

The Beams and Applications Seminar Series
Niobium Surface Treatment Study
at Peking University

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Bldg. 401, Room A1100

Wednesday, May 27, 2:30 pm

(note the special day, place, and time)

Host: Kwang-Je Kim, ASD

Buffered Electropolishing (BEP) is a new surface treatment technique that can produce the smoothest surface finish on Nb. Recent experimental results also indicate that the Nb removal rate by BEP can be at least 10 times faster than that of the conventional electropolishing (EP)¹. In this seminar, the R&D activities of BEP at the SRF group of Peking University will be described in detail. Parameters that control the BEP treatments of Nb were studied and the possible mechanism responsible for BEP was investigated. A new process for developing a more homogeneous removal of Nb on the inner surface of a Nb SRF cavity will be described. Peking University has been participating in the international collaboration between JLAB and CEA Saclay on BEP and some of the recent results from the collaboration will be also shown and discussed in this seminar.

Reference 1: X.Y. Lu et al, to be published

For more information visit

http://aps.anl.gov/News/Meetings/Beams_and_Applications_Seminars/

Visitors from off-site please contact Carmen Nolasco
(mnolasco@aps.anl.gov, 630-252-6159) to arrange for a gate pass.