

# A Brief Overview of ACS PRF Research Grants

# What is the ACS 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.
- ACS PRF has no connection with oil companies, the petroleum industry, or any corporations.

# What research does it fund?

- 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
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

# Petroleum-Relevant Research

Remember that a proposal must still be petroleum-related to be considered by a PRF Science Panel.

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

# Any other limitations on research?

- Nothing patentable:

The Agreement of Transfer of Trust requires “any patent” from 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, environmental remediation, or anthropogenic effects of petroleum use.
- The PRF Committee views these as “applied research” (which is “not fundamental”) and thus outside the scope of the Agreement of Transfer of Trust.

# PRF grants are “seed money”

- Enable a PI to start a new research direction:

“New Investigator” awards (DNI, UNI) for faculty in their first Assistant Professor appointment, to start independent research in areas different from their Ph.D. or post-doctoral research.

ND and UR awards for other faculty members to initiate research on topics in which they have not previously published, or received funding.

	Doctoral degree-granting department	Non-doctoral degree-granting department (PUI and M.S.)
Faculty member in first 3 years as Assistant Professor	<b>DNI</b> Doctoral New Investigator	
Faculty member in first 5 years as Assistant Professor		<b>UNI</b> Undergraduate New Investigator
'Established' faculty past their starter grant eligibility	<b>ND</b> New Directions	<b>UR</b> 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 (\$110K ND/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 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 budget request should 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 as “student support”.
- Capital equipment is the least-valued use of PRF funds.

# How do I submit my proposal?

- Proposals are submitted as PDF files through an Internet Application Website.
- A 100-word petroleum-relevance statement must be typed in when the proposal PDF is submitted.
- Principal Investigator must submit names and email addresses of six possible peer reviewers.



# PRF Grant Types

Grant Type	Grant Amount	Grant Length	Total Grants Per Year*
New Directions (ND)	\$110K	2 Years	~ 100
Doctoral New Investigator (DNI)	\$110K	2 Years	~ 90
Undergraduate Research (UR)	\$70K	3 Years	~ 45
Undergraduate New Investigator (UNI)	\$55K	2 Years	~ 45
* Number of grants includes <i>all</i> supported disciplines (chemistry, geology, engineering, materials science)			
PRF Committee meets in May and October – Proposals submitted Sep.- Oct. (for May meeting) and Feb.- Mar. (for October meeting)			

# Any other questions?

## Internet:

<http://www.acsprf.org>

## PRF Program Managers:

Email: [prfinfo@acs.org](mailto:prfinfo@acs.org)

Phone: 202-872-4481