aschmolt@nsf.gov; **Environmental Biology**, contact Dr. Gaus Shaver by phone, 306-1479, or by e-mail, gshaver@nsf.gov; **Molecular and Cellular Biosciences**, contact Dr. Charles Liarakos by phone, 306-1441, or by e-mail, cliarako@nsf.gov; and contact the **Division of Mathematical Sciences** at 306-1870. [PT.18,34,40,42; K.W.1002016,1002027,1005002,1007001,1007002.]

TARGET DATES:

May 1, 1997---

Coupling, Energetics, and Dynamics of Atmospheric Regions (CEDAR). Contact Dr. Sunanda Basu in the Division of Atmospheric Sciences by phone, 306-1529, or by e-mail, sbasu@nsf.gov. [PT.34; K.W.1001000,1008050.]

May 2, 1997---

Proposal for Unidata Equipment Grants. Contact Mr. Bernard Grant in the Division of Atmospheric Sciences by phone, 306-1521, or by e-mail, bgrant@nsf.gov. [PT.18; K.W.1001000.]

June 1, 1997---

Division of Atmospheric Sciences. Supports research that requires National Center for Atmospheric Research (NCAR) or university-based national facilities for the period April 1 through October 1, 1998. Contact Mr. Kenneth Van Sickle by phone, 306-1526, or by e-mail, kvansick@nsf.gov. [PT.34; K.W.1001000.]

Mathematical and Physical Sciences

CFDA #47.049

Further information on the programs in this section can be found in the NSF Guide to Programs (NSF 97-30), or on the MPS Directorate Home Page at <http://www.nsf.gov/mps>.

PROGRAM DEADLINES:

July 22, 1997---

FOUNDATION WIDE

Faculty Early Career Development (CAREER) Program. The CAREER Program guidelines (NSF 97-87) and the FAQ (Frequently Asked Questions) document are now available on the NSF Home Page (www.nsf.gov/) under the heading "Cross-Cutting Programs." The FAQ document is available in electronic format only. The guidelines are also available in printed format and can be ordered from the NSF Forms and Publications Unit using the order form in the back of this Bulletin. For general inquiries, contact Dr. James Wright in the Division of Astronomical Sciences by phone, 306-1819, or by e-mail, jwright@nsf.gov. [PT.34; K.W.0502006.]

August 29, 1997---

Advanced Technologies and Instrumentation (ATI). Contact Dr. Benjamin Snavely in the Division of Astronomical Sciences by phone, 306-1828, or by e-mail, bsnavely@nsf.gov. [PT.18,34; K.W.1014001.]

TARGET DATES:

July 1, 1997---

Division of Chemistry. Proposals submitted to the division should use this target date. However, those submitted in response to a program announcement should use the date in the announcement. Contact the Division of Chemistry at 306-1840. [PT. 34; K.W.1003000.]

Office of Polar Programs

Further information on the programs in this section can be found in the NSF Guide to Programs (NSF 97-30), or on the OPP Home Page at <http://www.nsf.gov:80/od/opp>.

PROGRAM DEADLINES:

June 1, 1997---

Arctic Research. (Brochure NSF 95-133.) This brochure describes the Foundation's Arctic Research Program and other opportunities for Foundation support of arctic research. Contact the Office of Polar Programs at 306-1029. [PT.34; K.W.0111001,1008020.]

U.S. Antarctic Research. See brochure NSF 96-93, Antarctic Research Program Announcement and Proposal Guide, for information on fieldwork in the 1998-1999 austral summer or in the 1999 winter, or for research not involving fieldwork beginning as early as January 1998. Contact the Office of Polar Programs at 306-1031. [PT.34; K.W.0102000.]

TARGET DATES:

June 1, 1997---

Arctic Social Sciences. (Brochure NSF 95-133.) Contact Dr. Carole Seyfrit in the Office of Polar Programs by phone, 306-1029, or by e-mail, cseyfrit@nsf.gov. [PT.34; K.W.0111001,1008020.]

Arctic System Sciences. (Brochure NSF 95-133.) Contact Dr. Michael Ledbetter in the Office of Polar Programs by phone, 306-1029, or by e-mail, mledbett@nsf.gov. [PT.34; K.W.0111001,1008020.]

Social, Behavioral, and Economic Sciences

CFDA #47.075

Further information on the programs in this section can be found in the NSF Guide to Programs (NSF 97-30), or on the SBE Directorate Home Page at <http://www.nsf.gov:80/sbe/start.htm>.

PROGRAM DEADLINES:

May 1, 1997----

Cooperative Science Programs with Argentina, Brazil, Mexico, and Venezuela. Semi-Annual Deadline. (Brochure NSF 96-14.) Supports cooperative research, joint workshops, dissertation improvement grants, and program planning visits. For collaborative research projects and workshops, the foreign counterpart or counterparts must submit a parallel proposal to a counterpart agency in the host country. Contact the Division of International Programs by phone, 306-1706, or by e-mail, krbrown@nsf.gov. [PT.34,40,42; K.W.0112005,0112017,0112026,0112089,0112147.]

June 15, 1997----

U.S.-France Cooperative Science Program. Annual Deadline for U.S. Proposals to the NSF. (Brochure NSF 96-14.) Supports cooperative research and joint workshops. A French collaborator must have submitted a parallel proposal to the French National Center for Scientific Research (CNRS) by June 15, 1997. Contact Ms. Rose Bader Gombay in the Division of International Programs by phone, 306-1702, or by e-mail, rgombay@nsf.gov. [PT.34,42; K.W.0112045.]

U.S.-Germany Cooperative Research Co-Sponsored by the German Academic Exchange Service (DAAD). Annual Deadline. (Brochure NSF 96-14.) Supports cooperative research and joint workshops with researchers at German universities. A German collaborator must submit a parallel proposal to the DAAD. Contact Dr. Mark Suskin in the Division of International Programs by phone, 306-1702, or by e-mail, msuskin@nsf.gov. [PT.26,34; K.W.0112050.]

U.S.-Japan Cooperative Research, Including Short-Term Visits and Joint Seminars. Annual Deadline. (Bro-

chure NSF 96-14.) This program accepts proposals for cooperative research projects and joint seminar activities. Contact the Division of International Programs by phone, 306-1701, or by e-mail, jkpinfo@nsf.gov. [PT.34,42; K.W.0112070.]

TARGET DATES:

May 1, 1997----

Cooperative Research Programs with the Americas. (Brochure NSF 96-14.) Supports cooperative research, workshops, program planning visits, and dissertation improvement awards to conduct research in most of the countries in the Americas. Contact the Division of International Programs by phone, 306-1706, or by e-mail, krbrown@nsf.gov. [PT.34,40,42; K.W.0113005.]

July 1, 1997----

Archaeology. (Brochure NSF 90-93.) Contact Dr. John Yellen in the Division of Social, Behavioral, and Economic Research by phone, 306-1759, or by e-mail, jyellen@nsf.gov. [PT.34; K.W.0402000.]

Cultural Anthropology. (Brochure NSF 90-93.) Contact Dr. Stuart Plattner in the Division of Social, Behavioral, and Economic Research by phone, 306-1758, or by e-mail, splattne@nsf.gov. [PT.34; K.W.0401001.]

Physical Anthropology. (Brochure NSF 90-93.) Contact Dr. Dennis O'Rourke in the Division of Social, Behavioral, and Economic Research by phone, 306-1758, or by e-mail, dorourke@nsf.gov. [PT.34; K.W.0401002.]

July 15, 1997----

Human Cognition and Perception. (Brochure NSF 94-64.) Contact Dr. Michael McCloskey in the Division of Social, Behavioral, and Economic Research by phone, 306-1732, or by e-mail, mmcclosk@nsf.gov. [PT.34; K.W.0414005,0414017.]

Linguistics. (Brochure NSF 94-64.) Contact Dr. Fernanda Ferreira in the Division of Social, Behavioral, and Economic Research by phone, 306-1731, or by e-mail, mferreir@nsf.gov. [PT.34; K.W.0410000.]

Social Psychology. (Brochure NSF 94-64.) Contact Dr. Steven Breckler in the Division of Social, Behavioral, and

Economic Research by phone, 306-1728, or by e-mail, sbreckle@nsf.gov. [PT.34; K.W.0414014.]

August 1, 1997----

Ethics and Values Studies. (Brochure NSF 95-86.) Contact Dr. Rachele Hollander in the Division of Social, Behavioral, and Economic Research by phone, 306-1743, or by e-mail, rholland@nsf.gov. [PT.34; K.W.1014004.]

Science and Technology Studies. (Brochure NSF 95-92.) Contact Dr. Edward Hackett in the Division of Social, Behavioral, and Economic Research by phone, 306-1743, or by e-mail, ehackett@nsf.gov. [PT.34; K.W.0309008.]

August 15, 1997----

Decision, Risk, and Management Science. (Brochure NSF 94-64.) Contact Dr. Jonathan Leland in the Division of Social, Behavioral, and Economic Research by phone, 306-1757, or by e-mail, jleland@nsf.gov. [PT.34; K.W.0411005,0411015.]

Economics. (Brochure NSF 94-64.) Contact Dr. Daniel Newlon, Dr. Catherine Eckel, or Dr. Lynn Pollnow in the Division of Social, Behavioral, and Economic Research by phone, 306-1753, or by e-mail, dnewlon@nsf.gov, ceckel@nsf.gov, or lpollnow@nsf.gov. [PT.34; K.W.0408000.]

Geography and Regional Science Doctoral Dissertation Improvement Awards. (Brochure NSF 94-64.) Contact Dr. J.W. Harrington or Dr. Thomas Leinbach in the Division of Social, Behavioral, and Economic Research by phone, 306-1754, or by e-mail, jwharrin@nsf.gov or tleinbac@nsf.gov. [PT.34; K.W.0409000.]

Law and Social Science. (Brochure NSF 94-64.) Contact Dr. Harmon Hosch in the Division of Social, Behavioral, and Economic Research by phone, 306-1762, or by e-mail, hhosch@nsf.gov. [PT.34; K.W.0418003,0801029.]

Methodology, Measurement, and Statistics in the Social Sciences (MMS). (Brochure NSF 94-64.) Contact Dr. Cheryl Eavey in the Division of Social, Behavioral, and Economic Research by phone, 306-1729, or by e-mail, ceavey@nsf.gov. [PT.34; K.W.0404050.]

Political Science. (Brochure NSF 94-64.) Contact Dr. Frank Scioli or Dr. Rick Wilson in the Division of Social, Behavioral, and Economic Research by phone, 306-1761, or by e-mail, fscioli@nsf.gov or rwilson@nsf.gov. [PT.34; K.W.0412000.]

Sociology. (Brochure NSF 94-64.) Contact Dr. William Bainbridge or Dr. Patricia White in the Division of Social, Behavioral, and Economic Research by phone, 306-1756, or by e-mail, wbainbri@nsf.gov or pwhite@nsf.gov. [PT.34; K.W.0417000.]

POSITIONS OPEN FOR

✓ PROGRAM DIRECTOR

✓ ASSOCIATE PROGRAM DIRECTOR

✓ ASSISTANT PROGRAM DIRECTOR

The positions listed in this section do not necessarily represent all current vacancies at NSF. To hear a listing of posted NSF vacancies, call the Vacancy Hotline (see below). Many divisions/offices accept applications for rotational positions year-round without formal advertisement. To apply, send a resume to the appropriate division with a cover letter explaining your interest. Positions are excepted from the competitive Civil Service; the type of appointment is indicated in the job announcement. The per annum salary levels, which include a locality pay adjustment, are as follows:

Program Director Level IV—\$64,555 to \$100,611;

Associate Program Director Level III—\$54,629 to \$86,059;

Assistant Program Director Level II—\$38,330 to \$71,017.

To apply for one of the following positions, you should submit a resume or other application form of your choice and a letter or letters of recommendation. Your application must specify the job title and grade of the position you are applying for and should include the following information: your country of citizenship; your education, including your major and the type(s) and year(s) of your degree(s); and your experience related to this job, including job titles, duties, accomplish-

ments, employers' names and phone numbers, number of hours worked per week, starting and ending dates, and salaries. If you have held various positions with the same employer, describe each separately. Send your application to the Division of Human Resource Management, Room 315, NSF, 4201 Wilson Boulevard, Arlington, VA 22230. For additional information and/or to obtain the closing date for an announcement, call 306-1182, ext. 3048. Hearing-impaired individuals should call TDD, 306-0189. NSF is an Equal Opportunity Employer.

Hotline Service

NSF has a **Vacancy Hotline** listing all current vacancies. The **Hotline** number locally is 306-0080; outside the Washington, DC, metropolitan area, call 1-800-628-1487. Hearing-impaired individuals should call TDD, 306-0189.

DIRECTORATE FOR BIOLOGICAL SCIENCES (BIO)

Position and Location: Program Director positions in the **Division of Biological Infrastructure (DBI)**. Openings are in the following programs: Instrumentation, Databases, and Computational Biology.

Type of Employment: Rotational assignment for 1 or 2 years under the terms of the Visiting Scientist Program or on a temporary basis during summer/fall 1997.

For More Information: Contact Dr. James Brown, Division Director for DBI, at 306-1470. Submit applications to the attention of Ms. Catherine Handle. For additional information, call Ms. Handle at 306-1185, ext. 3027.

Position and Location: Program Director positions in the **Division of Environmental Biology (DEB)**. Openings are in the following programs: Population Biology, Systematics, Ecology, Ecosystems Studies, Research Collections, and Biotic Surveys and Inventories.

Type of Employment: Rotational assignment for 1 or 2 years under the terms of the Visiting Scientist Program or on a temporary basis.

For More Information: Contact Dr. Thomas Brady, Acting Division Director for DEB, at 306-1480. Submit applica-

tions to the attention of Ms. Catherine Handle. For additional information, call Ms. Handle at 306-1185, ext. 3027.

Position and Location: Program Director positions in the **Division of Integrative Biology and Neuroscience (IBN)**.

Openings are in the following programs: Developmental Mechanisms, Physiology and Ethology, and Neuroscience.

Type of Employment: Rotational assignment for 1 or 2 years under the terms of the Visiting Scientist Program or on a temporary basis during summer/fall 1997.

For More Information: Contact Dr. Bruce Umminger, Division Director for IBN, at 306-1420. Submit applications to the attention of Ms. Catherine Handle. For additional information, call Ms. Handle at 306-1185, ext. 3027.

Position and Location: Program Director positions in the **Division of Molecular and Cellular Biosciences (MCB)**.

Openings are in the following programs: Biochemistry, Biophysics, Genetics, and Cell Biology.

Type of Employment: Rotational assignment for 1 or 2 years under the terms of the Visiting Scientist Program or on a temporary basis during summer/fall 1997.

For More Information: Contact Dr. Julius Jackson, Division Director for MCB, at 306-1440. Submit applications to the attention of Ms. Catherine Handle. For additional information, call Ms. Handle at 306-1185, ext. 3027.

DIRECTORATE FOR COMPUTER AND INFORMATION SCIENCE AND ENGINEERING (CISE)

Position and Location: Program Director for Computer Systems Software in the **Division of Computer and Computation Research (CCR)**.

Type of Employment: Rotational assignment for 1 or 2 years under the terms of the Visiting Scientist Program or on a temporary basis, expected to be filled in the fall of 1997. Alternatively, the position may be filled under the Intergovernmental Personnel Act (IPA). IPA applicants must be permanent career employees of their cur-

rent employer (which must be an eligible organization) for at least 90 days before entering into a mobility assignment agreement with a federal agency.

For More Information: Contact Dr. Richard Kieburz, Division Director for CCR, by phone, 306-1910, or by e-mail, rkieburz@nsf.gov. Submit applications to the attention of Ms. Nina Beard. For additional information, call Ms. Beard at 306-1185, ext. 3026.

DIRECTORATE FOR ENGINEERING (ENG)

Position and Location: Program Director for Thermal Transport and Thermal Processing in the **Division of Chemical and Transport Systems (CTS)**.

Type of Employment: Permanent or rotational assignment for 1 or 2 years under the terms of the Visiting Scientist Program or on a temporary basis. Alternatively, the position may be filled under the Intergovernmental Personnel Act (IPA). IPA applicants must be permanent career employees of their current employer (which must be an eligible organization) for at least 90 days before entering into a mobility assignment agreement with a federal agency.

For More Information: Contact Dr. Gary Poehlein, Division Director for CTS, by phone, 306-1370, or by fax, 306-0319. Submit applications to the attention of Ms. Catherine Handle. For additional information, call Ms. Handle at 306-1185, ext. 3027.

DIRECTORATE FOR GEOSCIENCES (GEO)

Position and Location: Associate Program Director for Ocean Drilling in the **Division of Ocean Sciences (OCE)**.

Type of Employment: One-year assignment to be filled under the Intergovernmental Personnel Act (IPA). IPA applicants must be permanent career employees of their current employer (which must be an eligible organization) for at least 90 days before entering into a mobility assignment agreement with a federal agency.

For More Information: Contact Dr. Bruce Malfait, Program Director for Ocean Drilling, OCE, at 306-1581. For

information on other qualifications for this position, contact Ms. Aliceann Phelps by phone, 306-1580, or by e-mail, aphelps@nsf.gov. Submit applications to the attention of Ms. Catherine Handle.

DIRECTORATE FOR MATHEMATICAL AND PHYSICAL SCIENCES (MPS)

Position and Location: Program Director (Astronomer) for Extragalactic Astronomy and Cosmology in the **Division of Astronomical Sciences (AST)**.

Type of Employment: Rotational assignment for 1 or 2 years under the terms of the Visiting Scientist Program or on a temporary basis during fall 1997.

For More Information: Contact Dr. Morris Aizenman, Executive Officer for AST, at 306-1821. Submit applications to the attention of Ms. Catherine Handle. For additional information, call Ms. Handle at 306-1185, ext. 3027.



Position and Location: Program Director positions in the **Division of Mathematical Sciences (DMS)**.

Type of Employment: Rotational assignment for 1 or 2 years under the terms of the Visiting Scientist Program or on a temporary basis beginning September 1997.

For More Information: Contact the Division of Mathematical Sciences at 306-1873. Submit applications to the attention of Ms. Catherine Handle. For additional information, call Ms. Handle at 306-1185, ext. 3027.



Position and Location: Program Officer positions in the **Division of Chemistry (CHE)**. Openings are in the following programs: Analytical and Surface Chemistry; Theoretical and Computational Chemistry; Organic Chemical Dynamics; Synthetic Organic Chemistry; Experimental Physical Chemistry; Inorganic, Bioinorganic, and Organometallic Chemistry; and the Office of Special Projects.

Type of Employment: Rotational assignment for 1 or 2 years under the terms of the Visiting Scientist Program or on a temporary basis during summer 1997.

For More Information: Contact the appropriate person listed below at 306-1840 (unless otherwise indicated). Submit applications to the attention of Ms. Catherine Handle. For additional information, call Ms. Handle at 306-1185, ext. 3027.

- Analytical and Surface Chemistry—Dr. Henry Blount.
- Theoretical and Computational Chemistry—Dr. Richard Hilderbrandt.
- Organic Chemical Dynamics or Synthetic Organic Chemistry—Dr. George Rubottom.
- Experimental Physical Chemistry—Dr. Frank Wodarczyk.
- Inorganic, Bioinorganic, and Organometallic Chemistry—Dr. Margaret Cavanaugh.
- Office of Special Projects—Dr. Carolyn Eisenstein, 306-1850.

OFFICE OF POLAR PROGRAMS (OPP)

Position and Location: Associate/Assistant Program Manager (Biological Science Administrator/Ecologist) for the Polar Biology and Medicine Program.

Type of Employment: The position will be filled under the Intergovernmental Personnel Act (IPA) beginning mid-1997. IPA applicants must be permanent career employees of their current employer (which must be an eligible organization) for at least 90 days before entering into a mobility assignment agreement with a federal agency.

For More Information: Contact Dr. Polly Penhale, Program Manager for Polar Biology and Medicine, OPP, at 306-1033. Submit applications to the attention of Ms. Nina Beard. For additional information, call Ms. Beard at 306-1185, ext. 3026.

STAFF CHANGES

Kendra L. Daly to Assistant Program Director for the Biological Oceanography Program, Division of Ocean Sciences, 306-1580.



May 1997 Publications Order Form

Before ordering printed copies of publications, please try accessing them electronically on the NSF Home Page (<http://www.nsf.gov/>) via the World Wide Web. Most of NSF's printed material can be obtained electronically, including program announcements, the Guide to Programs, the Grant Proposal Guide and Proposal Forms Kit, the Bulletin, the NSF phone book, and press releases and tipsheets. Abstracts of awards for the years 1989 through the present are also available. Information on electronic access is available in most of NSF's publications on the inside front or back cover. If you don't have electronic access, use the form below to order a printed copy.

Single copies of printed publications listed in this Bulletin are available by returning the order form below to the NSF Forms and Publications Unit, Room P15, 4201 Wilson Boulevard, Arlington, VA 22230.

Requests for publications can also be made by fax, (703) 644-4278; by e-mail, pubs@nsf.gov; or by voice-mail, (703) 306-1130. Requests must include the NSF publication number, the title, the number of copies needed, your name, and a complete mailing address.

Publications should be received within 3 weeks after placement of your order.

Check:

- NSF 93-130. Research Planning Grants and Career Advancement Awards for Women Scientists and Engineers.
- NSF 94-79. Research in Undergraduate Institutions (Faculty Research Projects; Research Instrumentation Grants; Research Opportunity Awards).
- NSF 94-147. Research Planning Grants and Career Advancement Awards for Minority Scientists and Engineers.
- NSF 95-27. Grant Proposal Guide (GPG) (contains the Proposal Forms Kit, NSF 95-28).
- NSF 95-28. Proposal Forms Kit (companion publication to NSF 95-27, Grant Proposal Guide).
- NSF 95-64. Getting NSF Information and Publications (revised STIS flyer).
- NSF 95-145. Local Systemic Change through Teacher Enhancement in Mathematics, Grades 7 through 12 (Program Solicitation and Guidelines).
- NSF 96-1. NSF Annual Report, FY 1994-95 (printed as an insert in the July/August 1996 issue of *Frontiers*).
- NSF 96-14. Division of International Programs (Program Announcement).
- NSF 96-50. Earth Sciences Research at the NSF (Program Descriptions).
- NSF 96-74. Institution-Wide Reform of Undergraduate Education in Science, Mathematics, Engineering, and Technology (Program Announcement and Guidelines).
- NSF 96-93. Antarctic Research Program Announcement and Proposal Guide.
- NSF 96-102. Research Experiences for Undergraduates.
- NSF 96-116. Collaborative Research at Undergraduate Institutions Program.
- NSF 96-146. Teacher Preparation and NSF Collaboratives for Excellence in Teacher Preparation (Awards Directory).
- NSF 96-303. Selected Data on S&E Doctorate Awards: 1995.
- NSF 96-305. Academic S&E Support from Federal Agencies Rose by 8 Percent in FY 1994 (Data Brief). (Only available from the SRS Division, Room 965; call 306-1780.)
- NSF 96-330. Western Europe Leads the United States and Asia in S&E Ph.D. Production (Data Brief). (Only available from the SRS Division, Room 965; call 306-1780.)
- NSF 97-20. Elementary, Secondary, and Informal Education (Program Announcement and Guidelines).
- NSF 97-29. Division of Undergraduate Education (Program Announcement and Guidelines).
- NSF 97-30. NSF Guide to Programs, FY 1997.
- NSF 97-37. Synergy: Shaping the Future of Undergraduate Education.
- NSF 97-71. NSF Announces Awards for Undergraduate Course and Curriculum Development Program: FY 1996.
- NSF 97-72. Undergraduate Course and Curriculum Development Program: FY 95 Awards.
- NSF 97-87. Faculty Early Career Development Program Guidelines.
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May 1997

NSF Bulletin

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