The Physics and Economics of Thorium-Based Fuel Research team at Canadian Nuclear Laboratories (CNL) is being recognized for its scientific and technical achievement in closing identified gaps in our understanding of reactor-physics behaviour, reactor-physics modelling, fuel-cycle characteristics, long-term radiological characteristics and economic characteristics of various advanced fuels, including uranium-based fuels augmented by small amounts of thorium, and thorium-based fuels.

Their studies have identified several technically viable and economically competitive options for using advanced thorium-based fuels in heavy-water reactors, which would help contribute to long-term energy security and safety for Canada and the international community. The progress made also sets the stage for potential exploitation and commercialization by the Canadian nuclear industry in various international markets.

The work performed by the CNL Physics and Economics of Thorium-Based Fuel Research team helped create a stronger technical and scientific foundation for enabling the use of advanced fuels and fuel cycles in heavy-water reactors, for the benefit of Canada and the international community.