

NSF-NATO POSTDOCTORAL FELLOWSHIPS IN SCIENCE AND ENGINEERING

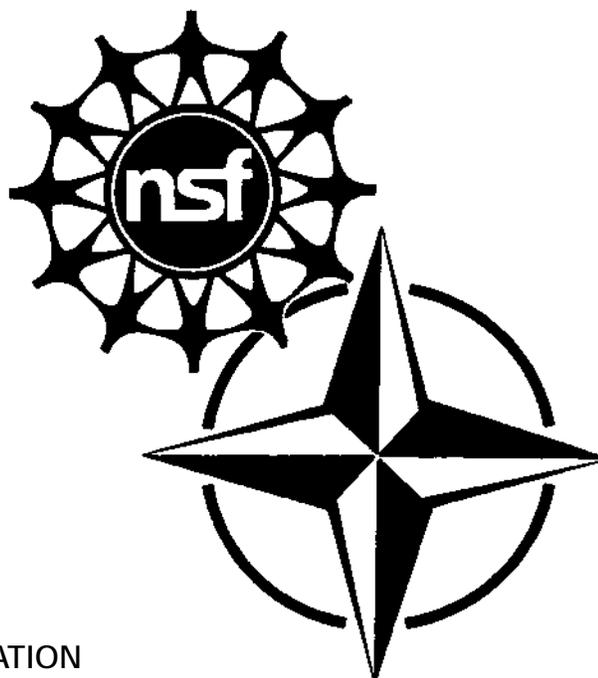
Including

SPECIAL FELLOWSHIP OPPORTUNITIES FOR VISITING
SCIENTISTS FROM COOPERATION PARTNER COUNTRIES

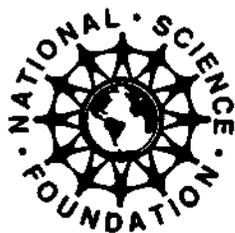
Guidelines for Submission of Applications
1997 Announcement

DIRECTORATE FOR EDUCATION AND HUMAN RESOURCES
NSF-NATO POSTDOCTORAL FELLOWSHIP PROGRAM

DEADLINE FOR SUBMISSION OF APPLICATIONS: *January 17, 1997*
AWARDS ANNOUNCED: *May 1997*



NATIONAL SCIENCE FOUNDATION



The National Science Foundation promotes and advances scientific progress in the United States by competitively awarding grants for research and education in the sciences, mathematics and engineering.

To get the latest information about program deadlines, to download copies of NSF publications, and to access abstracts of awards, visit the NSF Web site at:

<http://www.nsf.gov>

- | | |
|---|--|
| ▣ Location: | 4201 Wilson Blvd.
Arlington, VA 22230 |
| ▣ For General Information (NSF Information Center): | (703) 306-1234 |
| ▣ TDD (for the hearing-impaired): | (703) 306-0090 |
| ▣ To Order Publications or Forms: | |
| Send an e-mail to: | pubs@nsf.gov |
| or telephone: | (703) 306-1130 |
| ▣ To Locate NSF Employees: | (703) 306-1234 |

ANNOUNCEMENT OF NSF-NATO POSTDOCTORAL FELLOWSHIPS IN SCIENCE AND ENGINEERING INCLUDING SPECIAL FELLOWSHIP OPPORTUNITIES FOR VISITING SCIENTISTS FROM COOPERATION PARTNER COUNTRIES FOR 1997

On behalf of the North Atlantic Treaty Organization (NATO), the National Science Foundation (NSF) invites applications for 12 month postdoctoral fellowships from beginning scientists, mathematicians, and engineers. Approximately 30 fellowships will be offered for research and/or study abroad and at least 5 awards will be made to US institutions that would like to invite a Visiting Scientist from Cooperation Partner Countries. Eligible fields of research are: mathematics, engineering, computer and information science, geosciences, and the physical, biological, social, behavioral, and economic sciences, the history and philosophy of science, and interdisciplinary areas comprised of two or more of these fields. Research in the teaching and learning of science, mathematics, technology and engineering is also eligible for support. Application deadline is January 17, 1997. Awards will be announced May 1997. The stipend level is \$2750/month with limited travel and dependency allowance.

SUMMARY OF APPLICANT ELIGIBILITY

To be eligible for an NSF-NATO Postdoctoral Fellowship individuals must:

1. be US citizens, nationals or permanent residents as of January 17, 1997;
2. have been awarded a doctoral degree (Ph.D. or equivalent) on or after October 1, 1992 but no later than October 1, 1997;
3. desire to conduct scientific research and/or study at appropriate government and non-profit scientific institutions which are located in the NATO-member or Cooperation Partner Countries other than the United States.

To be eligible for an NSF-NATO Visiting Scientist Fellowship:

- 1 application must be submitted by an eligible US host institution;
2. a host sponsor (Principal investigator) must be identified;
3. invited "Visiting Scientist" must be a person who is a citizen from NATO Cooperation Partner Country;
4. "Visiting Scientist" must have been awarded a doctoral degree (Ph.D. or equivalent) on or after October 1, 1992 but no later than October 1, 1997.

WHERE TO GET MORE DETAILED INFORMATION AND APPLICATION MATERIALS

Electronic mail users who have access to INTERNET may order application materials by addressing requests to *pubs@nsf.gov*. Requests should include the NSF publication number NSF 96-149, title, number of copies, requester's name and a complete mailing address. Applications may be ordered by FAX (703) 644-4278 or PHONE: (703) 306-1130. Written requests for applications may be addressed to the NSF Publications Unit, 4201 Wilson Blvd., Arlington, VA 22230.

General inquires regarding NSF-NATO may be phoned to (703) 306-1696 or addressed via INTERNET to *nsf-nato@nsf.gov*. Photocopying of the application forms is permitted and individuals who post this notice are encouraged to share application material included with this notice.

ANNOUNCEMENT OF NSF-NATO POSTDOCTORAL FELLOWSHIPS IN SCIENCE AND ENGINEERING INCLUDING SPECIAL FELLOWSHIP OPPORTUNITIES FOR VISITING SCIENTISTS FROM COOPERATION PARTNER COUNTRIES¹

On behalf of the North Atlantic Treaty Organization (NATO), the National Science Foundation (NSF) invites applications for 12-month postdoctoral fellowships from or on behalf of beginning scientists, mathematicians and engineers. Women, underrepresented minorities and persons with disabilities are particularly encouraged to apply. These Fellowships have the following goals:

- to promote the progress of science and closer collaboration between scientists and engineers of NATO member and partnership countries, and scientists and engineers in the United States;
- to recognize the accomplishments to date of the beginning scientists and engineers and to provide an experience during tenure abroad which will increase professional competence.

Submission to this competition will be of two types:

- Applications may be submitted by US citizens, nationals, or permanent residents for postdoctoral study or research in other NATO member or partnership countries.
- Proposals may be submitted by US institutions on behalf of scientists or engineers from NATO partnership countries for postdoctoral study or research at the submitting institution.

More detailed eligibility criteria are given below.

Award of these fellowships will be made for work in mathematics, engineering, computer and information science, geosciences, and the physical, biological, social, behavioral, and economic sciences, the history and philosophy of science, and

interdisciplinary areas comprised of two or more of these fields. Research in the teaching and learning of science, mathematics, technology and engineering is also eligible for support.

NSF-NATO does not normally support technical assistance, pilot plan efforts, research requiring security classification, the development of products for commercial marketing or market research for a particular project or invention. Applicants working in clinical, education (except research in the teaching and learning of science, mathematics, technology and engineering) or business fields, or in history (except the history or philosophy of science), social work or public health, and individuals who propose to use the Fellowship to support residency training or similar work that may lead to qualification or certification in a clinical field are NOT eligible. These fellowships are not intended to support the preparation of prior research results for publication or the writing of textbooks as a primary objective.

Bioscience research with disease-related goals, including work on the etiology, diagnosis, or treatment of physical or mental diseases, abnormality, or malfunction in human beings or animals is normally not supported. Animal models of such conditions, or the development or testing of drugs or other procedures for their treatment also generally is not eligible for support. However, research in bioengineering with diagnosis or treatment-related goals, that applies engineering principles to problems in biology and medicine while advancing engineering knowledge is eligible for support. Bioengineering research to aid persons with disabilities is also eligible.

NSF-NATO Fellowships are administered by the National Science Foundation, an agency of the United States Government, at the request of the US Department of State. Approximately 30 fellowships will be offered for research and/or study abroad and approximately 5 awards will be made to US institutions that would like to invite a Visiting Scientist from Cooperation Partner Countries.

Fellowship Opportunities for US Citizens, Nationals² or Permanent Residents

ELIGIBILITY CRITERIA

Applicant (US Scientist) Eligibility

US citizens, nationals, or permanent residents who hold such status on or before January 17, 1997 are eligible to apply or to compete for an NSF-NATO Postdoctoral Fellowship. In addition, eligible applicants:

- a) must have been awarded a doctoral degree (Ph.D. or equivalent) on or after October 1, 1992 but no later than October 1, 1997 and

- b) have not previously held an NSF-NATO Postdoctoral Fellowship.

¹ Cooperation Partner Countries: Albania, Armenia, Azerbaijan, Belarus, Bulgaria, Czech Republic, Estonia, former Yugoslav Republic of Macedonia (FYROM), Georgia, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Poland, Romania, Russia, Slovakia, Slovenia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan

² The term "national of the United States" designates a citizen of the United States or a native resident of a possession of the United States such as American Samoa. It does NOT refer to a citizen of another country who has applied for United States citizenship.

Host Site Eligibility

Applicants may apply for scientific research and/or study at appropriate government and non-profit scientific institutions which are located in the following NATO-member countries: Belgium, Canada, Denmark, France, Germany, Greece, Iceland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Turkey, the United Kingdom; or Cooperation Partner Countries: Albania, Armenia, Azerbaijan, Belarus, Bulgaria, Czech Republic, Estonia, former Yugoslav Republic of Macedonia (FYROM), Georgia, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Poland, Romania, Russia, Slovakia, Slovenia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan.

Tenure Limitations

A Fellow will have a full-time tenure of 12 months. Requests to divide tenure between two institutions should be clearly described in the application and will be handled on a case by case basis.

A recipient of a postdoctoral fellowship must begin tenure by October 1, 1997. However, if unforeseen circumstances delay completion of the Ph.D. degree requirement or the advent of tenure, a request for an extension will be considered. An awardee who is unable to begin tenure by the specified time period is expected to decline the fellowship. This declination will not prejudice any subsequent application. The total time from date of award to termination of the fellowship may not exceed 36 months.

STIPENDS AND ALLOWANCES

The current stipend is \$2,750 per month for 12 months. Fellows are also provided with dependency allowances of \$200 per month for a dependent spouse and for each of not more than two dependent children for 12 months. The level of funding of NSF-NATO stipends for Fellows may be adjusted for individuals entitled to sabbatical leave pay or whose employer wishes to supplement the stipend to match regular salary. NSF-NATO funding in such instances will be determined on a case by case basis.

A travel allowance will normally be offered to aid in defraying travel costs from the Fellow's US permanent residence to the NATO fellowship institution to begin tenure and later to return. The travel allowance will be computed for the most direct route, as determined from standard mileage tables, at the rate of 25 cents per mile each for the Fellow and accompanying spouse, and 10 cents per mile for each of up to two accompanying dependent children.

The travel allowance may not exceed \$2,500 each for fellow and spouse; \$1,000 per accompanying dependent children up to two; the maximum round trip travel allowance, including that for dependents, is \$7,000 for the entire fellowship tenure. All travel must be by US flag carriers if such service is avail-

able, even though other carriers may be more convenient or less expensive.

The fellowship institution, upon its request, will receive \$100 for each month of the Fellow's resident tenure, i.e. 12 months. This allowance is paid on behalf of the Fellow to assist the institution in meeting the cost of fees chargeable to the Fellow, and in providing the Fellow with space, supplies and equipment.

In addition, the Fellow is provided with \$100 for each month of tenure to aid in defraying costs of research and special travel such as short visits to other laboratories or scientific meetings. This special allowance is expendable at the Fellow's discretion and usually provided with the advance stipend and travel allowance.

REVIEW AND SELECTION

NSF-NATO Fellowships is a multi-disciplinary activity managed by the NSF Directorate for Education and Human Resources. An acknowledgment card will be sent to the applicant when the Foundation has recorded receipt of the application in its electronic system of records.

The review criteria for the application include:

Applicant's Scientific Competence in science and engineering including achievements to date, particularly as attested to by academic records and letters of recommendation.

Applicant's Potential for Continued Professional Growth as demonstrated in the proposed plan of study and/or research from the standpoint of its appropriateness to the background and professional goals of the applicant and its feasibility within the time constraints imposed by tenure.

Applicant's Potential for Furthering International Collaboration in Science including the factors that influenced the applicant's selection of host institution and scientific advisor and the likelihood that the proposed plan of study and/or research might result in the establishment of a professional, working relationship between the applicant and one or more foreign scientists. In situations where English is not the primary language, consideration may be given to how communication is to be managed.

Selection of Fellows will be made by the National Science Foundation. All applicants will be notified by letter in May 1997 of the disposition of their applications. Applicants will receive verbatim copies of reviewers' comments without the name and affiliation of the reviewer.

The selection of applicants will be primarily based on the applicants' scientific ability and potential. Applications will be reviewed by multi-disciplinary panels of outside scientists and engineers and may include consideration of factors related to science and engineering infrastructure, such as disciplinary, institutional, and geographic distribution and increased participation of women, underrepresented minorities and persons with disabilities.

APPLICATION PROCEDURES

The NSF-NATO application consists of five (5) COMPLETE SETS of the application materials (signed original plus 4 copies), 1 copy of Supplementary Nominee Information (NSF Form 1225A - which **MUST** be returned) and four (4) reference letters. Please staple each complete application set separately. Type all forms. The type styles should be no smaller than 10 point font size. Margins may not be smaller than 2.5 cm except where margins are established on forms. Failure to comply with application procedures may make an application administratively ineligible, eliminating it from merit review.

APPLICATION FORM

Each set of NSF-NATO application materials must be submitted in stapled sets corresponding to the numeric order listed below:

1. NSF-NATO Postdoctoral Fellow Cover Sheet (NSF Form 294 (9-95) 2-sided form provided)

The first side of the NSF-NATO Cover Sheet must be completed in accordance with the instructions on the reverse side of the form. NOTE: The permanent US residence address, including zip code, must be given; college address may be used only if no other is available. The permanent address will be used in computing the travel allowance associated with the fellowship and correspondence. The applicant is responsible for notifying the program of any changes of the permanent address.

2. Abstract of Doctoral Dissertation (Limit: 1 Page)

The applicant's name and the heading "Abstract of Doctoral Dissertation" should appear at the top of this page followed by a brief description of the doctoral dissertation.

3. Abstract of Proposed Plan of Study and/or Research (50 words or less)

The applicant's name and the heading "Abstract of Proposed Plan of Study and/or Research " should appear at the top of this page followed by a brief description of not more than 50 words.

4. Proposed Plan of Study and/or Research (Limit: 2 Pages, including footnotes)

The applicant's name and the heading "Proposed Plan of Study and/or Research" should appear at the top of *each* page. The plan should be a relatively non-technical statement understandable by non-specialist experts. This statement should BRIEFLY include the applicant's 1) educational objectives, and 2) long-range professional goals. The applicant should describe in detail the activities expected to be undertaken during tenure and should also comment on the appropriateness of both the

institution/country selected. Finally, the applicant should indicate what plans have been made to date for the projected tenure period.

5. Biographical Sketch (Limit: 3 Pages)

The applicant's name and the heading "Biographical Sketch" should appear at the top of each page. This bio-sketch is meant to capture information normally contained in a curriculum vitae or resume and **MUST** include (but is not limited to) the following sections in the following order:

A) **Education** This section should list the applicant's educational background beginning with undergraduate and including postdoctoral training under the following columns: Institution & Location; Degree; Year Conferred; Field of Study.

B) **Academic Honors** This section should include fellowships, scholarships, teaching assistantships, mentoring activities, and other relevant positions held or awards received with dates and locations in reverse chronological order.

C) **Foreign Languages** This section should indicate the proficiency in the language of the country in which the Fellow plans to study, if other than English.

D) **Employment & Experience** This section should begin with the applicant's current position, (e.g. full-time graduate student, post-doctoral Fellow, lecturer, etc. and institution). Relevant professional history should be provided in reverse chronological order.

E) **Research Accomplishments** This section should list any research previously pursued, giving the title and reference of any published works. List the titles of any reference possible for unpublished works. Other accomplishments may include, but are not limited to, patent and software credits, papers presented at seminars, workshops, national or international meetings, etc.

F) **Other Accomplishments** This section is optional and may include relevant information that the applicant wishes to provide to the reviewers.

6. Transcripts

Provide an OFFICIAL and 4 copies of all graduate transcripts (5 completed sets in all). The OFFICIAL transcripts should be attached to the ORIGINAL, SIGNED Application. Attach a COMPLETE SET of transcripts to the last page of the Bio-sketch for EACH copy of the Application materials.

7. Letter of Support from the Host Advisor and/or Institution

Provide a letter of support from the proposed host advisor and/or institution acknowledging willingness to accept the

applicant to conduct the proposed research or other evidence of collaboration or communication between the applicant and the host advisor.

REFERENCE LETTERS (1 NSF Form 304 Provided.)

IT WILL BE NECESSARY TO MAKE BLANK COPIES OF THE REFERENCE REPORT FORM 304 FOR USE BY THE REFEREES. APPLICANTS ARE TO COMPLETE ITEMS 1-5 ON THE FORM BEFORE SENDING IT TO THE REFEREES.

Four (4) references are required. At least two of the four should be from persons with whom the applicant has worked in his/her major field, including the thesis advisor if possible. List the thesis advisor's name first on the application's Cover Page. Other referees should be in closely allied fields. It is important to send referees a copy of the proposed plan of study/research for their review and comment in the reference report.

NSF Form 304, "Reference Form For NSF-NATO Postdoctoral Fellowships," should be sent to the referees with a self-addressed, postage-paid return envelope and asked to submit an original plus four copies. NSF does not provide envelopes for collecting references. References must be collected in referee-sealed envelopes by the APPLICANT and mailed to the NSF-NATO Postdoctoral Fellowship in Science and Engineering Program with the required five (5) complete sets of application materials.

ON THE RETURN ENVELOPES SENT TO REFEREES, PLEASE BE SURE TO MARK BOTH SIDES "TO BE

OPENED ONLY BY NSF." The following method is recommended for preparing envelopes for referees.

In the upper left hand corner write:

The Referee's First and Last Name

Street Address

City, State Zip Code

Address envelope:

To: NSF-NATO Postdoctoral Fellowships

C/O Name of Applicant

Institution/Department/Street Address

City, State Zip Code.

References that are sent to NSF separately from the application material MAY MISS REVIEW.

DEADLINE FOR SUBMISSION OF APPLICATIONS

All application submissions must be postmarked by January 17, 1997. All sets of materials, forms and reference letters should be submitted as a single unit in a large envelope and addressed:

NSF-NATO Postdoctoral Fellowships

National Science Foundation

4201 Wilson Blvd. Suite 907N

Arlington, VA 22230

Special Fellowship Opportunities for Visiting Scientists from Cooperation Partner Countries

US institutions interested in fellowship opportunities for visiting scientists from NATO Cooperation Partner Countries (Albania, Armenia, Azerbaijan, Belarus, Bulgaria, Czech Republic, Estonia, Georgia, the former Yugoslav Republic of Macedonia (FYROM), Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Poland, Romania, Russia, Slovakia, Slovenia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan) are invited to submit applications on behalf of scientists, mathematicians and engineers who are citizens of NATO Cooperation Partner Countries. The primary goal of these fellowships is to promote the progress of science and closer collaboration between scientists and engineers of NATO Cooperation Partner Countries and scientists and engineers in the United States.

NSF-NATO Visiting Scientist Fellowships are administered by the National Science Foundation, an agency of the United States Government, at the request of the US Department of State. Applications to support a Visiting Scientist from Cooperation Partner Countries may be subject to security review by the United States Committee on Exchanges (COMEX) according to government policy. This review may be necessary before the State Department will issue a visa. The US host institution is responsible for obtaining research permits and

import/export documents, where applicable. Approximately 5 awards will be offered for research and/or study in the United States. The NSF-NATO Program Director should be contacted prior to the preparation and submission of an application.

Visiting Scientists must be working in their home country or in another Cooperation Partner Country at the time of application.

ELIGIBILITY CRITERIA

The following criteria will determine overall eligibility for consideration in the NSF-NATO Visiting Scientist Fellowships competition:

Applicant (Visiting Scientist) Eligibility

Citizens from Cooperation Partner Countries are eligible to be sponsored for NSF-NATO Visiting Scientist Fellowships. In addition, eligible applicants must have been awarded a doctoral degree (Ph.D. or equivalent) on or after October 1, 1992 but no later than the beginning of fellowship tenure, October 1, 1997.

Host Site Eligibility

US institutions must apply for a fellowship on behalf of a scientist or engineer from a Cooperation Partner country. A specific host/mentor scientist holding a full-time position at the host institution must be identified as the principal investigator (PI) on the fellowship application. The PI will be responsible for assuring the completeness of the application material. The host institution will be responsible for the disbursement of **all** funds associated with a fellowship award.

Tenure Limitations

A Fellow will have a full-time tenure of 12 months. The fellowship must begin by October 1, 1997. However, if unforeseen circumstances delay completion of the doctoral degree requirement or the advent of tenure, a request for an extension will be considered. If a Visiting Scientist is unable to begin tenure by the specified time period, the host institution is expected to decline the award. This declination will not prejudice any subsequent application. The total time from date of award to termination of the fellowship may not exceed 36 months.

STIPENDS AND ALLOWANCES

The current stipend is \$2,750 per month for 12 months. Visiting Scientists are also provided with dependency allowances of \$200 per month for a dependent spouse and for each of not more than two dependent children for 12 months.

A travel allowance should be requested to aid in defraying travel costs from the Visiting Scientist's place of residence in the Cooperation Partner country, at the time of application, to the host institution to begin tenure, and later to return. The travel allowance will be computed for the most direct route, as determined from standard mileage tables, at the rate of 25 cents per mile each for the Fellow and accompanying spouse, and 10 cents per mile for each of up to two accompanying dependent children.

The travel allowance may not exceed \$2,500 each for fellow and spouse; \$1,000 per accompanying dependent children up to two. The maximum round trip travel allowance, including that for dependents, is \$7,000 for the entire fellowship tenure.

The Visiting Scientist is also provided with a special allowance of \$100 for each month of tenure to aid in defraying costs of research and special travel such as short visits to other laboratories or scientific meetings. This is to be expendable at the Fellow's discretion in accordance with Host institution's disbursement policies.

REVIEW AND SELECTION

The NSF-NATO Visiting Scientist Initiative is a multi-disciplinary activity managed by the NSF Directorate for Education and Human Resources. An acknowledgment card will be sent to the applicant (PI) when the Foundation has recorded receipt of the application in its electronic system of records.

The review criteria for the application include:

Visiting Scientist's Professional Competence in science and engineering including achievements to date, particularly as attested to by academic records and the Sponsor Statement.

Visiting Scientist's Potential for Continued Professional Growth as demonstrated in the proposed plan of study and/or research from the standpoint of its appropriateness to the background and professional goals of the visiting scientist and its feasibility within the time constraints imposed by tenure.

Visiting Scientist's Potential for Furthering International Collaboration in Science including the factors that influenced the applicant's selection of host institution and scientific advisor/mentor and the likelihood that the proposed plan of study and/or research might result in the establishment of a professional, working relationship between the host scientist and the visiting scientist. Consideration will be given to the English language proficiency of the visiting scientist.

The US host institution must demonstrate that adequate accommodations and resources will be made available to the visiting scientist.

Selection of Visiting Scientist awardees will be made by the National Science Foundation. Principal investigators at host institutions as well as all applicants will be notified by letter in May 1997 of the disposition of their fellowships. Applicants will receive verbatim copies of reviewers' comments without the name and affiliation of the reviewer.

The selection of awardees will be primarily based on the visiting scientist's ability and potential for professional growth. Applications will be reviewed by multi-disciplinary panels of outside scientists and engineers and may include consideration of factors related to science and engineering infrastructure.

APPLICATION PROCEDURES

The NSF-NATO Visiting Scientist application consists of five (5) COMPLETE SETS of the application materials (signed original plus 4 copies), 1 copy of Supplementary Nominee Information (NSF Form 1225A - which **MUST** be returned), to be completed by the host advisor. **The host institution is responsible for assuring the completeness of application materials.** Please staple each complete application set separately. Type all forms. Type styles should be no smaller than 10 point font size. Margins may not be smaller than 2.5 cm except where margins are established on forms. Failure to comply with application procedures may make an application administratively ineligible, eliminating it from merit review.

APPLICATION SETS

Each set of NSF-NATO Visiting Scientist application materials should be submitted in stapled sets corresponding to the numeric order listed below:

1. NSF Form 1207 (7/95) Cover Sheet for Proposal to the National Science Foundation.

This form must be completed by the institution/host advisor that is submitting the application on behalf of the visiting scientist with FULLY signed certifications. In the first box on the upper left-hand corner of the cover page entitled For Consideration by NSF Organization Unit(s), type "DGE/EHR/NSF-NATO POSTDOCTORAL FELLOWSHIP."

2. NSF-NATO Postdoctoral Fellow Cover Sheet (NSF Form 294 (8-94) 2-sided form provided)

In addition to the NSF Form 1207, the NSF Form 294 (10/95) MUST BE COMPLETED. The first side of the NSF-NATO Cover Sheet must be completed in accordance with the instructions on the reverse side of the form. *NOTE: Current address is the address where the visiting scientist resides in the cooperation partner country; Permanent US address should be the host university address.*

3. Abstract of Doctoral Dissertation (Limit: 1 Page)

The host institution's name, the visiting scientist's name and the heading "Abstract of Doctoral Dissertation" should appear at the top of this page followed by a brief description of the doctoral dissertation.

4. Abstract of proposed Plan of Study and/or Research (50 words or less)

The host institution's name, the visiting scientist's name and the heading "Abstract of Proposed Plan of Study and/or Research" should appear at the top of this page followed by a brief description of not more than 50 words.

5. Proposed Plan of Study and/or Research (Limit: 2 Pages)

The host institution's name, the visiting scientist's name and the heading "Proposed Plan of Study and/or Research" should appear at the top of *each* page. The plan should be a relatively non-technical statement understandable by non-specialist experts. This statement should BRIEFLY include the visiting scientist's 1) educational objectives, and 2) long-range professional goals. The plan should describe in detail the activities expected to be undertaken during tenure by the visiting scientist and the appropriateness of the institution selected. Finally, indicate what plans have been made to date for the projected tenure period (e.g. comments on previous contacts with host advisor/institution.)

6. Biographical Sketch (Limit: 3 Pages)

The host institution's name, the visiting scientist's name and the heading "Biographical Sketch" should appear at the top of each page. This bio-sketch is meant to capture information

normally contained in a curriculum vitae or resume and MUST include (but is not limited to) the following sections in the following order:

A) **Education** This section should list the applicant's educational background beginning with undergraduate and including postdoctoral training under the following columns: Institution & Location; Degree; Year Conferred; Field of Study.

B) **Academic Honors** This section should include fellowships, scholarships, teaching assistantships, mentoring activities, and other relevant positions held or awards received with dates and locations in reverse chronological order.

C) **Foreign Languages** This section should indicate the proficiency of the visiting scientist in English.

D) **Employment & Experience** This section should begin with the visiting scientist's current position. Relevant professional history should be provided in reverse chronological order.

E) **Research Accomplishments** This section should list any research previously pursued, giving the title and reference of any published works. List the titles of any reference possible for unpublished works. The P.I. will determine the appropriateness of all journal publications. Other accomplishments may include, but are not limited to, patent and software credits, papers presented at seminars, workshops, national or international meetings, etc.

F) **Other Accomplishments** This section is optional and may include relevant information about the visiting scientist that the PI wishes to provide to the reviewers.

7. Sponsor Statement from US Host Institution

A statement of support from the host PI is required. Verification of resources being made available to the visiting scientist (i.e. housing, equipment, facilities to be provided by the host institution) should be included in this statement. The host PI should also indicate why this particular scientist would benefit from such a research opportunity and what contribution this scientist would make. Any host institution financial commitment of support to the visiting scientist should also be described. Institutional proposals for Visiting Scientists need not include Reference Report Form 304's or other letters of reference. Instead, this portion of the sponsor statement should be prepared in lieu of references, but should address the same issues that reference writers would. The sponsor institution should seek input from whatever sources it deems appropriate, and may attach to this statement any external references it chooses.

DEADLINE FOR SUBMISSION OF APPLICATIONS

All application submissions must be postmarked by January 17, 1997. All sets of materials, forms and reference let-

ters should be submitted as a single unit in a large envelope and addressed:

National Science Foundation
NSF-NATO Postdoctoral Fellowships
National Science Foundation
4201 Wilson Blvd., Suite 907N
Arlington, VA 22230

INQUIRIES

General inquiries regarding this activity, excluding

requests for copies of this or other NSF publications, may be addressed to NSF-NATO Postdoctoral Fellowships, Suite 907N, 4201 Wilson Blvd., Arlington, VA 22230. The telephone number is (703) 306-1696 and the fax number is (703) 306-0468. Requests for information via INTERNET may be addressed to nsf-nato@nsf.gov

Copies of this or any other NSF publication, may be obtained from the NSF Publications Unit. The NSF-NATO announcement number is: NSF 96-149. For descriptions and telephone numbers for NSF activities request a copy of the annual Guide to Programs from the Publications Unit, National Science Foundation, 4201 Wilson Blvd., Arlington, VA 22230, telephone number (703) 306-1130.

INSTRUCTIONS FOR COMPLETING APPLICATION

Read the NSF-NATO Announcement carefully before completing this Coversheet to determine applicant eligibility. Listed below are specific instructions for some questions found on page 1 of this Coversheet. Be sure to answer all questions on **BOTH** sides of this Coversheet.

1. **Proposed Major Field** should be one of the following: Life Sciences, Mathematics, Physics and Astronomy, Chemistry and Materials, Earth Sciences, Environmental Sciences, Applied Sciences and Engineering, and Social and Behavioral Sciences.
2. **Proposed Specialization Field.** Select proposed field and enter its number on the designated line and its name in the designated space. If the "other" category applies, list the appropriate code number and write the name of the specialized field.
3. Applicants **MUST** give a permanent address in the United States which will be used for **all** correspondence. The applicant is **responsible** for notifying the program of any changes of the permanent address.
4. Applicants **MUST** be US citizens, nationals, permanent residents of the United States or citizens of a Cooperation Partner Country.
5. **Ph.D. Field** should be selected from the list below in **Fields of Specialization**.
6. **Name of Proposed Fellowship Institution:** Many institutions are part of a larger organization such as a university. Specify the name of the larger organization.
7. Designate present position/rank at current institution--e.g. graduate student, postdoctoral fellow, staff (Government, private, industry), self-employed, etc.
8. State the **NAME** and **TYPE** (e.g. academic, private, federal, etc.) of institution of current affiliation.

Fields of Specialization

1. LIFE SCIENCES

BIOLOGY

- 101 Animal physiology
- 102 Biochemistry and biophysics
- 103 Biotechnology
- 104 Cell biology and physiology, microbiology
- 105 Developmental biology and zoology
- 106 Ecosystems, landscapes and environment
- 107 Molecular biology and genetics, virology
- 108 Neurosciences, cognition and psychology
- 109 Plant biology: botany, physiology and pathology
- 110 Population biology and genetics, evolution
- 111 Biology (other)

2. MATHEMATICS, PHYSICS AND ASTRONOMY

MATHEMATICS

- 201 Algebra and number theory
- 202 Analysis
- 203 Biomathematics
- 204 Computational mathematics and numerical analysis
- 205 Discrete Mathematics
- 206 Geometry and topology
- 207 Logic and foundations of mathematics
- 208 Mechanics and mathematical physics
- 209 Optimization and control theory
- 210 Probability
- 211 Mathematics (other)

PHYSICS

- 221 Acoustics
- 222 Atomic and molecular physics
- 223 Condensed matter physics
- 224 Electromagnetism, plasmas and electric discharges
- 225 Elementary particles and fields
- 226 Fluid dynamics
- 227 General physics
- 228 Mathematical physics
- 229 Nuclear physics
- 230 Optics
- 231 Statistical physics
- 232 Physics (other)

ASTRONOMY AND ASTROPHYSICS

- 241 Astronomy
- 242 Astrophysics
- 243 Cosmology
- 244 Space and Planetary Physics
- 245 Astronomy and astrophysics (other)

200 Physical and Mathematical Sciences (non-specific)

3. CHEMISTRY MATERIALS

CHEMISTRY

- 302 Analytical biochemistry
- 303 Analytical chemistry
- 304 Bio-inorganic chemistry
- 305 Bio-organic chemistry
- 306 Catalysis
- 307 Computational chemistry
- 308 Electro chemistry
- 309 Inorganic chemistry
- 311 Organic chemistry
- 312 Physical chemistry
- 313 Polymer chemistry
- 314 Solid-state chemistry
- 315 Theoretical chemistry

- 316 Chemistry (other)

MATERIALS SCIENCES

- 321 Ceramics, inorganic materials
- 322 Corrosion, chemical degradation
- 323 Electrical, magnetic and optical properties
- 324 Mechanical and thermal properties
- 325 Metals and alloys
- 326 Polymers
- 327 Structure, composition and properties
- 328 Materials science (other)
- 300 Chemistry and Materials (non-specific)

4. EARTH SCIENCES

SOLID EARTH

- 401 Engineering geology
- 402 Geochemistry
- 403 Geology
- 404 Geomorphology
- 405 Geophysics
- 406 Hydrology and hydrogeology
- 407 Mineralogy and petrology
- 408 Paleontology and paleobotany
- 409 Remote sensing and detection
- 410 Sedimentology and stratigraphy
- 411 Soil science
- 412 Solid earth (other)

ATMOSPHERIC SCIENCE

- 421 Aerology
- 422 Climatology
- 423 Meteorology
- 424 Radiometerology
- 425 Atmospheric science (other)

OCEANOGRAPHY

- 431 Air-sea interaction
- 432 Biological oceanography
- 433 Chemical oceanography
- 434 Hydrography
- 435 Physical oceanography
- 436 Oceanography (other)

5. ENVIRONMENTAL SCIENCES

- 501 Air
- 502 Disasters
- 503 Ecosystems
- 504 Environmental change
- 505 Environmental chemistry
- 506 Environmental policy
- 508 Noise
- 509 Soil
- 510 Waste
- 511 Water
- 512 Environmental sciences (other)
- 500 Environmental Sciences (non-specific)

6. APPLIED SCIENCES AND ENGINEERING

ENGINEERING

- 601 Aeronautical and astronautical engineering
- 603 Bioengineering
- 604 Biomedical engineering
- 605 Ceramic engineering
- 606 Chemical engineering

- 607 Civil engineering
- 608 Electrical engineering
- 609 Energy
- 610 Engineering mechanics
- 611 Hydraulics
- 612 Industrial engineering
- 613 Mechanical engineering
- 614 Metallurgical engineering
- 615 Mining engineering
- 616 Nuclear engineering
- 617 Petroleum engineering
- 618 Sanitary engineering
- 619 Engineering (other)

COMPUTER SCIENCE

- 621 Artificial intelligence and knowledge-based systems
- 622 Computer databases and banks
- 623 Human-computer interaction
- 624 Operating systems and networks
- 625 Software and requirements engineering
- 626 Theory and mathematics of computing
- 627 Computer science (other)

SYSTEMS SCIENCE

- 631 Automatic control
- 632 Operational research
- 633 Systems analysis
- 634 Systems engineering
- 635 Systems science (other)

INFORMATION SCIENCE

- 641 Communications
- 643 Information science (other)

- 600 Diverse Applied Sciences (non-specific)

7. SOCIAL AND BEHAVIORAL SCIENCES

SOCIAL SCIENCES

- 701 Economic and social history
- 702 Economics (Bus. Admin. NOT eligible)
- 703 Education
- 704 Environmental planning
- 705 Human geography
- 707 Linguistics
- 708 Management and business studies
- 709 Political Science and international relations
- 710 Science and technology policy
- 711 Social administration
- 712 Social anthropology
- 713 Social psychology
- 714 Socio-legal studies
- 715 Sociology (Social Work NOT eligible)
- 716 Social science (other)

BEHAVIORAL SCIENCES

- 721 Archeology
- 722 Developmental science
- 723 Ergonomics and human engineering
- 724 Human factors
- 725 Organisational science
- 726 Personality
- 727 Psychology
- 728 Psychometrics
- 729 Behavioral science (other)

999 Not Listed (Specify) _____

Have you applied for any other fellowships or similar appointment for all or part of tenure herein requested? If so please specify _____

By my signature below, I hereby certify that the information that I have provided in this application is correct to the best of my knowledge

Signature of Applicant _____ Date: _____

COVER SHEET FOR PROPOSAL TO THE NATIONAL SCIENCE FOUNDATION

FOR CONSIDERATION BY NSF ORGANIZATION UNIT(S) <small>(Indicate the most specific unit known, i.e., program, division, etc.)</small>				FOR NSF USE ONLY NSF PROPOSAL NUMBER	
DGE/EHR/NSF-NATO POSTDOCTORAL FELLOWSHIP					
PROGRAM ANNOUNCEMENT/SOLICITATION NO./CLOSING DATE/If not in response to a program announcement/solicitation enter GPG, NSF 95-27					
DATE RECEIVED	NUMBER OF COPIES	DIVISION ASSIGNED	FUND CODE	FILE LOCATION	
EMPLOYER IDENTIFICATION NUMBER (EIN) OR TAXPAYER IDENTIFICATION NUMBER (TIN)		SHOW PREVIOUS AWARD NO. IF THIS IS <input type="checkbox"/> A RENEWAL OR <input type="checkbox"/> AN ACCOMPLISHMENT-BASED RENEWAL		IS THIS PROPOSAL BEING SUBMITTED TO ANOTHER FEDERAL AGENCY? YES <input type="checkbox"/> NO <input type="checkbox"/> IF YES, LIST ACRONYM(S)	
NAME OF ORGANIZATION TO WHICH AWARD SHOULD BE MADE			ADDRESS OF AWARDEE ORGANIZATION, INCLUDING ZIP CODE		
AWARDEE ORGANIZATION CODE (IF KNOWN)					
NAME OF PERFORMING ORGANIZATION, IF DIFFERENT FROM ABOVE			ADDRESS OF PERFORMING ORGANIZATION, IF DIFFERENT, INCLUDING ZIP CODE		
PERFORMING ORGANIZATION CODE (IF KNOWN)					
IS AWARDEE ORGANIZATION (Check All That Apply) <small>(See GPG II.D.1 For Definitions)</small> <input type="checkbox"/> FOR-PROFIT ORGANIZATION <input type="checkbox"/> SMALL BUSINESS <input type="checkbox"/> MINORITY BUSINESS <input type="checkbox"/> WOMAN-OWNED BUSINESS					
TITLE OF PROPOSED PROJECT					
REQUESTED AMOUNT \$	PROPOSED DURATION (1-60 MONTHS) months		REQUESTED STARTING DATE		
CHECK APPROPRIATE BOX(ES) IF THIS PROPOSAL INCLUDES ANY OF THE ITEMS LISTED BELOW					
<input type="checkbox"/> BEGINNING INVESTIGATOR (GPG I.A.3)		<input type="checkbox"/> VERTEBRATE ANIMALS (GPG II.D.12) IACUC App. Date _____			
<input type="checkbox"/> DISCLOSURE OF LOBBYING ACTIVITIES (GPG II.D.1)		<input type="checkbox"/> HUMAN SUBJECTS (GPG II.D.12) Exemption No. _____ or IRB App. Date _____			
<input type="checkbox"/> PROPRIETARY & PRIVILEGED INFORMATION (GPG II.D.10)		<input type="checkbox"/> INTERNATIONAL COOPERATIVE ACTIVITIES: COUNTRY/COUNTRIES _____			
<input type="checkbox"/> NATIONAL ENVIRONMENTAL POLICY ACT (GPG II.D.10)		<input type="checkbox"/> FACILITATION FOR SCIENTISTS/ENGINEERS WITH DISABILITIES (GPG V.G.)			
<input type="checkbox"/> HISTORIC PLACES (GPG II.D.10)		<input type="checkbox"/> RESEARCH OPPORTUNITY AWARD (GPG V.H)			
<input type="checkbox"/> SMALL GRANT FOR EXPLOR. RESEARCH (SGER) (GPG II.D.12)					
<input type="checkbox"/> GROUP PROPOSAL (GPG II.D.12)					
PI/PD DEPARTMENT		PI/PD POSTAL ADDRESS			
PI/PD FAX NUMBER					
NAMES (TYPED)	Social Security No.*	High Degree, Yr	Telephone Number	Electronic Mail Address	
PI/PD NAME					
CO-PI/PD					
NOTE: THE FULLY SIGNED CERTIFICATION PAGE MUST BE SUBMITTED IMMEDIATELY FOLLOWING THIS COVER SHEET					
<small>*SUBMISSION OF SOCIAL SECURITY NUMBERS IS VOLUNTARY AND WILL NOT AFFECT THE ORGANIZATION'S ELIGIBILITY FOR AN AWARD. HOWEVER, THEY ARE AN INTEGRAL PART OF THE NSF INFORMATION SYSTEM AND ASSIST IN PROCESSING THE PROPOSAL. SSN SOLICITED UNDER NSF ACT OF 1950, AS AMENDED.</small>					

CERTIFICATION PAGE

Certification for Principal Investigators and Co-Principal Investigators

I certify to the best of my knowledge that:

- (1) the statements herein (excluding scientific hypotheses and scientific opinions) are true and complete, and
- (2) the text and graphics herein as well as any accompanying publications or other documents, unless otherwise indicated, are the original work of the signatories or individuals working under their supervision. I agree to accept responsibility for the scientific conduct of the project and to provide the required progress reports if an award is made as a result of this application.

I understand that the willful provision of false information or concealing a material fact in this proposal or any other communication submitted to NSF is criminal offense (U.S.Code, Title 18, Section 1001).

Name (Typed)	Signature	Date
PI/PD		
Co-PI/PD		

Certification for Authorized Organizational Representative or Individual Applicant

By signing and submitting this proposal, the individual applicant or the authorized official of the applicant institution is: (1) certifying that statements herein are true and complete to the best of his/her knowledge; and (2) agreeing to accept the obligation to comply with NSF award terms and an award is made as a result of this application. Further, the applicant is hereby providing certifications regarding Federal debt status, debarment and suspension, drugfree workplace, and lobbying activities (see below), as set forth in the *Grant Proposal Guide (GPG)*, NSF 95-27. Willful provision of false information in this application and its supporting documents or in reports required under an ensuing award is a criminal offense (U.S. Code, Title Section 1001).

In addition, if the applicant institution employs more than fifty persons, the authorized official of the applicant institution is certifying that the institution implemented a written and enforced conflict of interest policy that is consistent with the provisions of *Grant Policy Manual* Section 510; that to the best his/her knowledge, all financial disclosures required by that conflict of interest policy have been made; and that all identified conflicts of interest will be satisfactorily managed, reduced or eliminated prior to the institution's expenditure of any funds under the award, in accordance with the conflict of interest policy. Conflicts which cannot be satisfactorily managed, reduced or eliminated must be disclosed to NSF.

Debt and Debarment Certifications (If answer "yes" to either, please provide explanation.)

- Is the organization delinquent on any Federal debt? Yes No
- Is the organization or its principals presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal Department or agency? Yes No

Certification Regarding Lobbying

This certification is required for an award of a Federal contract, grant or cooperative agreement exceeding \$100,000 and for an award of a Federal loan a commitment providing for the United States to insure or guarantee a loan exceeding \$150,000.

Certification for Contracts, Grants, Loans and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer employee of any agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements and that all subrecipients shall certify and disclose

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

AUTHORIZED ORGANIZATIONAL REPRESENTATIVE		SIGNATURE	DATE
NAME/TITLE (TYPED)			
TELEPHONE NUMBER	ELECTRONIC MAIL ADDRESS	FAX NUMBER	

DO NOT DUPLICATE THIS PAGE AS PART OF THE PROPOSAL

Every prospective grantee must complete the section on certification on the Cover Sheet (NSF Form 1207, (Rev. 7 /95)) submitted with each proposal. Instructions for the two certifications are below:

INSTRUCTIONS ON CERTIFICATION OF NON-DELINQUENCY BY APPLICANTS FOR FEDERAL ASSISTANCE

Pursuant to OMB Circular A-129, "Except where required by law or approved by the head of the agency, no award of Federal funds shall be made to an applicant who is delinquent on a Federal debt until the delinquent account is made current or satisfactory arrangements are made between affected agencies and the debtor." The certification of non-delinquency applies only to the organization requesting financial assistance and not to the individual Principal Investigator.

For the purposes of this certification, the following definitions of delinquency apply:

Direct loans—a debt more than 31 days past due on a scheduled payment

Grants—recipients of a "Notice of Grants Cost Disallowance" who have not repaid the disallowed amount or who have not resolved the disallowance

Guaranteed and insured loans—recipients of a loan guaranteed by the Federal Government that the Federal Government has repur-

chased from a lender because the borrower breached the loan agreement and is in default

Examples of debts include delinquent taxes, audit disallowances, guaranteed and direct student loans, housing loans, farm loans, business loans, Department of Education institutional loans, benefit overpayments and other miscellaneous administrative debts.

INSTRUCTIONS ON CERTIFICATION REGARDING DEBARMENT AND SUSPENSION

1. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.

2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such person from participation in this transaction.

3. The certification in this clause is any material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.

4. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if at any time the prospective primary participant learns that its certification was erroneous when submitted or has become

erroneous by reason of changed circumstances.

5. The terms *covered transaction*, *debarred*, *suspended ineligible*, *lower tier-covered transaction*, *participant*, *person*, *primary covered transaction*, *principal*, *proposal*, and *voluntarily excluded*, as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is being submitted for assistance in obtaining a copy of those regulations.

6. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

7. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion—Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower

tier covered transactions and in all solicitations for lower tier covered transactions.

8. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.

9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause.

The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

10. Except for transactions authorized under paragraph 6 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

CERTIFICATION

(1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

(a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

(b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to ob-

tain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State anti-trust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumer-

ated in paragraph (1)(b) of this certification; and

(d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

(2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

Instructions for Certification

1. By signing the NSF Proposal Cover Sheet, NSF Form 1207, and submitting this application or grant agreement, the grantee is providing the certifications set out below.
2. The certification set out below is a material representation of fact upon which reliance was placed when the agency determined to award the grant. If it is later determined that the grantee knowingly rendered a false certification, or otherwise violates the requirements of the Drug-Free Workplace Act, the agency, in addition to any other remedies available to the Federal Government, may take action authorized under the Drug-Free Workplace Act.
3. For grantees other than individuals, Alternate I applies.
4. For grantees who are individuals, Alternate II applies.

Certification Regarding Drug-Free Workplace Requirements

Alternate I (Grantees Other Than Individuals)

The grantee certifies that it will or will continue to provide a drug-free workplace by:

- (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
- (b) Establishing an ongoing drug-free awareness program to inform employees about—
 - (1) The dangers of drug abuse in the workplace;
 - (2) The grantee's policy of maintaining a drug-free workplace;
 - (3) Any available drug counseling, rehabilitation and employee assistance programs; and
 - (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
- (c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);
- (d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will—
 - (1) Abide by the terms of the statement; and
 - (2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction;
- (e) Notifying the agency in writing, within 10 calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction.

Employers of convicted employees must provide notice, including position, title, to every grant officer or other designee on whose grant activity the convicted employee was working, unless the Federal agency has designated a central point for the receipt of such notices. Notice shall include the identification number(s) of each affected grant;

- (f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted—
 - (1) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or
 - (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;
- (g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a), (b), (c), (d), (e) and (f).

Alternate II (Grantees Who Are Individuals)

- (a) The grantee certifies that, as a condition of the grant, he or she will not engage in the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance in conducting any activity with the grant.
 - (b) If convicted of a criminal drug offense resulting from a violation occurring during the conduct of any grant activity, he or she will report the conviction, in writing, within 10 calendar days of the conviction, to every grant officer or other designee, unless the Federal agency designates a central point for the receipt of such notices. When notice is made to such a central point, it shall include the identification number(s) of each affected grant.
- (For NSF, grantee notification should be made to the Cost Analysis/Audit Resolution Branch, Division of Contracts, Policy & Oversight, NSF, Arlington, VA 22230)

SUPPLEMENTARY NOMINEE INFORMATION

Submit only ONE copy of this form. Attach it on top of the cover page of the copy that bears the original signatures. Leave the back of the page blank. *Do not include this form with any of the other copies, as this may compromise the confidentiality of the information.*

Please check the appropriate answers to each question for the nominee:

1. Is this person
Female
Male
2. Is this person a
U.S. Citizen
Permanent Resident
Other non-U.S. Citizen
3. Which one of these categories best describes this person's ethnic/racial status? (If more than one category applies, use the category that most closely reflects the person's recognition in the community.)
American Indian or Alaskan Native
Asian
Black, not of Hispanic Origin
Hispanic
Pacific Islander
White, not of Hispanic Origin
4. Does this person have a disability* which limits a major life activity?
Yes
No
- Check here if this person does not wish to provide some or all of the above information.
- Required: Check here if this person is currently serving (or has previously served) as PI, Co-PI or PD on any Federally funded project.**

AMERICAN INDIAN OR ALASKAN NATIVE: A person having origins in any of the original peoples of North America, and who maintains cultural identification through tribal affiliation or community recognition.

ASIAN: A person having origins in any of the original peoples of East Asia, Southeast Asia and the Indian subcontinent. This area includes, for example, China, India, Indonesia, Japan, Korea and Vietnam.

BLACK, NOT OF HISPANIC ORIGIN: A person having origins in any of the black racial groups of Africa.

HISPANIC: A person of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race.

PACIFIC ISLANDER: A person having origins in any of the original peoples of Hawaii; the U.S. Pacific Territories of Guam, American Samoa, and the Northern Marianas; the U.S. Trust Territory of Palau; the islands of Micronesia and Melanesia; and the Philippines.

WHITE, NOT OF HISPANIC ORIGIN: A person having origins in any of the original peoples of Europe, North Africa, or the Middle East.

*Disabled: A person having a physical or mental impairment that substantially limits one or more major life activities; who has a record of such impairment; or who is regarded as having such impairment.

WHY THIS INFORMATION IS BEING REQUESTED:

The Federal Government has a continuing commitment to monitor the operation of its review and award processes to identify and address any inequities based on gender, race, ethnicity or disability of the nominee. To gather the information needed for this important task, you should submit a single copy of this form, however, submission of the requested information is not mandatory and is not a precondition of award. Any individual not wishing to provide the information should check the box provided for this purpose. (The exception is information about previous Federal support, the last question above.)

Information from this form will be retained by Federal agencies as an integral part of their Privacy Act Systems of Records in accordance with the Privacy Act of 1974. These are confidential files accessible only to appropriate Federal agency personnel and will be treated as confidential to the extent permitted by law. Data submitted will be used in accordance with criteria established by the respective Federal agency for awarding grants for research and education, and in response to Public Law 99-383 and 42 USC 1885c.

REFERENCE FORM FOR NSF-NATO POSTDOCTORAL FELLOWSHIPS—Page 1 of 2

INSTRUCTIONS TO APPLICANT: MAKE SEVERAL COPIES OF BOTH SIDES OF THIS FORM BEFORE YOU SIGN IT. Please complete items 1, 2, 3, 4, and 5 below before sending this Reference Form and a pre-addressed, postage paid return envelope to the referee. BE SURE TO SEND A COPY OF YOUR PROPOSED PLAN OF STUDY/RESEARCH TO EACH REFEREE FOR USE IN COMPLETING THIS FORM. YOU ARE RESPONSIBLE FOR COLLECTING ALL REFERENCES FOR SUBMISSION TO NSF.

INSTRUCTIONS TO REFEREE: This report is due on or before the date specified by the applicant. Please complete all items beginning with item number 6. Your reference will be of no value if it is received after the deadline for submission of applications. This reference form should be collected by the applicant and submitted as part of the application. If no envelope has been provided, please DO NOT SEND THE LETTER DIRECTLY TO NSF-NATO. ADDRESS ENVELOPES TO NSF-NATO, C/O THE APPLICANT AND MARK BOTH SIDES OF THE ENVELOPE "TO BE OPENED ONLY BY NSF." FOR ADDED SECURITY REFEREES ARE ENCOURAGED TO SIGN ACROSS THE ENVELOPE'S FLAP. Reference forms that are sent to NSF under cover separate from the Application Submission or after the deadline for application may miss panel review.

1. Name of Applicant _____ Phone Number: _____

2. Field _____ 3. Date Reference Due to Applicant: _____

4. As the REQUESTER of this report, I (circle one:) wish / do not wish to waive any rights I may have to the information contained herein. Applicant's Signature/Date _____

5. Name of Respondent: _____ Institution: _____

6. How long have you known the applicant? _____ 7. In what capacity (e.g. undergraduate, graduate, research assistant, by reputation only, etc.?)

8. On the following scale of 1 to 5, please rank the applicant with those of comparable experience.

1—The most outstanding person at this career stage I have known in the past 5 years.

2—Among the top 10 young scientists or engineers I have known in the past 5 years.

3—Outstanding

4—Above Average

5—Average or below

9. The primary objective of the NATO Postdoctoral Fellowships is to promote progress in science and engineering and to foster collaboration among scientists of various nations. It is anticipated that 7 to 10 times as many individuals will apply for this Fellowship than can be given an award. Taking into consideration NATO's goals and the overall competitiveness, the applicant's proposed plan of study/research, scientific achievements to date and personal characteristics, to what extent do you recommend the applicant for a NATO Postdoctoral Fellowship? Please answer by circling one or several consecutive numbers on the following scale.

Do not recommend 1 2 3 4 5 6 7 8 9 Recommend as strongly as possible.

10. On the back of this sheet please briefly describe the applicant's competence in science or engineering; particularly consider the following, (when relevant) mastery of fundamental knowledge in the applicant's field; design of research projects AND the proposed plan of study/research; laboratory skills and technique; growth during period observed; fertility of imagination, originality; self reliance, and independence. If you attach sheets please be sure to CLEARLY indicate the applicant's name.

PLEASE FILL OUT BOTH SIDES OF THIS FORM

REFERENCE FORM NSF 304 FOR NSF-NATO POSTDOCTORAL FELLOWSHIPS—Page 2 of 2

In the space below or on attached sheets, please add any descriptive comments which will assist in providing a complete picture of the applicant's abilities and potential as a scientist or engineer. Include, where appropriate, comments on such matters as versatility, emotional stability, competence to envision and plan sound significant research, ability to make mature sound scientific judgments, and other strengths and weaknesses.

11. Before signing this report, you should check one of the two blocks below. If no block is checked, then Block B obtains. If block A is checked, the Foundation will hold your comments in confidence so as not to reveal your identity as the author of these comments, and warns that failure to check block A may result in the requirement to provide these comments to the applicant under the Privacy Act of 1974.

A. My preparation of this Reference Report is conditioned on the promise of the Foundation to hold my identity as the author of these comments in confidence.

B. My preparation of this Reference Report is not conditioned on the promise of the Foundation to hold my comments in confidence.

Signature of Referee: _____ Date: _____

Telephone of Referee: _____ E-Mail (optional) _____

PLEASE FILL OUT BOTH SIDES OF THIS FORM

Ordering by Electronic Mail or by Fax

Electronic mail users who have access to INTERNET may order publications electronically. INTERNET users should address requests to pubs@nsf.gov. Requests should include the NSF publication number, title, number of copies, requester's name and a complete mailing address. Publications will be mailed within 2 days of receipt of request. Printed publications may be ordered by FAX (703) 644-4278. Publications should be received within 3 weeks after receipt of request.

Information on NSF's activities is also available through the Science and Technology Information System (STIS), NSF's on-line publishing system, described in NSF91-1-(Revised 10/4/91), the "STIS Flyer." To get a paper copy of the flyer call the NSF Publications Unit at 703-306-1130. For an electronic copy, send an e-mail message to stiflyer@nsf.gov (INTERNET).

The National Science Foundation (NSF) provides awards for research and education in the sciences and engineering. The awardee is wholly responsible for the conduct of such research and preparation of the results for publication. The Foundation, therefore, does not assume responsibility for such findings or their interpretation.

The Foundation welcomes proposals on behalf of all qualified scientists and engineers, and strongly encourages women, minorities and persons with disabilities to compete fully in any of the research and research-related Programs described in this document.

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

Facilitation Awards for Scientists and Engineers with Disabilities provides funding for special assistance or equipment to enable persons (investigators and other staff, including student research assistants) to work on an NSF project. See the FASED program announcement (NSF 91-54) or contact the FASED Coordinator in the Directorate for Education and Human Resources. The telephone number is (703) 306-1636 ext. 6865.

The National Science Foundation has TDD (Telephone Device for the Deaf) capability which enables people with hearing impairment to communicate with the Division of Human Resource Management for information relating to NSF programs, employment, or general information. This number is (703) 306-0090; for Federal Information Relay Services, 1-800-877-8339. The catalog of Federal Domestic Assistance Number is 47.076, Education and Human Resources.

Privacy Act and Public Burden Statements

The information requested on the application materials 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 applicants and may be disclosed to qualified reviewers and staff assistants as part of the review process; to the institution the nominee, applicant or fellow is attending or is planning to attend or is employed by for the purpose of facilitating review or award decisions, or administering fellowships or awards; to government contractors, experts, volunteers and researchers as necessary to complete assigned work; and to other government agencies to coordinate programs. Information from this system may be merged with other computer files to carry out statistical studies the results of which do not identify individuals. Disclosure may be made of awardees' names, home institutions, and fields of study for public information purposes. For fellows or awardees receiving stipends directly from the government, information is transmitted to the Department of the Treasury to make payments. See Systems of Records, NSF-12, "Fellowships and Other Awards," 60 Federal Register 4449 (January 23, 1995). Submission of the information is voluntary, however, failure to provide full and complete information may reduce the possibility of your receiving an award.

The public reporting burden for this collection of information is estimated to average 12 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. 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
Contacts, Policy and Oversight
National Science Foundation
Arlington, VA 22230

**NATIONAL SCIENCE FOUNDATION
ARLINGTON, VA. 22230**

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300

**BULK RATE
POSTAGE & FEES PAID
National Science Foundation
Permit No. G-69**

RETURN THIS COVER SHEET TO ROOM P35, IF YOU DO NOT WISH TO RECEIVE THIS MATERIAL , OR IF CHANGE OF ADDRESS IS NEEDED , INDICATE CHANGE INCLUDING ZIP CODE ON THE LABEL. (DO NOT REMOVE LABEL).

**OMB NO. 3145-0023
P.T.: 22
K.W.: 1013000, 1002000,
1010000, 0600000,
0400000, 0309008**

**NSF 96-149
(Replaces 96-9)**