

NATIONAL SCIENCE FOUNDATION

4201 Wilson Boulevard, Arlington VA 22230

**Division of Earth Sciences
Instrumentation and Facilities Program**

Summary of All FY-1997 Actions Leading to AWARDS

Institution/PI	Title of Proposal	Proposal #	\$'s Requested/ months	FY97 Funding by IF/months	Comments
Alaska WYSS, Max	"Mapping Active Magma Chambers by b-Values"	EAR9614783	5,000/12	5,000/12	IF split-funding for EA on PH grant
Arizona COHEN, Andrew S.	"Development of an REU Site for Tropical Limnology Associated With the International Decade of East African Lakes (IDEAL) Program"	ATM9619458	41,000/12	41,000/12	IF split-funding for EA on ATM grant
Arizona DONAHUE, Douglas J.	"NSF Arizona Accelerator Mass Spectrometry Facility: Operations and Research Applications"	EAR9508413	1,973,131/60	325,000/12	3rd yr incr on 3-yr cont grant for FS
Arizona RUIZ, Joaquin	"Continued Technical Support for the W. M. Keck Isotope Laboratory"	EAR9708361	80,000/24	80,000/24	standard grant for TS
Arizona State BUSECK, Peter R.	"Solid State Geochemistry: High-Resolution Transmission Electron Microscopy of Minerals"	EAR9219376	943,620/60	- 0 -	5th yr incr on 5-yr cont grant for Research; split-funded w/ CH= 130,000 in FY 97
Arizona State BUSECK, Peter R.	"High-Resolution Electron Energy-Loss Spectroscopy of Minerals"	EAR9418206	346,731/36	- 0 -	3rd yr incr on 3-yr cont grant for ITD; split-funded w/ CH = 73,870 in FY 97
Arizona State HERVIG, Richard L.	"Acquisition of a Normal Incidence Electron Gun for the ASU SIMS"	EAR9615982	112,585/18	95,120/24	standard grant for EA
Arizona State HERVIG, Richard L.	"Support of Special Session Entitled, 'Isotopic Ratio Measurements Using SIMS' at the SIMS XI International Conference"	EAR9714813	10,352/6	10,352/12	standard grant for Workshop
Arizona State HOLLOWAY, John R.	"Collaborative Research: Measurement of P&S Velocities at High Pressure and Temperature"	EAR9614233	3,350/12	3,350/12	IF split-funding for EA on PH grant
Arizona State McMILLAN, Paul F.	"IR Reflectivity and Volatile Analysis in Natural and Synthetic Glasses"	EAR9614229	10,000/12	10,000/12	IF split-funding for EA on CH grant
Arizona State WILLIAMS, Stanley N.	"Workshop on COSPEC"	EAR9706265	19,150/12	19,150/12	standard grant for Workshop

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Berkeley Geochronology Cen LUDWIG, Kenneth R.	"Development of a Computer Program for Mathematical and Graphical Treatment of Radiogenic-Isotope Data"	EAR9722719	18,248/24	18,248/12	standard grant for ITD
Boston University MURRAY, Richard W.	"Acquisition and Upgrade of an Inductively Coupled Plasma Emission (ICP-ES) Laboratory for Geological, Oceanographic, and Environmental Chemical Research"	EAR9724282	107,347/24	- 0 -	standard grant for EA; split-funded w/ MRI/OSTI = 100,000
California - Berkeley RICHARDS, Mark A.	"Collaborative Research: The Dynamics of Plume-Ridge Interaction"	EAR9707192	1,900/12	1,900/12	IF split-funding for EA on PH grant
California - Berkeley ROMANOWICZ, Barbara A.	"Upgrade of Computer Equipment for Seismology and Geophysics at U.C. Berkeley"	EAR9615751	91,328/24	65,000/36	standard grant for EA
California - Davis VEROSUB, Kenneth L.	"Technician Support for the Long-Core Cryogenic Magnetometer Facility at the University of California, Davis"	EAR9709245	120,000/36	120,000/36	standard grant for TS
California - Los Angeles HARRISON, T. Mark	"Support of An Ion Microprobe Facility"	EAR9509641	708,667/36	204,198/12	3rd yr incr on 3-yr cont grant for FS
California - Los Angeles HARRISON, T. Mark	"Support of An Ion Microprobe Facility [supplement]"	EAR9509641	5,400/12	5,400/12	IF suppl to IF grant for Workshop
California - Los Angeles VIDALE, John E.	"Upgrade of UCLA Computing Facilities for Research in Seismology"	EAR9615357	47,000/12	47,000/36	standard grant for EA
California - Riverside PARK, Stephen K.	"Collaborative Research: A National Instrument Facility for ElectroMagnetic Studies of the Continents"	EAR9616986	188,127/60	188,127/60	standard grant for FS
California - San Diego BOCK, Yehuda	"Collaborative Research: Fundamental Support for GPS Research - UNAVCO Facilities"	EAR9615997	272,636/36	100,000/12	standard grant for FS
California - San Diego BOCK, Yehuda	"Collaborative Research: Integration of Synthetic Aperture Radar Interferometry, Continuous GPS and GPS Meteorology for Crustal Deformation and Earthquake Monitoring"	EAR9619201	681,452/36	77,785/12	1st yr incr on 3-yr cont grant for ITD; split-funded w/ interagency transfer from NASA = 80,711 in FY 97
California - San Diego HILTON, David R.	"He-Ne-Ar Isotope Studies in Iceland, Heard Island and La Palma (Canaries): Identifying Mantle Plume Signatures and Crustal Contamination"	EAR9614347	15,520/12	15,520/12	IF split-funding for EA on CH grant
California - San Diego HILTON, David R.	"Acquisition of a Laser Probe Rare Gas Mass Spectrometry System for Research in the Earth Sciences"	EAR9724189	362,370/12	- 0 -	standard grant for EA; split-funded w/ MRI/OSTI = 277,718
California - San Diego ORCUTT, John A.	"Collaborative Research: Broad-band Seismic Measurements on the Deep Ocean Floor: A Pilot Experiment"	OCE9523541	646,542/24	137,000/12	IF split-funding for ITD on 2nd yr incr of 2 yr cont grant from OCE; split-funded w/ OCE = 330,010 in FY 97

Institution/PI	Title of Proposal	Proposal #	\$'s Requested/ months	FY97 Funding by IF/months	Comments
California - San Diego TAUXE, Lisa	"Acquisition of Equipment for Paleomagnetic Research"	EAR9614879	118,555/12	107,000/24	standard grant for EA
California - Santa Barbara SPERA, Frank J.	"Experimental Rheometry of Magmatic Multiphase Suspensions"	EAR9614376	4,100/12	4,100/12	IF split-funding for EA on CH grant
California - Santa Cruz GILL, James B.	"Upgrade of Mass Spectrometer"	EAR9612548	20,000/12	20,000/24	standard grant for EA
California - Santa Cruz REVENAUGH, Justin	"Kirchhoff Coda Migration of Regional Network Data"	EAR9614874	25,000/12	25,000/12	IF split-funding for EA on PH grant
Caltech FARLEY, Kenneth A.	"Technician Support for the Noble Gas Geochemistry Lab at Caltech"	EAR9707119	149,996/36	149,996/36	standard grant for TS
Caltech SALEEBY, Jason B.	"Technician Support: Radiogenic and Noble Gas Isotope Geochemistry Laboratories, California Institute of Technology"	EAR9633381	149,829/36	149,829/36	standard grant for TS
Caltech WERNICKE, Brian P.	"Active Tectonics of Diffuse Intracontinental Deformation [supplement]"	EAR9740273	89,614/12	44,807/12	IF suppl for EA on CD grant; split-funded w/ CD = 44,807
Carnegie Inst of Wash-DTM CARLSON, Richard W.	"Acquisition of a Multiple Collector Inductively-Coupled Plasma Mass Spectrometer for Geochemical, Geochronological and Cosmochemical Applications"	EAR9724409	730,765/12	- 0 -	standard grant for EA; split-funded w/ MRI/OSTI = 574,172
Carnegie Inst of Wash-DTM SILVER, Paul G.	"Collaborative Research: The Dynamics of Plume Ridge Interaction"	EAR9707193	9,000/12	9,000/12	IF split-funding for EA on PH grant
Carnegie Inst of Wash-DTM SILVER, Paul G.	"Collaborative Research: Thermal, Compositional and Dynamical Evolution of the Sub-continental Mantle During Orogeny"	EAR9713946	5,000/12	5,000/12	IF split-funding for EA on PH grant
Carnegie Inst of Wash-GL CODY, George D.	"The Development of Computational Methods to Study the Chemical Structural Evolution of Organic Macromolecules with Diagenesis"	EAR9614352	10,355/12	10,355/12	IF split-funding for EA on GE grant
Carnegie Inst of Wash-GL CODY, George D.	"Acquisition of a Departmental Solid State Nuclear Magnetic Resonance Spectrometer for Organic Geochemistry, Experimental Petrology, and Mineral Physics"	EAR9724317	290,500/36	- 0 -	standard grant for EA; split-funded w/ MRI/OSTI = 225,828
Carnegie Inst of Wash-GL COHEN, Ronald E.	"Collaborative Project: Theoretical Investigation of Core Materials from First Principles: Solid and Liquid Phases and Melting of Iron"	EAR9614363	20,000/12	20,000/12	IF split-funding for EA on CH grant
Carnegie Inst of Wash-GL FOGEL, Marilyn L.	"SGER: Diagenetic Transformation of Plant Macromolecules"	EAR9705733	13,000/12	13,000/12	IF split-funding for EA on GE grant

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Carnegie Inst of Wash-GL MAO, Ho-kwang	"Superconducting Wiggler Insertion Device for X-Ray Studies with the Diamond-Anvil Cell at Ultra-High Pressures"	EAR9418328	403,967/36	109,973/12	3rd yr incr on 3-yr cont grant for FS
Carnegie Inst of Wash-GL MAO, Ho-Kwang	"Equipment for Elasticity Measurements of Earth Materials at High Pressures and Temperatures"	EAR9709572	63,000/24	63,000/24	standard grant for EA
Central Washington MILLER, Meghan	"Collab. Res.: Development of a Pacific Northwest Geodetic Array (PANGA) and Data Analysis Facility, Central Washington U. & U. of Washington: Monitoring North America-Juan"	EAR9615640	326,013/36	200,237/36	standard grant for FS
Chicago RIVERS, Mark L.	"GeoCARS, a National Resource for Earth, Planetary, Soil and Environmental Science Research at the Advanced Photon Source"	EAR9317772	11,745,446/60	1,300,000/12	4th yr incr on 5-yr cont grant for FS
Colgate APRIL, Richard H.	"Acquisition of an Analytical X-ray Facility for Colgate University, Department of Geology"	EAR9724238	236,643/12	- 0 -	standard grant for EA; split-funded w/ MRI/OSTI = 101,287
Colorado RITZWOLLER, Michael H.	"Acquisition of Global Geophysics Compute Server"	EAR9614483	33,680/12	22,000/24	standard grant for EA; split-funded w/ OPP/AGG = 12,500
Colorado SMYTH, Joseph R.	"Upgrade of X-ray Diffraction Facility"	EAR9614919	38,800/24	29,000/24	standard grant for EA
Colorado S of M WENDLANDT, Richard F.	"Upgrade of an Electron Microprobe Facility"	EAR9707054	49,790/12	48,962/24	standard grant for EA
Columbia SCHOLZ, Christopher H.	"Upgrade and Development of LDEO Rock Mechanics Laboratory Equipment for Hydrothermal Deformation Experiments"	EAR9614065	153,035/24	130,000/24	standard grant for EA
Delaware WEHMILLER, John F.	"Geochemical Integrity, Geochronology, and Paleoclimatology of Late Pleistocene Molluscan Specimens, U.S. Middle and Southeastern Atlantic Coastal Plain"	EAR9741676	23,973/12	23,973/12	IF split-funding for EA on GE grant
Delaware State GWANMESIA, Gabriel D.	"RUI: A Comprehensive Study of the Elastic Properties of Carbonates at Ambient Conditions"	EAR9615166	24,000/12	24,000/12	IF split-funding for EA on PH grant
Emory LATHROP, Daniel P.	"Development of an Experimental Dynamo: Self-generating Magnetic Fields from a Liquid Metal"	EAR9615789	83,279/24	83,279/12	standard grant for ITD
Florida CHANNELL, James T.	"Acquisition of a High Resolution Magnetometer"	EAR9617897	161,248/12	80,624/24	standard grant for EA; split-funded w/ OCE/ITS = 40,312 and OCE/ODP = 40,312
Florida HODELL, David A.	"Acquisition of a Stable Isotope Mass Spectrometer with Automated Preparation Systems"	EAR9617878	156,271/24	78,135/24	standard grant for EA; split-funded w/ OCE/ODP = 39,068 and OCE/ITS = \$39,068

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Harvard BLOXHAM, Jeremy	"Upgrade of Geophysics Computer Workstation Network"	EAR9711223	54,905/12	54,905/24	standard grant for EA
Harvard BLOXHAM, Jeremy	"Investigations of the Geodynamo"	EAR9526914	10,000/12	10,000/12	IF split-funding for EA on PH grant
Harvard BLOXHAM, Jeremy	"Acquisition of a Computational Facility for Numerical Dynamo Theory"	EAR9724568	213,885/24	- 0 -	standard grant for EA; split-funded w/ MRI/OSTI = 178,885
Harvard DZIEWONSKI, Adam M.	"Studies of Global Seismicity and Earth Structure"	EAR9219361	9,000/12	9,000/12	IF split-funding for EA on PH grant
Harvard EKSTROM, Goran A.	"Upgrading of Computer Facility for Research in Seismology"	EAR9615634	124,474/12	99,777/24	standard grant for EA
Harvard EKSTROM, Goran A.	"Technician Support: Computer Facility for Research in Seismology (Phase II)"	EAR9615677	84,374/24	84,374/24	standard grant for TS
Harvard JACOBSEN, Stein B.	"Technician Support: EPS-TIMS Facility at Harvard"	EAR9616072	128,494/36	128,494/36	standard grant for TS
Harvard RUDNICK, Roberta L.	"Technician Support: EPS-ICP-MS Facility at Harvard"	EAR9711008	162,470/36	150,000/36	standard grant for TS
Hawaii BATIZA, Rodey	"Technician Support: University of Hawaii ICP-MS Facility for Research in Ocean and Earth Sciences"	EAR9706711	150,000/36	37,500/18	standard grant for TS; split-funded w/ OCE = 37,500
Hawaii BEVIS, Michael G.	"Collaborative Research: Integration of Synthetic Aperture Radar Interferometry, Continuous GPS and GPS Meteorology for Crustal Deformation and Earthquake Monitoring"	EAR9711445	111,298/36	12,539/12	1st yr incr on 3-yr cont grant for ITD; split-funded w/ interagency transfer from NASA = 12,540 in FY 97
Hawaii GIAMBELLUCA, Thomas W.	"Hydrologic Change and Accelerated Erosion in Mountainous Tropical Watersheds: The Impact of Rural Roads"	EAR9614259	8,178/12	8,178/12	IF split-funding for EA on HS grant
Hawaii HERRERO-BERVERA, E.	"Acquisition of Equipment for Measuring Magnetic Properties of Rocks"	EAR9633500	107,410/12	60,000/24	standard grant for EA
Hawaii MANGHNANI, Murli H.	"Elastic and Anelastic Properties of Molten and Partially Molten Iron Alloys [supplement]"	EAR9740602	14,900/12	14,900/12	IF split-funding for EA on PH grant suppl
Hawaii MANGHNANI, Murli H.	"U.S.-Japan Seminar: High Pressure-Temperature Research: Properties of Earth and Planetary Materials/January 23-26, 1996/Maui, Hawaii [supplement]"	INT9741060	13,000/12	13,000/12	IF suppl to INT grant for publication of Workshop proceedings
Hawaii WESSEL, Paul	"Support of the Generic Mapping Tools"	OCE9529431	49,887/12	49,887/12	IF split-funding for ITD on OCE grant

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Illinois BASS, Jay D.	"Elasticity of Mantle Minerals at High Pressures and Temperatures"	EAR9614416	17,600/12	17,600/12	IF split-funding for EA on PH grant
Illinois - Chicago GUGGENHEIM, Stephen J.	"Support of UIC X-ray Diffraction Facilities"	EAR9612878	48,355/12	48,355/24	standard grant for EA
IRIS BUTLER, Rhett	"IRIS/JOI Scientific Submarine Cable Steering Committee"	OCE9612368	123,096/36	25,765/12	1st yr incr on 3-yr cont OCE grant for Steering Committee support; split-funded w/ OCE = 25,765 in FY 97
IRIS SIMPSON, David W.	"IRIS 2000: A Science Facility for Studying the Dynamics of the Solid Earth"	EAR9529992	93,089,000/60	10,970,000/12	2nd yr incr on 5-yr Cooperative Agreement EAR-9529992 for FS; split-funded w/ EAR/EH = 169,000, OPP/AGG = 12,000 and interagency transfer from DOD/NIMA = 380,800 in FY 97
IRIS SIMPSON, David W.	"Acquisition of a Mass Store for the IRIS Data Management Center"	EAR9724492	576,979/12	- 0 -	standard grant for EA; split-funded w/ MRI/OSTI = 576,979
IUPUI Ft. Wayne FARLOW, James O.	"RUI: Within Taxon and Across-Taxon Variability in Foot and Footprint Proportions in Dinosaurs, Birds, and Crocodylians: Implications for Dinosaur Ichnology"	EAR9612880	3,700/12	3,700/12	IF split-funding for EA on GE grant
Lafayette College HOVIS, Guy L.	"RUI: Energies of Mineral and Rock Processes"	EAR9613710	6,502/12	6,502/12	IF split-funding for EA on CH grant
Maine GUIDOTTI, Charles V.	"Acquisition of an Automated Powder X-Ray Diffraction System"	EAR9708272	70,295/24	70,295/24	standard grant for EA
Maryland WALKER, Richard J.	"Technician Support: Phase II for the Isotope Geochemistry Laboratory, Department of Geology, University of Maryland at College Park"	EAR9711377	100,000/24	100,000/24	standard grant for TS
Miami - RSMAS GRAMMER, G. Michael	"GRGC: High Resolution Stable Isotopic Fluctuations in Tropical Marine Waters Determined From Inorganic Aragonite Cements: Implications to the Younger Dryas & Other High Frequency Climatic Events [supplement]"	EAR9419176	14,317/6	14,317/6	IF suppl for EA on GE grant
Miami - RSMAS SCHOLZ, Christopher A.	"Modernization of the Seismic Processing Facility at RSMAS"	EAR9615141	29,524/12	9,842/24	standard grant for EA; split-funded w/ OCE/MGG = 9,841 and OCE/ODP = 9,841
Michigan HALLIDAY, Alexander N.	"Improvements to Mass Spectrometers and Associated Equipment in the RIGL"	EAR9707153	150,000/12	100,000/24	standard grant for EA
Minnesota BANERJEE, Subir K.	"Continuation of a Facility: Institute for Rock Magnetism"	EAR9628693	1,502,322/60	278,031/12	2nd yr incr on 3-yr cont grant for FS

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Minnesota EDWARDS, R. Lawrence	"Request for Technical Support for the Minnesota Isotope Laboratory (Phase II)"	EAR9712037	100,000/24	100,000/24	standard grant for TS
Minnesota WANNAMAKER, Barbara J.	"Effect of Hydrogen on the Electrical Conductivity of Olivine"	EAR9706105	10,000/12	10,000/12	IF split-funding for EA on PH grant
Minnesota YUEN, David A.	"The Use of Wavelets in Modeling of Geophysical Flows"	EAR9614763	94,220/24	47,000/12	IF split-funding for ITD on PH grant
Minnesota YUEN, David A.	"Collaborative Research: Role of Shear Heating in the Generation and Ascent of Granitic, Basaltic and Komatiitic Magma"	EAR9741062	17,000/12	17,000/12	IF split-funding for EA on PH grant
Missouri LYONS, Timothy W.	"Acquisition of an Inductively-Coupled Plasma Optical Emission Spectrometer Facility at the University of Missouri"	EAR9615712	82,965/12	82,965/24	standard grant for EA
MIT BOWRING, Samuel A.	"Acquisition of Thermal Ionization and Inductively Coupled Plasma Mass Spectrometers"	EAR9419210	625,000/12	- 0 -	2nd yr incr on 2-yr cont grant for EA; split-funded w/ OCE/CO = 100,000 in FY 97
MIT GROVE, Timothy L.	"Technician Support for the MIT Electron Microprobe Facility"	EAR9711826	150,000/36	150,000/36	standard grant for TS
MIT GROVE, Timothy L.	"Electron Microprobe Facility Automation Upgrade"	EAR9616827	89,600/48	72,800/24	standard grant for EA
MIT HAGER, Bradford H.	"Acquisition of Continuous GPS Receivers for Investigating the Geodynamics of Intracontinental Mountain Building in the Tien Shan"	EAR9708618	46,387/24	30,537/24	standard grant for EA
MIT JORDAN, Thomas H.	"CSEDI Collaborative Research: Testing Critical Hypotheses About Upper-Mantle Structure & Composition Using Seismological & Mineralogical Data"	EAR9709905	2,000/12	2,000/12	IF split-funding for EA on PH grant
MIT KING, Robert W.	"Collaborative Research: Fundamental Support for GPS Research - UNAVCO Facilities"	EAR9708946	161,650/36	105,390/30	standard grant for FS
MIT NEPF, Heidi M.	"(CAREER) Metals Transport in Transition Wetlands: Research and Education Development Plan"	EAR9629259	36,000/12	36,000/12	IF split-funding for EA on HS grant
Montana STANLEY, George D.	"Early Mesozoic Reef Evolution and Recoveries from Mass Extinctions"	EAR9614501	14,650/12	14,650/12	IF split-funding for EA on GE grant
New Hampshire SAHAGIAN, Dork L.	"Analysis of Vesicular Volcanic Rocks Using Computed X-ray Tomography: Technical Development and Testing"	EAR9614747	50,000/12	50,000/12	IF split-funding for ITD on CH grant

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New Mexico BREARLEY, Adrian J.	"Acquisition of an Analytical Scanning Electron Microscope"	EAR9615257	90,000/12	90,000/24	standard grant for EA
New Mexico WIEDENBECK, Michael G.	"Support of UNM/SNL Ion Microprobe Facility"	EAR9706054	258,912/36	80,000/12	1st yr incr on 2-yr cont grant for FS
New Mexico Tech HEIZLER, Matthew T.	"Acquisition of a UV Laser Ablation System for 40Ar/39Ar Research"	EAR9706062	49,055/12	49,055/24	standard grant for EA
New Mexico Tech PHILLIPS, Fred M.	"COLLABORATIVE RESEARCH: Development of Environmental Tracers for Water and Solute Transport in Arid Vadose Zones with Applications to Paleohydrology"	EAR9614509	5,000/12	5,000/12	IF split-funding for EA on HS grant
New Mexico Tech WILSON, John L.	"Small Displacement Faults in Sand: What Controls Do They Exert on Saturated and Unsaturated Flow and Transport?"	EAR9614385	3,649/12	3,649/12	IF split-funding for EA on HS grant
Northern Illinois PERRY, Eugene C.	"Development of a Laser-Excited System for 16-O, 17-O, and 18-O Analysis of Molecular Oxygen from Small Samples of Silicate and Oxide Minerals"	EAR9708023	65,895/12	65,895/24	standard grant for ITD
Oklahoma LONDON, David	"Renovation and Upgrade of the Experimental Petrology Laboratory, University of Oklahoma"	EAR9618867	34,230/12	34,230/24	standard grant for EA
Oregon RICE, Jack M.	"Technician Support for the Electron-Beam Facility at the University of Oregon: Phase II"	EAR9712115	80,000/24	80,000/24	standard grant for TS
Oregon State CUENCA, Richard H.	"Relationship of Predominant Soil Moisture, Soil Hydraulic Processes and Precipitation Length Scales"	EAR9614884	26,250/12	26,250/12	IF split-funding for EA on HS grant
Oregon State DILLES, John H.	"Acquisition of a Heating/Freezing Stage, Microscope, and Video System for Fluid Inclusion Research"	EAR9709783	20,000/6	20,000/24	standard grant for EA
Oxford HUGHES, Anthony A.	"Acquisition of a Modern Computing and Communications Facility"	EAR9708000	69,900/12	69,900/24	standard grant for EA
Penn State BRANTLEY, Susan L.	"Acquisition of an Inductively Coupled Plasma-Mass Spectrometer for Geological, Soil, and Environmental Analysis"	EAR9724508	362,950/36	- 0 -	standard grant for EA; split-funded w/ MRI/OSTI = 175,120
Penn State FLEMINGS, Peter B.	"Pressure, Stress, and Stratigraphy: Hydrodynamic Analysis of a Young Compacting Sedimentary Basin"	EAR9614689	7,500/12	7,500/12	IF split-funding for EA on GE grant
Pittsburgh CAPO, Rosemary C.	"Acquisition of a Thermal Ionization Mass Spectrometer"	EAR9634801	299,781/12	275,000/24	standard grant for EA
Princeton NOLET, Guust	"Upgrading of Computer Equipment for Geophysical Studies"	EAR9614110	46,764/12	47,833/36	standard grant for EA

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Purdue ELMORE, David	"Facility Support: The Purdue Rare Isotope Measurement Laboratory"	EAR9510040	1,993,293/60	325,000/12	3rd yr incr on 3-yr cont grant for FS
Rice LEEMAN, William P.	"Upgrade of X-ray Fluorescence Facility"	EAR9614725	48,871/12	36,951/24	standard grant for EA
Rochester ANBAR, Ariel D.	"Acquisition of a High Resolution Inductively Coupled Plasma Source Mass Spectrometer (HR-ICP-MS) for Inorganic and Biogeochemistry [supplement]"	EAR9601929	50,000/12	50,000/12	IF suppl for EA on IF grant
Smithsonian-AO DAVIS, James L.	"Development of a GPS Calibration System for High-Accuracy Geophysical Applications"	EAR9708251	938,591/36	249,659/12	1st yr incr on 3-yr cont grant for ITD
Southern Illinois PINTER, Nicholas	"Acquisition of a UNIX Workstation Laboratory for Geomorphic Analysis of Digital Topography and Other Geological Applications of GIS"	EAR9712065	14,758/24	14,758/24	standard grant for EA
Southern Mississippi SHILLER, Alan M.	"Characterization of Fluvial Suspended Matter Using Field-Flow Fractionation and Related Methods."	EAR9614186	30,000/12	30,000/12	IF split-funding for EA on HS grant
Stanford GORELICK, Steven M.	"Acquisition of Computer Workstations for Hydrogeology and Near-Surface Hydrology Research at Stanford University"	EAR9707031	275,323/36	175,000/36	standard grant for EA
Stanford STEBBINS, Jonathan F.	"Improved NMR Equipment for Studies of Silicate Glasses and Crystals"	EAR9616468	31,100/12	31,100/24	standard grant for EA
Stanford STEBBINS, Jonathan F.	"Acquisition of a 600 MHz NMR spectrometer for research on solid and molten materials in the earth, materials, and chemical sciences"	EAR9724198	894,073/24	- 0 -	1st yr incr on 2-yr cont grant for EA; split-funded w/ MRI/OSTI = 572,568; OMA/MPS = 150,000 in FY 97
Stanford ZEBKER, Howard A.	"Collaborative Research: Integration of Synthetic Aperture Radar Interferometry, Continuous GPS and GPS Meteorology for Crustal Deformation and Earthquake Monitoring"	EAR9711915	226,200/36	26,748/12	1st yr incr on 3-yr cont grant for ITD; split-funded w/ interagency transfer from NASA = 26,749 in FY 97
SUNY-Stony Brook PARISE, John B.	"Acquisition of a CCD-Based X-ray Diffraction Facility for Earth Science and Chemistry Research at Stony Brook and the NSLS"	EAR9724501	295,518/24	- 0 -	standard grant for EA; split-funded w/ MRI/OSTI = 295,518
SUNY-Stony Brook WEIDNER, Donald J.	"Science and Technology Center for High Pressure Research"	EAR9613679	14,680,542/60	2,638,933/12	7th yr incr on STC Cooperative Agreement EAR-890239 for FS; split-funded w/ EHR = 155,067
Tennessee THONNARD, Norbert	"Development of Laser-Based Resonance Ionization Spectroscopy Techniques for 81-Kr and 85-Kr Measurements in the Geosciences"	EAR9410695	537,738/36	3,708/12	4th yr incr on 4-yr cont grant for ITD; split-funded w/ OPP = 15,000 in FY 97
Texas GOSE, Wulf A.	"Acquisition of a Superconducting Rock Magnetometer"	EAR9708576	76,350/12	38,175/24	standard grant for EA; split-funded w/ SBER/AASC = 38,175

Institution/PI	Title of Proposal	Proposal #	\$'s Requested/ months	FY97 Funding by IF/months	Comments
Texas-Dallas PRESNALL, Dean C.	"First International Pressure Calibration Workshop, August 22-23, 1997, Misasa, Japan"	EAR9712301	15,400/12	6,200/12	standard grant for Workshop; split-funded w/ PH = 6,200 and CH = 3,000
UCAR - UNAVCO BELL, Robin E.	"Collaborative Research: Fundamental Support for GPS Research - UNAVCO Facilities"	EAR9615934	10,057,671/36	1,500,000/12	1st yr incr on 3-yr cont grant for FS
UCAR - UNAVCO BELL, Robin E.	"Collaborative Research: Support for Fundamental GPS Research - UNAVCO Facilities for Data Processing"	EAR9708346	359,169/36	150,000/30	standard grant for FS
UCAR - UNAVCO BELL, Robin E.	"Collaborative Research: Fundamental Support for GPS Research - UNAVCO Facilities [supplement]"	EAR9615934	155,747/12	- 0 -	suppl to UNAVCO Cooperative Agreement EAR- 9405501 for FS; split-funding for support of Antarctica projects from OPP = 155,747
UCAR - UNAVCO WARE, Randolph H.	"Support of UNAVCO and Related Activities [supplement]"	EAR9742924	381,423/12	- 0 -	suppl to UNAVCO Cooperative Agreement EAR- 9405501 for ITD; split-funding for GPS/MET from ATM = 381,243
UCAR - UNAVCO WARE, Randolph H.	"Support of UNAVCO and Related Activities [supplement]"	EAR9743639	150,000/12	- 0 -	suppl to UNAVCO Cooperative Agreement EAR- 9405501 for ITD; interagency transfer for development of an L1 frequency GPS volcano monitoring system from NASA/SENH = 150,000
UCAR - UNAVCO WARE, Randolph H.	"Support of UNAVCO and Related Activities [supplement]"	EAR9740696	300,000/12	- 0 -	suppl to UNAVCO Cooperative Agreement EAR- 9405501 for ITD; split-funding for GPS/MET from ATM = 300,000
UCAR - UNAVCO WARE, Randolph H.	"Support of UNAVCO and Related Activities [supplement]"	EAR9743639	148,823/12	- 0 -	suppl to UNAVCO Cooperative Agreement EAR- 9405501 for FS; interagency transfer for continuation of UNAVCO GPS technical support to NASA from NASA/SENH = 148,823
Utah CHAPMAN, David S.	"Geothermics and Climate Change: Observatory Mode"	EAR9706559	3,100/12	3,100/12	IF split-funding for EA on PH grant
Utah ZHDANOV, Michael	"Fast 3-D Geo-Electromagnetic Inversion Based on Quasi-Linear Approximation"	EAR9614136	114,000/24	53,000/12	IF split-funding for ITD on PH grant
Vermont BIERMAN, Paul R.	"Acquisition of Equipment for Integrated Environmental Research and Education in Recent Sediments and Surface Processes"	EAR9724190	146,090/12	- 0 -	standard grant for EA; split-funded w/ MRI/OSTI = 106,166
Virginia Tech BODNAR, Robert J.	"Upgrade of Hydrothermal Facility"	EAR9614272	54,408/12	54,408/24	standard grant for EA
Washington BOOKER, John R.	"Collaborative Research: A National Instrument Facility for ElectroMagnetic Studies of the Continents (EMSOC)"	EAR9616421	305,335/36	112,000/12	1st yr incr on 5-yr cont grant for FS

Institution/PI	Title of Proposal	Proposal #	\$'s Requested/ months	FY97 Funding by IF/months	Comments
Washington QAMAR, Anthony I.	"Collaborative Research: Development of Pacific Northwest Geodetic Array (PANGA) by Central Washington Univ (CWU) and UW and Data Analysis Facility at CWU"	EAR9616302	134,393/36	80,000/36	standard grant for FS
Washington-St. Louis CROZAZ, Ghislaine	"Microanalytical Studies of Extraterrestrial and Terrestrial Materials"	EAR9614212	15,000/12	15,000/12	IF split-funding for EA on CH grant
Washington-St. Louis WIENS, Douglas A.	"Upgrade of Computational Facilities for Seismology Research"	EAR9614199	34,203/12	34,203/36	standard grant for EA
WHOI HART, Stanley R.	"Geochemical Evolution of the Mantle"	EAR9219958	3,000/12	3,000/12	IF split-funding for EA on CH grant
WHOI SHIMIZU, Nobumichi	"Support of a Regional Microprobe Facility at Woods Hole Oceanographic Institution"	EAR9628749	538,966/36	179,965/12	2nd yr incr on 3-yr cont grant for FS
WHOI STEPHEN, Ralph A.	"Broadband Seismic Measurements on the Deep Ocean Floor: A Pilot Experiment"	OCE9522114	355,796/24	110,000/12	IF split-funding for ITD on OCE grant
Wisconsin COOPER, Reid F.	"Low-Frequency Attenuation in Polycrystalline Silicates and Microstructurally Equilibrated Silicate Partial Melts"	EAR9706213	7,000/12	7,000/12	IF split-funding for EA on PH grant
Wisconsin STONE, Donald S.	"Physical Basis for the Mechanical Equation of State: Statistical Analysis of Deformation Induced Microstructures in Mineral Rheology"	EAR9706332	5,000/12	5,000/12	IF split-funding for EA on PH grant
Wisconsin WANG, Herbert F.	"Poroelastic Properties of Crustal Rocks"	EAR9614558	2,900/12	2,900/12	IF split-funding for EA on PH grant
Wyoming EGGLESTON, Carrick M.	"Acquisition of a Scanning Probe Microscope System for a New Mineral Surface Chemistry Laboratory"	EAR9634143	88,976/12	88,976/24	standard grant for EA

ABBREVIATIONS and EXPLANATIONS

AASC =	Archeology, Archeometry and Systematic Collections Program in SBER	MPS =	Directorate for Mathematics and Physical Sciences at NSF
AFOSR =	Air Force Office of Scientific Research	MRI =	Major Research Instrumentation Program in OSTI
AGG =	Antarctic Geology and Geophysics Program in OPP	NASA-DOSE =	National Aeronautics and Space Administration-Dynamics of the Solid Earth Program
AMS =	Accelerator Mass Spectrometry	NIMA =	National Imagery and Mapping Agency (formerly DMA)
ASL =	Albuquerque Seismology Laboratory of the USGS	NOAA =	National Oceanic and Atmospheric Administration within U.S. Department of Commerce
ATM =	Division of Atmospheric Sciences in GEO	NOS =	National Ocean Service in NOAA
BNL =	Brookhaven National Laboratory	NSLS =	National Synchrotron Light Source at BNL
CD =	Continental Dynamics Program in EAR	OBES =	Office of Basic Energy Sciences in the U.S. Department of Energy
CD-ATM =	Climate Dynamics Program in ATM	OCE =	Division of Ocean Sciences in GEO
CH =	Geochemistry and Petrology Program in EAR	ODP =	Ocean Drilling Program in OCE
CIW =	Carnegie Institution of Washington	OMA =	Office of Multidisciplinary Activities at NSF
CO =	Chemical Oceanography Program in OCE	OPP =	Office of Polar Programs at NSF
cont grant =	continuing grant, a multi-year grant funded one year at a time	OSTI =	Office of Science and Technology Infrastructure at NSF
DCP =	direct current plasma	OT =	Oceanographic Technology Program in OCE
DMA =	Defense Mapping Agency	PH =	Geophysics Program in EAR
DMR =	Division of Materials Research in MPS	REU =	Research Experience for Undergraduates Program in EHR
DOD =	Department of Defense	RSMAS =	Rosenstiel School of Marine and Atmospheric Sciences
DTM =	Department of Terrestrial Magnetism in CIW	RUI =	Research in Undergraduate Institutions Program in EHR
EA =	Equipment Acquisition component of IF Program	SBE =	Directorate for Social, Behavioral & Economic Sciences at NSF
EAR =	Division of Earth Sciences in GEO	SBER =	Division of Social, Behavioral and Economic Research in SBE
EH =	Education & Human Resources Program in EAR	SENH =	NASA's Solid Earth And Natural Hazards Research Program
EHR =	Directorate for Education and Human Resources at NSF	SGER =	Small Grants for Exploratory Research
ENG =	Directorate for Engineering at NSF	SIMS =	secondary ionization mass spectrometry
FS =	Facility Support component of IF Program	SNL =	Sandia National Laboratory
FY =	Federal fiscal year e.g., FY94: 10/1/93 to 9/30/94	split-funding =	two or more programs share the funding of a grant
GE =	Geology and Paleontology Program in EAR	standard grant	a grant funded for the full amount in its 1st yr
GEO =	Directorate for Geosciences at NSF	STC =	NSF Science and Technology Center
GL =	Geophysical Laboratory in CIW	suppl =	a funding supplement to an active NSF grant
GPS =	Global Positioning System	TE =	Tectonics Program in EAR
GSN =	Global Seismographic Network of IRIS	TEM =	transmission electron microscopy
HRTEM =	high- resolution TEM	TIMS =	thermal ionization mass spectrometry
HS =	Hydrologic Sciences Program in EAR	TS =	Technician Support component of IF Program
ICP-AE =	Inductively coupled plasma-atomic emission spectrometer	UCAR =	University Consortium for Atmospheric Research
ICP-MS =	Inductively coupled plasma-mass spectrometer	UNAVCO =	University NAVSTAR Consortium within UCAR
IF =	Instrumentation and Facilities Program in EAR	USGS =	U.S. Geological Survey
incr =	an annual increment of funds to an active NSF grant	WHOI =	Woods Hole Oceanographic Institution
IRIS =	Incorporated Research Institutions for Seismology	XRD =	X-ray diffractometer
ITD =	Instrument and Technique Development component of IF Program	XRF =	X-ray fluorescence spectrometer
IUPU =	Indiana University - Purdue University system		
LA-ICP-MS =	laser ablation ICP-MS		
LDEO =	Lamont-Doherty Earth Observatory, Columbia University		
MGG =	Marine Geology and Geophysics Program in OCE		

NATIONAL SCIENCE FOUNDATION
 4201 Wilson Boulevard, Arlington VA 22230

Division of Earth Sciences (EAR)

Instrumentation and Facilities Program (IF)

Numerical Summary of All Actions in FY-1997

<u>PROPOSALS</u>		<u>DOLLARS</u>	
Total number of proposals processed by IF	208	Total dollars requested of IF (per year for multi-year proposals)	51,899,689
Logged-in to IF as primary program	158	Total awarded through IF actions in FY-1997	30,597,009
New proposals; full review by IF	138	Awarded from IF budget	24,294,819
Declined	56	For equipment acquisition/upgrade (EA)	3,053,157
Withdrawn	1	For instr and technique development (ITD)	984,748
Funded entirely from IF budget	58	For facility support (FS)	18,846,854
Split-funded with other programs	21	For technician support (TS)	1,330,193
Held over for FY98 decision	2	Other (workshops, REU, etc.)	79,867
New proposals; withdrawn before review	1	Awarded from other NSF budgets through split-funding	5,502,567
Other award actions (incr, suppl, etc)	21	For equipment acquisition/upgrade (EA)	3,708,165
Funded entirely from IF budget	10	For instr and technique development (ITD)	1,100,123
Split-funded with other programs	11	For facility support (FS)	491,814
		For technician support (TS)	37,500
		Other (workshops, REU, etc.)	164,965
Logged-in to other NSF programs; IF-split-funding	48	Awarded through interagency transfers	799,623
		For facility support (FS)	529,623
		For instr and technique development (ITD)	270,000