

cERL
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From 2016, KEK switched the purpose of ERL development from synchrotron radiation facility to industrial application based on superconducting linac technology. As industrial applications, we are considering a high repetition FEL and RI production based on high average current linac.

Toward the industrial applications and the basic development of the superconducting linac, we continue the beam operation of the cERL, which is a test ERL accelerator in KEK. In June 2018, we succeeded 0.8-0.9 mA CW energy recovery operation in the cERL. It was very stable in 3 hours.

In addition, from 2018, we are considering a collaboration for ERL development in the world. In this presentation, we will show the current status of cERL in KEK and potential research on ERLs for EIC.