## A provisional study of ADS within Turkic Accelerator Complex project

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## Abstract

The Turkic Accelerator Complex (TAC) project [1-3] has been developed with the support of the Turkish State Planning Organization by the collaboration of 10 Turkish universities. The complex is planned to have four main facilities, namely: SASE FEL Facility Based on 1 GeV Electron Linac, Third Generation Synchrotron Radiation Facility (SR) Based on 3.56 GeV Positron Synchrotron, Super-Charm factory ( $\sqrt{s} = 3.77$  GeV) by colliding the electron beam coming from the linac with an energy of 1 GeV and positron beam coming through the positron ring with an energy of 3.56 GeV, GeV scale proton accelerator. Later has two-fold goal: Neutron Spallation Source (NSS) and ADS.

The proton accelerator construction will have 3 MeV, 100 MeV, and 1 GeV phases. The technical design report is planned to be finished in 2013. Since Turkey has essential Thorium reserves [4] the ADS becomes very attractive for our country as emerging energy technology.

## References

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