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A compact divertor plasma simulator (CDPS) developed in Nagoya University, has been installed in the radiation control area of the Oarai Center, Institute of Material Research, Tohoku University. The CDPS makes it possible to study the interaction between high-density-deuterium plasmas and neutron-irradiated materials for the first time in Japan. The CDPS, which can keep the sample temperature constant during plasma exposure and conduct thermal desorption gas analysis without air exposure after plasma exposure, is expected to reveal deuterium absorption characteristics of neutron-irradiated materials toward DEMO development. (Noriyasu OHNO *et al.*, Plasma and Fusion Research, Vol.12, 1405040 (2017) <http://www.jspf.or.jp/>)



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