DOE F 4650.2
Rev. (10-03)
(All Other Editions Are Obsolete)

Office of Science (SC)

Face Page

OMB Control No.
1910-1400
(OMB Burden Disclosure Statement on Back)

TITLE OF PROPOSED RESEARCH:

1. CATALOG OF FEDERAL DOMESTIC ASSISTANCE #
81.049

2. CONGRESSIONAL DISTRICT:
Applicant Organization's District: _____
Project Site's District: _____

3A. I.R.S. ENTITY IDENTIFICATION OR SSN:

3B. DUNS Number:

4. AREA OF RESEARCH OR ANNOUNCEMENT TITLE/#:

5. HAS THIS RESEARCH PROPOSAL BEEN SUBMITTED TO ANY OTHER FEDERAL AGENCY?
☐ YES ☐ NO

PLEASE LIST _____

6. DOE/OER PROGRAM STAFF CONTACT (if known):

7. TYPE OF APPLICATION:
☐ New ☐ Renewal
☐ Continuation ☐ Revision
☐ Supplement

8. ORGANIZATION TYPE:
☐ Local Govt. ☐ State Govt.
☐ Non-Profit ☐ Hospital
☐ Indian Tribal Govt. ☐ Individual
☐ Other ☐ Inst. of Higher Educ.
☐ For-Profit
☐ Small Business ☐ Disadvan. Business
☐ Women-Owned ☐ 8(a)

9. CURRENT DOE AWARD # (IF APPLICABLE):

10. WILL THIS RESEARCH INVOLVE:
10A. Human Subjects ☐ No ☐ If yes
Exemption No. _____ or
IRB Approval Date _____
Assurance of Compliance No: _____
10B. Vertebrate Animals ☐ No ☐ If yes
IACUC Approval Date _____ or
Animal Welfare Assurance No: _____

11. AMOUNT REQUESTED FROM DOE FOR ENTIRE PROJECT PERIOD $ _____

12. DURATION OF ENTIRE PROJECT PERIOD:
_____ to _____
MM/DD/YY MM/DD/YY

13. REQUESTED AWARD START DATE
_____
MM/DD/YY

14. IS APPLICANT DELINQUENT ON ANY FEDERAL DEBT?
☐ Yes (attach an explanation) ☐ No

15. PRINCIPAL INVESTIGATOR/PROGRAM DIRECTOR
NAME _____
TITLE _____
ADDRESS _____
PHONE NUMBER _____

* TYPE IN ABOVE NAME HERE

SIGNATURE OF PRINCIPAL INVESTIGATOR/ PROGRAM DIRECTOR
(please type in full name if electronically submitted)
Date TYPE IN DATE HERE

PI/PD ASSURANCE: 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 submission. Willful provision of false information is a criminal offense. (U.S. Code, Title 18, Section 1001).

16. ORGANIZATION'S NAME _____
ADDRESS _____

CERTIFYING REPRESENTATIVE'S
NAME _____
TITLE _____
PHONE NUMBER _____

* TYPE IN ABOVE NAME HERE

SIGNATURE OF ORGANIZATION'S CERTIFYING REPRESENTATIVE
(please type in full name if electronically submitted)
Date TYPE IN DATE HERE

CERTIFICATION and ACCEPTANCE: I certify that the statements herein are true and complete to the best of my knowledge, and accept the obligation to comply with DOE terms and conditions if an award is made as the result of this submission. A willfully false certification is a criminal offense. (U.S. Code, Title 18, Section 1001).

NOTICE FOR HANDLING PROPOSALS

This submission is to be used only for DOE evaluation purposes and this notice shall be affixed to any reproduction or abstract thereof. All Government and non-Government personnel handling this submission shall exercise extreme care to ensure that the information contained herein is not duplicated, used, or disclosed in whole or in part for any purpose other than evaluation without written permission except that if an award is made based on this submission, the terms of the award shall control disclosure and use. This notice does not limit the Government's right to use information contained in the submission if it is obtainable from another source without restriction. This is a Government notice, and shall not itself be construed to impose any liability upon the Government or Government personnel for any disclosure or use of data contained in this submission.

PRIVACY ACT STATEMENT

If applicable, you are requested, in accordance with 5 U.S.C., Sec. 562A, to voluntarily provide your Social Security Number (SSN). However, you will not be denied any right, benefit, or privilege provided by law because of a refusal to disclose your SSN. We request your SSN to aid in accurate identification, re erral and review of applications for research/training support for efficient management of Office of Science grant/contract programs.

APPLICATION FACE PAGE
OMB BURDEN DISCLOSURE STATEMENT

Public reporting burden for this collection of information is estimated to average 30 minutes 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:

Office of Information, Records and Resource Management,
S0-31, Forrestal, Paperwork Reduction Project (1910-1400),
U.S. Department of Energy
1000 Independence Avenue, S.W.,
Washington, DC 20585

and the :

Office of Management and Budget (OMB),
Paperwork Reduction Project (1910-1400)
Washington, DC 20503

DOE F 4620.1
(04-93)
All Other Editions Are Obsolete

U.S. Department of Energy

Budget Page

(See reverse for Instructions)

OMB Control No.
1910-1400
OMB Burden Disclosure
Statement on Reverse

ORGANIZATION				**Budget Page No:**	
PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR				Requested Duration:	(Months)
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title; A.6. show number in brackets)	DOE Funded Person-mos.			Funds Requested by Applpicant	Funds Granted by DOE
	CAL	ACAD	SUMR		
1.					
2.					
3.					
4.					
5.					
6. ( ) OTHERS (LIST INDIVIDUALLY ON BUDGET EXPLANATION PAGE)					
7. ( ) TOTAL SENIOR PERSONNEL (1-6)				0.00	0.00
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)					
1. ( ) POST DOCTORAL ASSOCIATES					
2. ( ) OTHER PROFESSIONAL (TECHNICIAN, PROGRAMMER, ETC.)					
3. ( ) GRADUATE STUDENTS					
4. ( ) UNDERGRADUATE STUDENTS					
5. ( ) SECRETARIAL - CLERICAL					
6. ( ) OTHER					
TOTAL SALARIES AND WAGES (A+B)				0.00	0.00
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)					
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A+B+C)				0.00	0.00
D. PERMANENT EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM.)					
TOTAL PERMANENT EQUIPMENT					
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS)					
2. FOREIGN					
TOTAL TRAVEL				0.00	0.00
F. TRAINEE/PARTICIPANT COSTS					
1. STIPENDS (Itemize levels, types + totals on budget justification page)					
2. TUITION & FEES					
3. TRAINEE TRAVEL					
4. OTHER (fully explain on justification page)					
TOTAL PARTICIPANTS ( ) TOTAL COST				0.00	0.00
G. OTHER DIRECT COSTS					
1. MATERIALS AND SUPPLIES					
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION					
3. CONSULTANT SERVICES					
4. COMPUTER (ADPE) SERVICES					
5. SUBCONTRACTS					
6. OTHER					
TOTAL OTHER DIRECT COSTS				0.00	0.00
H. TOTAL DIRECT COSTS (A THROUGH G)				0.00	0.00
I. INDIRECT COSTS (SPECIFY RATE AND BASE)					
TOTAL INDIRECT COSTS					
J. TOTAL DIRECT AND INDIRECT COSTS (H+I)				0.00	0.00
K. AMOUNT OF ANY REQUIRED COST SHARING FROM NON-FEDERAL SOURCES					
L. TOTAL COST OF PROJECT (J+K)				0.00	0.00

DOE F 4620.1
(04-93)
All Other Editions Are Obsolete

U.S. Department of Energy

Budget Page

(See reverse for Instructions)

OMB Control No.
1910-1400
OMB Burden Disclosure
Statement on Reverse

ORGANIZATION				**Budget Page No:**	
PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR				Requested Duration:	(Months)
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title; A.6. show number in brackets)	DOE Funded Person-mos.			Funds Requested by Applpicant	Funds Granted by DOE
	CAL	ACAD	SUMR		
1.					
2.					
3.					
4.					
5.					
6. ( ) OTHERS (LIST INDIVIDUALLY ON BUDGET EXPLANATION PAGE)					
7. ( ) TOTAL SENIOR PERSONNEL (1-6)				0.00	0.00
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)					
1. ( ) POST DOCTORAL ASSOCIATES					
2. ( ) OTHER PROFESSIONAL (TECHNICIAN, PROGRAMMER, ETC.)					
3. ( ) GRADUATE STUDENTS					
4. ( ) UNDERGRADUATE STUDENTS					
5. ( ) SECRETARIAL - CLERICAL					
6. ( ) OTHER					
TOTAL SALARIES AND WAGES (A+B)				0.00	0.00
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)					
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A+B+C)				0.00	0.00
D. PERMANENT EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM.)					
TOTAL PERMANENT EQUIPMENT					
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS)					
2. FOREIGN					
TOTAL TRAVEL				0.00	0.00
F. TRAINEE/PARTICIPANT COSTS					
1. STIPENDS (Itemize levels, types + totals on budget justification page)					
2. TUITION & FEES					
3. TRAINEE TRAVEL					
4. OTHER (fully explain on justification page)					
TOTAL PARTICIPANTS ( ) TOTAL COST				0.00	0.00
G. OTHER DIRECT COSTS					
1. MATERIALS AND SUPPLIES					
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION					
3. CONSULTANT SERVICES					
4. COMPUTER (ADPE) SERVICES					
5. SUBCONTRACTS					
6. OTHER					
TOTAL OTHER DIRECT COSTS				0.00	0.00
H. TOTAL DIRECT COSTS (A THROUGH G)				0.00	0.00
I. INDIRECT COSTS (SPECIFY RATE AND BASE)					
TOTAL INDIRECT COSTS					
J. TOTAL DIRECT AND INDIRECT COSTS (H+I)				0.00	0.00
K. AMOUNT OF ANY REQUIRED COST SHARING FROM NON-FEDERAL SOURCES					
L. TOTAL COST OF PROJECT (J+K)				0.00	0.00

DOE F 4620.1
(04-93)
All Other Editions Are Obsolete

U.S. Department of Energy

Budget Page

(See reverse for Instructions)

OMB Control No.
1910-1400
OMB Burden Disclosure
Statement on Reverse

ORGANIZATION				**Budget Page No:**	
PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR				Requested Duration:	(Months)
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title; A.6. show number in brackets)	DOE Funded Person-mos.			Funds Requested by Applpicant	Funds Granted by DOE
	CAL	ACAD	SUMR		
1.					
2.					
3.					
4.					
5.					
6. ( ) OTHERS (LIST INDIVIDUALLY ON BUDGET EXPLANATION PAGE)					
7. ( ) TOTAL SENIOR PERSONNEL (1-6)				0.00	0.00
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)					
1. ( ) POST DOCTORAL ASSOCIATES					
2. ( ) OTHER PROFESSIONAL (TECHNICIAN, PROGRAMMER, ETC.)					
3. ( ) GRADUATE STUDENTS					
4. ( ) UNDERGRADUATE STUDENTS					
5. ( ) SECRETARIAL - CLERICAL					
6. ( ) OTHER					
TOTAL SALARIES AND WAGES (A+B)				0.00	0.00
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)					
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A+B+C)				0.00	0.00
D. PERMANENT EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM.)					
TOTAL PERMANENT EQUIPMENT					
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS)					
2. FOREIGN					
TOTAL TRAVEL				0.00	0.00
F. TRAINEE/PARTICIPANT COSTS					
1. STIPENDS (Itemize levels, types + totals on budget justification page)					
2. TUITION & FEES					
3. TRAINEE TRAVEL					
4. OTHER (fully explain on justification page)					
TOTAL PARTICIPANTS ( ) TOTAL COST				0.00	0.00
G. OTHER DIRECT COSTS					
1. MATERIALS AND SUPPLIES					
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION					
3. CONSULTANT SERVICES					
4. COMPUTER (ADPE) SERVICES					
5. SUBCONTRACTS					
6. OTHER					
TOTAL OTHER DIRECT COSTS				0.00	0.00
H. TOTAL DIRECT COSTS (A THROUGH G)				0.00	0.00
I. INDIRECT COSTS (SPECIFY RATE AND BASE)					
TOTAL INDIRECT COSTS					
J. TOTAL DIRECT AND INDIRECT COSTS (H+I)				0.00	0.00
K. AMOUNT OF ANY REQUIRED COST SHARING FROM NON-FEDERAL SOURCES					
L. TOTAL COST OF PROJECT (J+K)				0.00	0.00

DOE F 4620.1
(04-93)
All Other Editions Are Obsolete

U.S. Department of Energy

Budget Page

(See reverse for Instructions)

OMB Control No.
1910-1400
OMB Burden Disclosure
Statement on Reverse

ORGANIZATION				**Budget Page No:**	
PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR				Requested Duration:	(Months)
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title; A.6. show number in brackets)	DOE Funded Person-mos.			Funds Requested by Applpicant	Funds Granted by DOE
	CAL	ACAD	SUMR		
1.					
2.					
3.					
4.					
5.					
6. ( ) OTHERS (LIST INDIVIDUALLY ON BUDGET EXPLANATION PAGE)					
7. ( ) TOTAL SENIOR PERSONNEL (1-6)				0.00	0.00
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)					
1. ( ) POST DOCTORAL ASSOCIATES					
2. ( ) OTHER PROFESSIONAL (TECHNICIAN, PROGRAMMER, ETC.)					
3. ( ) GRADUATE STUDENTS					
4. ( ) UNDERGRADUATE STUDENTS					
5. ( ) SECRETARIAL - CLERICAL					
6. ( ) OTHER					
TOTAL SALARIES AND WAGES (A+B)				0.00	0.00
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)					
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A+B+C)				0.00	0.00
D. PERMANENT EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM.)					
TOTAL PERMANENT EQUIPMENT					
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS)					
2. FOREIGN					
TOTAL TRAVEL				0.00	0.00
F. TRAINEE/PARTICIPANT COSTS					
1. STIPENDS (Itemize levels, types + totals on budget justification page)					
2. TUITION & FEES					
3. TRAINEE TRAVEL					
4. OTHER (fully explain on justification page)					
TOTAL PARTICIPANTS ( ) TOTAL COST				0.00	0.00
G. OTHER DIRECT COSTS					
1. MATERIALS AND SUPPLIES					
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION					
3. CONSULTANT SERVICES					
4. COMPUTER (ADPE) SERVICES					
5. SUBCONTRACTS					
6. OTHER					
TOTAL OTHER DIRECT COSTS				0.00	0.00
H. TOTAL DIRECT COSTS (A THROUGH G)				0.00	0.00
I. INDIRECT COSTS (SPECIFY RATE AND BASE)					
TOTAL INDIRECT COSTS					
J. TOTAL DIRECT AND INDIRECT COSTS (H+I)				0.00	0.00
K. AMOUNT OF ANY REQUIRED COST SHARING FROM NON-FEDERAL SOURCES					
L. TOTAL COST OF PROJECT (J+K)				0.00	0.00

DOE F 4620.1
(04-93)
All Other Editions Are Obsolete

U.S. Department of Energy

Budget Page

(See reverse for Instructions)

OMB Control No.
1910-1400
OMB Burden Disclosure
Statement on Reverse

ORGANIZATION				**Budget Page No:**	
PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR				Requested Duration:	(Months)
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title; A.6. show number in brackets)	DOE Funded Person-mos.			Funds Requested by Applpicant	Funds Granted by DOE
	CAL	ACAD	SUMR		
1.					
2.					
3.					
4.					
5.					
6. ( ) OTHERS (LIST INDIVIDUALLY ON BUDGET EXPLANATION PAGE)					
7. ( ) TOTAL SENIOR PERSONNEL (1-6)				0.00	0.00
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)					
1. ( ) POST DOCTORAL ASSOCIATES					
2. ( ) OTHER PROFESSIONAL (TECHNICIAN, PROGRAMMER, ETC.)					
3. ( ) GRADUATE STUDENTS					
4. ( ) UNDERGRADUATE STUDENTS					
5. ( ) SECRETARIAL - CLERICAL					
6. ( ) OTHER					
TOTAL SALARIES AND WAGES (A+B)				0.00	0.00
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)					
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A+B+C)				0.00	0.00
D. PERMANENT EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM.)					
TOTAL PERMANENT EQUIPMENT					
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS)					
2. FOREIGN					
TOTAL TRAVEL				0.00	0.00
F. TRAINEE/PARTICIPANT COSTS					
1. STIPENDS (Itemize levels, types + totals on budget justification page)					
2. TUITION & FEES					
3. TRAINEE TRAVEL					
4. OTHER (fully explain on justification page)					
TOTAL PARTICIPANTS ( ) TOTAL COST				0.00	0.00
G. OTHER DIRECT COSTS					
1. MATERIALS AND SUPPLIES					
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION					
3. CONSULTANT SERVICES					
4. COMPUTER (ADPE) SERVICES					
5. SUBCONTRACTS					
6. OTHER					
TOTAL OTHER DIRECT COSTS				0.00	0.00
H. TOTAL DIRECT COSTS (A THROUGH G)				0.00	0.00
I. INDIRECT COSTS (SPECIFY RATE AND BASE)					
TOTAL INDIRECT COSTS					
J. TOTAL DIRECT AND INDIRECT COSTS (H+I)				0.00	0.00
K. AMOUNT OF ANY REQUIRED COST SHARING FROM NON-FEDERAL SOURCES					
L. TOTAL COST OF PROJECT (J+K)				0.00	0.00

Office of Science

INSTRUCTIONS FOR COMPLETING
BUDGET PAGE (DOE Form 4620.1)

1.General

a. Each new, renewal and supplemental application must contain Budget Pages in this format unless a pertinent program notice guideline specifically provides otherwise. A separate Budget Page must be completed for each year of support requested.

b. Continuation funding will not require a budget page unless the amount proposed for funding is either 25% over or under the original recommended amount of support for that period. A cover letter signed by the applicant organization official and the Principal Investigator (PI) must accompany this budget and should be forwarded to the U.S. Department of Energy (DOE) Project Officer listed in item 11 of the DOE Financial Assistance Award.

c. Duplication of this form and instructions may be done by applicants as DOE will not provide additional copies beyond what is contained in the application kit and guide.

EACH BUDGET ITEM MUST BE JUSTIFIED ON CONTINUATION PAGES FOLLOWING THE BUDGET PAGE.

In addition to a full discussion of the budget items needed to carry out the proposed work the following information is mandatory to be included on the budget justification continuation pages in order to be considered a complete application.

A. "Senior Personnel": List any personnel, funds requested for salary, and the number of person months to be funded. Include any additions in Item A6 on the Budget Page.

B. All "Other Personnel": Must be listed individually, their rate of pay and % as well as length of time working on the project. Also include a written narrative that fully justifies the need for all requested personnel.

C. "Fringe Benefits": Must include the current fringe benefit rate established for the applicant organization as well as the total cost or a list of cost and type for each individual employed on the project. Tuition remission for undergraduate or graduate students working on the project must be included in this category or listed as a separate line item in the "Other Category" depending on the applicant organization's system of reporting.

D. "Equipment": List each item, its cost and reason it is needed for the project.

E. "Travel": List each trip's destination, dates, estimated cost including transportation and subsistence, number of staff traveling and the purpose of the travel and how it relates to the project. This category should include the amounts needed for staff on the project as well as for travel associated with any consultants working on the project.

F. "Trainee/Participant Costs": Educational projects that intend to support trainees (precollege, college, graduate and post graduate) must list each trainee cost that includes stipend levels and amounts, cost of tuition for each trainee, cost of any travel (provide the same information as that needed under the regular travel category, Item E), and costs for any other related training expenses. Participant costs are those costs associated with conferences, workshops, symposia or institutes and the breakout items should indicate the number of participants, cost for each participant, purpose of the conference, dates and places of meetings and any related administrative expenses.

G. "Other Direct Costs".

1. Materials & Supplies: Indicate types required and estimate costs.

2. Publication Costs/Documentation/Dissemination: Estimate cost of preparing and publishing project results.

3. Consultant Services: Indicate name, daily compensation, number of days service required and justify.

4. Computer (ADP) Services: Include justification based on established computer service rates at the proposing institution. Purchase of equipment is included under D.

5. Subcontracts: Include a budget and justify details.

6. Other: Itemize and justify details. Under this item list tuition remission for students employed to work on this project listed under personnel category. (Do not include tuition remission if this cost is included under the fringe benefit category).

H. Total Direct Costs: (A through G)

I. Indirect Costs: Specify current rate(s) and base(s). Use current rate(s) negotiated with the cognizant Federal negotiating Agency.

J. Total Direct and Indirect Costs: (H + I)

K. Amount of any required cost-sharing from non-Federal sources.

L. Total Cost of Project (J + K)

The personnel categories listed in Part A and Part B of the Budget Page are defined as follows:

A. Senior Personnel

1-5. (Co) Principal Investigator(s) are individual(s) so designated by the grantee institution. A Faculty Associate (faculty member) is an individual-other than the Principal Investigator-who is considered by the performing institution to be a

member of its faculty or who holds an appointment as a faculty member at another institution, and who will participate in the project being supported.

B. Other Personnel

1. A Postdoctoral Associate is an individual who received a Ph.D., M.D., D.Sc. or equivalent degree less than 5 years ago, who is not a member of the faculty of the performing institution, and who is not reported under Senior personnel above.

2. Other Professional is a person who may or may not hold a doctoral degree or its equivalent who is considered professional and is not reported as a Principal Investigator, faculty associate, postdoctoral associate, or student. Examples of persons included in this category are doctoral associates not reported under B1 above, professional technicians, mathematicians, physicians, veterinarians, systems experts, computer programmers, and design engineers.

3. A Graduate Student (Research assistant) is a part-time or full-time student working on the project in research capacity who holds at least a bachelor's degree or its equivalent and is enrolled in a degree program leading to an advanced degree.

4. An Undergraduate Student is a student who is enrolled in a degree program (part-time or full-time) leading to a bachelor's degree.

5&6. These include persons working on the project in a non- research capacity such as secretaries, clerk-typists, draftsmen, animal caretakers, electricians, and custodial personnel, regardless of whether they hold a degree or are involved in degree work.

NOTE: Any personnel category for which funds are requested should indicate the number of persons expected to receive some support and where called for on the budget format, the full-time equivalent (FTE) person-months to the nearest tenth.

OMB Burden Disclosure Statement

Public reporting burden for this collection of information is estimated to average 30 minutes 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 Office of Information Resources Management Policy, Plans, and Oversight, HR-4.3, Paperwork Reduction Project (1910-1400), U.S. Department of Energy, 1000 Independence Avenue, S.W., Washington, DC 20585; and the Office of Management and Budget (OMB), Paperwork Reduction Project (1910-1400), Washington, DC 20503.

DOE F 1600.5
(06-94)
OMB Control No. 1910-0400
All Other Editions Are Obsolete

U.S. Department of Energy
Assurance of Compliance
Nondiscrimination In Federally Assisted Programs

OMB Burden Disclosure Statement

Public reporting burden for this collection of information is estimated to average 15 minutes 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 Office of Information Resources Management Policy, Plans, and Oversight, HR-4.3, Paperwork Reduction Project (1910-0400), U.S. Department of Energy, 1000 Independence Avenue, S.W., Washington, DC 20585; and to the Office of Management and Budget (OMB), Paperwork Reduction Project (1910-0400), Washington, DC 20503.

_____(Hereinafter called the "Applicant") HEREBY AGREES to comply with Title VI of the Civil Rights Act of 1964 (Pub. L. 88-352), Section 16 of the Federal Energy Administration Act of 1974 (Pub. L. 93-275), Section 401 of the Energy Reorganization Act of 1974 (Pub. L. 93-438), Title IX of the Education Amendments of 1972, as amended, (Pub. L. 92-318, Pub. L. 93-568, and Pub. L. 94-482), Section 504 of the Rehabilitation Act of 1973 (Pub. L. 93-112), the Age Discrimination Act of 1975 (Pub. L. 94-135), Title VIII of the Civil Rights Act of 1968 (Pub. L.90-284), the Department of Energy Organization Act of 1977 (Pub. L. 95-91), the Energy Conservation and Production Act of 1976, as amended, (Pub. L. 94-385) and Title 10, Code of Federal Regulations, Part 1040. In accordance with the above laws and regulations issued pursuant thereto, the Applicant agrees to assure that no person in the United States shall, on the ground of race, color, national origin, sex, age, or disability, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity in which the Applicant receives Federal assistance from the Department of Energy.

Applicability and Period of Obligation

In the case of any service, financial aid, covered employment, equipment, property, or structure provided, leased, or improved with Federal assistance extended to the Applicant by the Department of Energy, this assurance obligates the Applicant for the period during which Federal assistance is extended. In the case of any transfer of such service, financial aid, equipment, property, or structure, this assurance obligates the transferee for the period during which Federal assistance is extended. If any personal property is so provided, this assurance obligates the Applicant for the period during which it retains ownership or possession of the property. In all other cases, this assurance obligates the Applicant for the period during which the Federal assistance is extended to the Applicant by the Department of Energy.

Employment Practices

Where a primary objective of the Federal assistance is to provide employment or where the Applicant's employment practices affect the delivery of services in programs or activities resulting from Federal assistance extended by the Department, the Applicant agrees not to discriminate on the ground of race, color, national origin, sex, age, or disability, in its employment practices. Such employment practices may include, but are not limited to, recruitment, advertising, hiring, layoff or termination, promotion, demotion, transfer, rates of pay, training and participation in upward mobility programs; or other forms of compensation and use of facilities.

Subrecipient Assurance

The Applicant shall require any individual, organization, or other entity with whom it subcontracts, subgrants, or subleases for the purpose of providing any service, financial aid, equipment, property, or structure to comply with laws and regulations cited above. To this end, the subrecipient shall be required to sign a written assurance form; however, the obligation of both recipient and subrecipient to ensure compliance is not relieved by the collection or submission of written assurance forms.

Data Collection and Access to Records

The Applicant agrees to compile and maintain information pertaining to programs or activities developed as a result of the Applicant's receipt of Federal assistance from the Department of Energy. Such information shall include, but is not limited to the following: (1) the manner in which services are or will be provided and related data necessary for determining whether any persons are or will be denied such services on the basis of prohibited discrimination; (2) the population eligible to be served by race, color, national origin, sex, age, and disability; (3) data regarding covered employment including use or planned use of bilingual public contact employees serving beneficiaries of the program where necessary to permit effective participation by beneficiaries unable to speak or understand English; (4) the location of existing or proposed facilities connected with the program and related information adequate for

determining whether the location has or will have the effect of unnecessarily denying access to any person on the basis of prohibited discrimination; (5) the present or proposed membership by race, color, national origin, sex, age and disability in any planning or advisory body which is an integral part of the program; and (6) any additional written data determined by the Department of Energy to be relevant to the obligation to assure compliance by recipients with laws cited in the first paragraph of this assurance.

The Applicant agrees to submit requested data to the Department of Energy regarding programs and activities developed by the Applicant from the use of Federal assistance funds extended by the Department of Energy. Facilities of the Applicant (including the physical plants, buildings, or other structures) and all records, books, accounts, and other sources of information pertinent to the Applicant's compliance with the civil rights laws shall be made available for inspection during normal business hours on request of an officer or employee of the Department of Energy specifically authorized to make such inspections. Instructions in this regard will be provided by the Director, Office of Civil Rights, U.S. Department of Energy.

This assurance is given in consideration of and for the purpose of obtaining any and all Federal grants, loans, contracts (excluding procurement contracts), property, discounts or other Federal assistance extended after the date hereof, to the Applicants by the Department of Energy, including installment payments on account after such data of application for Federal assistance which are approved before such date. The Applicant recognizes and agrees that such Federal assistance will be extended in reliance upon the representations and agreements made in this assurance, and that the United States shall have the right to seek judicial enforcement of this assurance. This assurance is binding on the Applicant, the successors, transferees, and assignees, as well as the person(s) whose signatures appear below and who are authorized to sign this assurance on behalf of the Applicant.

Applicant Certification

The Applicant certifies that it has complied, or that, within 90 days of the date of the grant, it will comply with all applicable requirements, of 10 C.F.R. 1040.5 (a copy will be furnished to the Applicant upon written request to DOE).

Designated Responsible Employee

_____
Name and Title (Printed or Typed) and Telephone Number

_____
Signature and Date
(please type in full name if electronically submitted)

_____
Applicant's Name and Telephone Number

_____
Address

_____
Date

Authorized Official:
President, Chief Executive Officer
or Authorized Designee

_____
Name and Title (Printed or Typed) and Telephone Number

_____
Signature and Date
(please type in full name if electronically submitted)

CERTIFICATIONS REGARDING LOBBYING; DEBARMENT, SUSPENSION AND OTHER RESPONSIBILITY MATTERS; AND DRUG-FREE WORKPLACE REQUIREMENTS

Applicants should refer to the regulations cited below to determine the certification to which they are required to attest. Applicants should also review the instructions for certification included in the regulations before completing this form. Signature of this form provides for compliance with certification requirements under 10 CFR Part 601 "New Restrictions on Lobbying," and 10 CFR Part 1036 "Governmentwide Debarment and Suspension (Nonprocurement) and Governmentwide Requirements for Drug-Free Workplace (Grants)." The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of Energy determines to award the covered transaction, grant, or cooperative agreement.

1. Lobbying

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 cooperative 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 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 this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," 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 accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this 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.

2. DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS

(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 obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust 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 enumerated 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.

3. DRUG-FREE WORKPLACE

This certification is required by the Drug-Free Workplace Act of 1988 (Pub.L. 100-690, Title V, Subtitle D) and is implemented through additions to the Debarment and Suspension regulations, published in the Federal Register on January 31, 1989, and May 25, 1990.

ALTERNATE I (GRANTEES OTHER THAN INDIVIDUALS)

(1) 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 statue occurring in the workplace not later than five calendar days after such conviction;

(e) Notifying the agency, in writing, within ten 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).

(2) The grantee may insert in the space provided below the site(s) for the performance of work done in connection with the specific grant:

Place of Performance: (Street address, city, county, state, zip code)

_____

_____

_____

☐ Check if there are workplaces on file that are not identified here.

ALTERNATE II (GRANTEES WHO ARE INDIVIDUALS)

(1) 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.

(2) 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.

As the duly authorized representative of the applicant, I hereby certify that the applicant will comply with the above certifications.

_____
NAME OF APPLICANT and PR/AWARD NUMBER and/or PROJECT NAME

_____
PRINTED NAME and TITLE OF AUTHORIZED REPRESENTATIVE

_____
SIGNATURE and DATE
(please type in full name if electronically submitted)

DISCLOSURE OF LOBBYING ACTIVITIES

Approved by OMB
0348-0046

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352

(See reverse for public burden disclosure.)

1. Type of Federal Action:	2. Status of Federal Action:	3. Report Type:
☐ a. contract b. grant c. cooperative agreement d. loan e. loan guarantee f. loan insurance	☐ a. bid/offer/application b. initial award c. post-award	☐ a. initial filing b. material change For Material Change Only: year _____ quarter _____ date of last report _____

4. Name and Address of Reporting Entity:	5. If Reporting Entity in No. 4 is Subawardee, Enter Name and Address of Prime:
☐ Prime ☐ Subawardee Tier ___, *if known.* Congressional District, *if known:*	Congressional District, *if known:*
6. Federal Department/Agency:	**7. Federal Program Name/Description:** CFDA Number, *if applicable* :
8. Federal Action Number, *if known:*	**9. Award Amount, if known:**
10. a. Name and Address of Lobbying Registrant *(if individual, last name, first name, MI):*	**b. Individuals Performing Services** *(including address if different from No. 10a)* *(last name, first name, MI):*

Items 11 through 15 are deleted.

16 Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.	**Signature:** _____ **Print Name:** _____ **Title:** _____ **Telephone No.:** _____ **Date:** _____ (please type in full name if electronically submitted)
Federal Use Only:	Authorized for Local Reproduction Standard Form - LLL

INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity 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 a covered Federal action. Use the SF-LLL-A Continuation Sheet for additional information if the space on the form is inadequate. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. Identify the type of covered Federal action for which lobbying activity is and or has been secured to influence the outcome of a covered Federal action.

2. Identify the status of the covered Federal action.

3. Identify the appropriate classification of this report. If this is a followup report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.

4. Enter the full name, address, city, state and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.

5. If the organization filing the report in item 4 checks "Subawardee", then enter the full name, address, city, state and zip code of the prime Federal recipient. Include Congressional District, if known.

6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.

7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.

8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number; Invitation for Bid (IFB) number; grant announcement number; the contract, grant, or loan award number; the application proposal control number assigned by the Federal agency). Include prefixes, e.g., "RFP-DE-90-001."

9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award loan commitment for the prime entity identified in item 4 or 5.

10. (a) Enter the full name, address, city, state and zip code of the lobbying entity engaged by the reporting entity identified in item 4 to influence the covered Federal action.

10. (b) Enter the full name of the individual(s) performing services, and include full address if different from 10(a). Enter Last Name, First Name, and Middle Initial (MI).

(Items 11 through 15 were removed from the form.)

16. The certifying official shall sign and date the form, print his/her name, title, and telephone number.

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaing the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Information Resources Management Policy, Plans and Oversight, HR-4.3, Paperwork Reduction Project (1910-1400), U.S. Department of Energy, 1000 Independence Avenue, S.W., Washington, DC 20585; and the office of Management and Budget (OMB), Paperwork Reduction Project (0348-0046), Washington, DC 20503.

Simpson-Craig Amendment Representation

Applicant organizations which are described in section 501(c)(4) of the Internal Revenue Code of 1986 and engage in lobbying activities after December 31, 1995 shall not be eligible for the receipt of Federal funds constituting an award, grant, or loan.

Section 501(c)(4) of the Internal Revenue Code of 1986 covers:

> Civic leagues or organizations not organized for profit but operated exclusively for the promotion of social welfare, or local associations of employees, the membership of which is limited to the employees of a designated person or persons in a particular municipality, and the net earnings of which are devoted exclusively to charitable, educational, or recreational purposes.

As set forth in section 3 of the Lobbying Disclosure Act of 1995, as amended, (2 U.S.C. 1602), lobbying activities are defined broadly to include, among other things, contacts on behalf of an organization with specified employees of the Executive Branch and Congress with regard to Federal legislative, regulatory, and program administrative matters.

When submitting an application, 501(c)(4) applicants shall include this representation in their application:

Simpson-Craig Amendment Representation

Check the appropriate block:

The applicant represents that it is an organization described in section 501(c)(4) of the Internal Revenue Code of 1986 which, after December 31, 1995, has_ _ has not_ _ engaged in any lobbying activities as defined in the Lobbying Disclosure Act or 1995.

Applicant _____

Title _____

Signature _____
(please type in full name if electronically submitted)

Date _____

EPACT REPRESENTATION

Section 2306 of the Energy Policy Act of 1992, Pub. L. 102-486 establishes eligibility requirements for companies to participate in certain financial assistance programs covered under Titles XX through XXIII of the EPAct. For this purpose, "company" means any business entity other than an organization of the type described in section 501(c)(3) of the Internal Revenue Code of 1954 [26 U.S.C. Section 501(c)(3)].

In order for the Department of Energy (DOE) to make an award to a company under a covered program, DOE must determine that the company's participation will be in the economic interest of the United States and, if the company is not a United States-owned company, that the parent company is incorporated in a foreign country that: affords national treatment to United States-owned companies with regard to access to Government-supported joint ventures in energy research and development; affords national treatment to United States-owned companies with regard to general investment opportunities; and affords protection to intellectual property rights owned by United States-owned companies. To assist DOE in making these determinations, the applicant must answer the following questions and make the representation provided therein. In the event the information submitted is inadequate for DOE to make a determination, DOE will request such additional information as may be required.

Company Ownership Information:
(Include this information for each participant in a joint venture.)

1. Is your company a United States-owned company? Yes____ No____
(U.S.-owned company means (1) a company that has majority ownership by individuals who are citizens of the United States, or (2) a company organized under the laws of a State that either has no parent company or has a parent company organized under the laws of a State.)

2. If no, identify the place in which the parent company is incorporated or organized.
_____

Economic Interest Information:

1. Will this project result in investments in the U.S. in research and development? Yes____ No____
If the answer is yes, what percentage of the total estimated cost of the project will be expended in the U.S.? (Contractor and supplier costs are to be included in total estimated costs.) Also, express in terms of dollars. _____% ---- $_____

2. Will this project result in investments in U.S. in manufacturing? Yes____ No____
If the answer is yes, what percentage of the total estimated cost of the project including contractor and supplier costs will be expended in U.S. manufacturing? Also, express in terms of dollars. _____% ---- $_____

3. Will this project contribute to U.S. employment? Yes____ No____
If the answer is yes, briefly describe how.

4. Does the applicant agree that it will promote the manufacture within the U.S. of products resulting from any resultant technology and competitively procure parts and materials? Yes____ No____

   Briefly describe plans, if any, for any manufacturing of products arising from the program supported research and development, including the location where such manufacturing is expected to occur.

If your answer is no, please explain.

5. What other benefits to the U.S. will result from this project?

To the best of its current knowledge and belief, the applicant represents that the information provided is current, accurate, and complete and will advise DOE of any changes prior to award.

Applicant _____

Title _____

Signature _____
(please type in full name if electronically submitted)

Date _____

EPACT REPRESENTATION FOR AWARDS UNDER $100,000

Check one block and complete as applicable.

[ ] _____ (Hereinafter called the "Applicant") represents that it is a United States-owned company. (A company that has majority ownership by individuals who are citizens of the United States or a company organized under the laws of a State that either has no parent company or has a parent company organized under the laws of a State.)

[ ] _____ (Hereinafter called the "Applicant") represents that it or its parent company is incorporated or organized in the following country: _____

The applicant hereby agrees to comply with Section 2306 of the Energy Policy Act (Pub. L. 102-486). In accordance with the above law, the applicant represents that its participation in this financial assistance program would be in the economic interest of the United States based upon its investments in the United States in research, development, and manufacturing, and its contributions to employment in the United States. The applicant agrees with respect to any technology arising from this financial assistance to promote the manufacture of products within the United States and to procure parts and materials from competitive suppliers.

Applicant _____

Title _____

Signature _____
(please type in full name if electronically submitted)

Date _____