**Information for potential collaborators**

**General information**

The mission of the Princeton Collaborative Low Temperature Plasma Research Facility (PCRF) is to provide the entire scientific community access to specialized, world-class diagnostics, instruments, computational tools, and related expertise. The facility, sponsored by the Office of Science, Fusion Energy Sciences within the Department of Energy (DOE), is focused on frontier research in low temperature plasma.

More detailed information about the PCRF can be found at <http://pcrf.pppl.gov/>

**Call for Proposals**

A call for proposals to access the resources of the PCRF will occur on annual basis and will remain open for roughly a period of two months. Target timeframe for the call is in the fall. The submission process utilizes a succinct proposal describing the scientific goals of the proposed research and how the proposed work advances and impacts the field of low temperature plasma science. Information is also requested about what capabilities and expertise will be needed to achieve the proposed research goals, and likelihood of the proposed research being published.

Individual proposals may include multiple users, from one or more institutions, and may request access to multiple Facility capabilities and staff scientists. The scope of a user proposal can vary from a single interaction to several extended visits utilizing a range of capabilities. The duration of each proposed project will be determined in discussions between the proposal PI and the facility. It is anticipated that the facility runtime for each project will not exceed 6-8 week.

We encourage user proposals from early career scientists, women, and minority researchers, proposals for research that involves students and proposals that promote a broad collaboration between PCRF and LTP research teams in the US and internationally.

Proposals can be submitted at the webpage <https://pcrf.princeton.edu/solicitation/> by emailing directly to Dr. Yevgeny Raitses (PCRF Director): yraitses@pppl.gov

Engaging with principal investigators to help guide the formation of the proposal is highly encouraged. The list of investigators and their research interests can be found at the PCRF website: <http://pcrf.pppl.gov> .

**Review process**

After proposals are collected, they will undergo both internal and external reviews to determine technical merit, feasibility of success with requested resources and availability of resources. Proposals will only be reviewed by the Facility to which they are submitted.

Reviews will be based on the following criteria:

• Scientific and technical merit of the project

• Appropriateness of the proposed method or approach

• Qualification of collaborator PI’s team

• Availability of Facility resources and personnel

Once reviews are received, a notification letter will be issued to the PI of the proposal regarding the decision. PIs of successful proposals will receive a tentative schedule for the user project.

**A tentative schedule for upcoming Call is outlined below**

Call for proposals opens: October 12th, 2021

Call for proposals closes: December 17th, 2021

External Review: ~1 month

Notification of Principal Investigators: by February 4, 2022

The PCRF facility will consider out-of-cycle proposals throughout the year depending on facility utilization.

**This year solicitation**

In addition to general topics of low temperature plasma science and applications, this year’s solicitation encourages user proposals aimed to

* broaden PCRF research capabilities and resources (e.g., diagnostics, plasma sources, codes)
* benchmark and experimentally validate different codes
* integrate experiments and theory/models

**Additional information for potential US collaborators**

U.S. collaborators whose proposals have been selected for runtime on the PCRF may contact DOE Program Manager Nirmol Podder (nirmol.Podder@science.doe.gov) regarding supplemental funding in support of their collaborative proposals. Please note that the runtime on the PCRF does not guarantee or imply this supplemental user support from the DOE FES.

Thank you for your interest and participation.

**For more information:**

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*The Princeton Plasma Physics Laboratory is devoted to creating new knowledge about the physics of plasmas and to developing practical solutions for the creation of fusion energy. The Laboratory is managed by Princeton University for the U.S. Department of Energy’s Office of Science under contract DE-AC02-09CH11466.*

 