

## Research Topics NOT Supported by ACS PRF

The phrase "fundamental research" is interpreted to **exclude** research that aims to develop new experimental or theoretical techniques, analytical methods, and devices, as well as research focused on applications or patentable research. Accordingly, ACS PRF **does not** consider proposals in the areas of biomedical, pharmaceutical, or drug-delivery studies, including synthesis of compounds for biological evaluation; pollution or environmental remediation studies, including anthropogenic effects of petroleum; groundwater hydrology; paleoclimatology; micro- and nanofluidics; sensors; nanoscience not directly related to petroleum-derived materials; quantum dots; semiconductors; superconductors; low temperature phenomena; subatomic physics; all forms of solar energy; photovoltaics; batteries; wind energy and wind farms; hydrogen fuel cells, hydrogen storage, hydrogen generation from non-petroleum sources; CO<sub>2</sub> capture; and social, economics, or history research. In addition, most research on biosystems is excluded, including whole-cell, organelle, tissue, organ, or whole organism studies; metabolic pathway research; biopolymers including blends and block; biofuels and biomass; and biosensors.

If you have a question on whether or not your research is within the scope of the ACS Petroleum Research Fund please call 202-872-4481 and ask to speak to a Program Manager **before** submitting a proposal.

### PRF Advisory Board Committees and Areas of Research Support

Committee	Discipline and Areas of Research Support
1	<b>Synthetic Organic Chemistry</b> Organic synthesis, including organic and organometallic reagents and catalysts, and asymmetric synthesis.
2	<b>Geochemistry</b> Isotope, organic and sedimentary geochemistry, marine geochemistry, and diagenesis.
3	<b>Inorganic Chemistry</b> Coordination and organometallic chemistry, homogeneous catalysis, small soluble clusters, new ligands, main group, transition metal, and lanthanide and actinide metal chemistry.
4	<b>Physical Organic Chemistry</b> Reaction mechanisms, kinetics, photochemistry, organic radical chemistry, reactive organic species, enzymes in non-aqueous media working on petroleum substrates.
5	<b>Surface Science</b> Surface phenomena and reactions, heterogeneous catalysis, and characterization of surfaces directly relevant to petroleum and petroleum products.
6	<b>Chemical Physics/Physical Chemistry</b> Theoretical chemistry, quantum/statistical mechanics, and molecular dynamics; optical, laser, ultrafast, and mass spectroscopies; and gas phase reactions.
7	<b>Polymer Science</b> Synthesis, characterization, and properties of polymers and organic materials derived from petroleum sources.
8	<b>Geology and Geophysics</b> Stratigraphy, sedimentology, paleontology, geomorphology, structural geology, flow through porous media, and geophysics.
9	<b>Chemical and Petroleum Engineering</b> Engineering studies including process and operations control and design, fluid flow and multiphase flow dynamics, and related computations.
10	<b>Materials Science</b> Synthesis, characterization, bulk properties and solid-state chemistry of materials directly relevant to petroleum, or to conversion of petroleum and petroleum products.