

A Brief Overview of ACS PRF Research Grants

What is the Petroleum Research Fund?

- The Petroleum Research Fund is an endowment managed by the American Chemical Society.
- The endowment provides funds for PRF research grants and administrative expenses.
- PRF has no connection with oil companies, the petroleum industry, or any corporations.

Research Supported by the PRF Trust

- Fundamental petroleum-relevant research:
- The PRF Trust was established to support “advanced scientific education and fundamental research in the ‘petroleum field’, which may include any field of pure science which in the judgment of the Transferee [ACS] may afford a basis for subsequent research directly connected with the petroleum field.”

What's the 'petroleum field'?

- Fossil fuel hydrocarbons:
- The Agreement of Transfer of Trust defines it as “exploration for, and the production, transportation and refining of, petroleum, petroleum products and natural gas, and (2) the production and refining of substitutes for petroleum and petroleum products from natural gas, coal, shale, tar sands and like materials.”

What is “petroleum-relevance?”

- “Petroleum science” **not** “petroleum industry”.
- “Fundamental research” = **petroleum science**.
 - How do fossil fuel hydrocarbons form; what is their chemistry; what are their properties?
- “Applied research” = **petroleum industry**.

PRF Research Areas

PRF Science Panels and Areas of Research	
1	Synthetic Organic Chemistry
2	Geochemistry and Biogeochemical Cycling
3	Inorganic Chemistry
4	Physical Organic Chemistry
5	Surface Science
6	Physical Chemistry / Chemical Physics
7	Polymer Science
8	Geology and Geophysics
9	Chemical and Petroleum Engineering
10	Materials Science

PRF-Relevant Research

Remember that a proposal **must still**
be petroleum-related to be considered.

Inclusion into one of these categories
does not make the research
petroleum-related.

All PRF grants are “seed money”

- PRF is not a source of “continuation research” support.
- Intended as support to enable PI to obtain initial proof-of-concept data set, in a new research area.
- DNI and UNI “starter grant” research must be different from Ph.D. or post-doctoral research.
- ND and UR grants for “established” faculty research, on topics which are different from previous research or publications.

Any other limitations on research?

- Nothing patentable:

The Agreement of Transfer of Trust requires “any patent” from ACS PRF supported research “must be devoted to the public, royalty-free.”

- No “applied” research:

Development of techniques, methods, and devices are excluded from support.

Does it have to be fossil fuels?

- Biological research is not supported:
 - No biomass, biofuels, biopolymers.
 - No biomedical, pharmaceutical, drug-delivery, or synthesis of compounds for biological evaluation.
 - No whole-cell, organelle, tissue, organ, or whole organism studies.
 - No metabolic pathway research.

What about environmental research?

- No pollution or environmental remediation studies.
- The ACS PRF Advisory Board views these as “applied research” (which is “not fundamental”) and thus outside the scope of the Agreement of Transfer of Trust.

PRF Research Grants

- PRF grants provide “seed money” to enable a Principal Investigator to initiate a “new direction in research” in fundamental petroleum science.
- A “new direction” is a topic in which the PI has neither published nor received previous support; it is not the logical extension of a PI’s previous research.
- A PRF grant should enable the PI to obtain the “proof-of-concept” data set needed for a proposal to an agency that grants continuation research funding.

	Doctoral degree-granting department	Non-doctoral degree-granting department (PUI and M.S.)
Faculty member in first 3 years as Assistant Professor	DNI Doctoral New Investigator	
Faculty member in first 5 years as Assistant Professor		UNI Undergraduate New Investigator
'Established' faculty past their starter grant eligibility	ND New Directions	UR Undergraduate Research

Note: UNI eligibility period is longer due to greater teaching duties in non-doctoral departments

What about proposal formatting?

- Proposals limited to 4,000 words, double-spaced, in 12-point Arial, Times Roman, or Courier font.
- Word count doesn't include 250-word Abstract, Figure and Table captions, or References Cited.
- Requested amount must be the dollar amounts stipulated (\$125K ND, \$110K DNI, \$70K UR, \$55K UNI).
- Do your budget calculations, then add the “odd dollar amount” to “Expendable Supplies and Services”, if necessary, to make the total request equal to the stipulated amount.

Any budget limitations?

- No indirect costs are allowed on ACS PRF grants.
- Total PI Salary not more than \$8,000/year (this amount includes support for PI and co-PI combined, and any institutional fringe benefits).
- Travel not more than \$2,000/year (this is travel to meetings or symposia, to present research results; travel to obtain data is part of the “Field Work” budget category).

Any other hints on proposal budgets?

- “Advanced scientific education” means $\geq 60\%$ of the total ND/DNI budget request must be devoted to “student support” (post-doctoral fellows, graduate stipends, graduate tuition, and/or undergraduate research assistantships).
- For UR/UNI proposals, $\geq 40\%$ of total budget in “student support” categories.

How do I submit my proposal?

- Applications are submitted on the PRF Portal which requires an ACS ID and Pre-Registration approval.
- PDF file of technical proposal is uploaded as part of application submission on the PRF Portal.
- A 100-word petroleum-relevance statement must be entered as part of application form.
- Principal Investigator must submit names and email addresses of six possible peer reviewers.

ACS PRF Grant Types

Grant Type	Grant Amount	Grant Length
New Directions (ND)	\$125K	2 Years
Doctoral New Investigator (DNI)	\$110K	2 Years
Undergraduate Research (UR)	\$70K	3 Years
Undergraduate New Investigator (UNI)	\$55K	2 Years
Advisory Board meets in May and October: Proposals submitted Sep.-Oct. (for May meeting) and Feb.-Mar. (for October meeting)		

Any other questions?

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