

Accelerator Advisory Committee Meeting (AAC-2008)

April 3-4, 2008

Charge

TRIUMF's capital, operational, and development funding is provided through a "contribution" from the National Research Council (NRC) in a 5-year cycle. The new 2010-2015 5-year plan proposal is presently under construction and requires a thorough review of all its aspects before submission to NRC and the Canadian Government in September 2008.

Accelerators represent the major infrastructure of the laboratory. TRIUMF's view for science frontiers beyond 2010 calls for a substantial upgrade of the accelerator facilities. TRIUMF's Accelerator Group is developing a concept which will allow us to meet these goals. It includes:

- 500 MeV cyclotron refurbishing and high intensity upgrade;
- Construction of a new beam line, delivering protons to two additional ISAC production targets;
- Development of two new actinide target modules compatible with both proton and electron driving beams;
- Expansion of the ISAC acceleration and beam delivery infrastructures in order to provide three radioactive ion beams (RIB) to the experiments simultaneously;
- Development and construction of a photo-fission driver based on an electron superconducting (SCRF) linac;
- Further development of SCRF technology and infrastructure on site in support of an e-linac and external accelerator programs (CERN SPL, ILC etc.).

We request that the AAC review, comment on, and offer recommendations, as appropriate, on the operational requirements, on the scope of the proposed upgrade, whether the concepts and milestones adequately address the scientific needs, whether the resource estimates (both funds and labour) are in line with the project magnitude.

It is also requested that a short summary report responsive to this charge be forwarded to the Accelerator Division Head, Paul Schmor, by Monday, April 15, 2008. This report will be provided to ACOT in May and the International Peer Review in September. In addition, we request that the committee give a brief public summary of their comments.