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## **Radiation Center**

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## To the OSU TRIGA user's community

We are pleased to announce that our reactor now offers a second cadmium-lined facility for epithermal irradiations, named the CLOCIT (Cadmium-Lined Outer-Core Irradiation Tube). Our reactor core was re-configured to provide one cadmium-lined facility (the CLICIT, an acronym for Cadmium-Lined Inner-Core Irradiation Tube) in the B-ring, one cadmium-lined facility (the CLOCIT) in the F-ring, an unlined facility (the ICIT) in the F-ring and a pneumatic rabbit in the G-ring (see Figure 1).

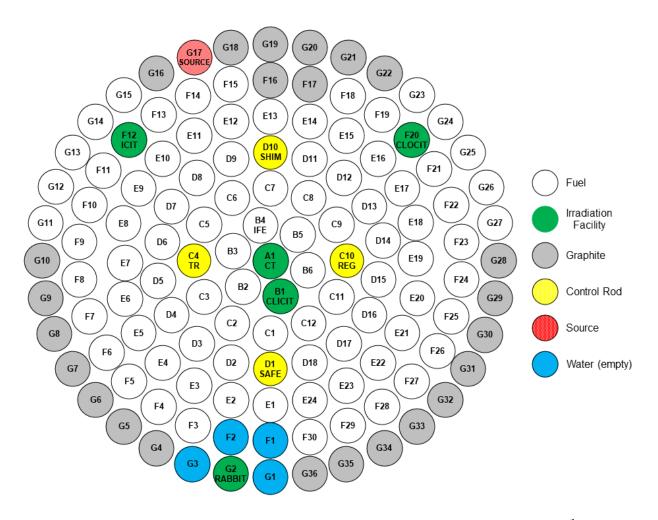
Since this core offers simultaneous use of all irradiation facilities, it is now our only core configuration. ICIT samples will all be irradiated in the F-ring. CLICIT users will have a choice of irradiation in either the B-ring (CLICIT) or the F-ring (CLOCIT). The epithermal flux in the CLICIT is essentially unchanged from the prior core configuration. The peak flux in the CLOCIT is approximately 60% of the flux in the B-ring CLICIT. J-values are similar in both the CLICIT and CLOCIT but axial and radial flux gradients may differ. CLOCIT sample fees will be charged based on equivalent B-ring CLICIT time. For example, a 10 hour B-ring CLICIT would be irradiated for approximately 17 hours (OSU staff will do the exact time conversions) in the F-ring CLOCIT to provide the same fluence. The charge for either irradiation would be the same.

Users may request irradiation in either facility, but we expect that the queue for the B-ring CLICIT will generally be longer than the queue for the F-ring CLOCIT. We offer all users one irradiation free of charge in the F-ring CLOCIT for the remainder of 2018, as long as it is of reasonable duration (<20 hours). If not specified by the user, our staff will select the cadmium lined facility best suited to optimize the reactor irradiation schedule. If desired, experimenters should specify which cadmium lined facility they wish to utilize.

The most current flux values for all of our irradiation facilities can be found at the Radiation Center website (<a href="https://radiationcenter.oregonstate.edu">https://radiationcenter.oregonstate.edu</a>). A map of the current core configuration is also available. Please feel free to contact me for clarification or any additional information.

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Current Oregon State TRIGA Reactor Core Configuration as of January 30th, 2018