

Abstract for an Invited Paper
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Exploring the Exotic Nuclei through Nucleon Transfer Reactions and Inelastic Scattering at TRIUMF

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Nuclei far from stability have opened new avenues for constructing a more complete view of nuclei. The emergence of exotic forms of nuclei such as halo and skin together with the associated changes in shell structure have raised great interest towards understanding the underlying reasons. Nucleon transfer reactions and inelastic scattering using ISOL beams are greatly extending our understanding on structure of exotic, complementing the information gathered from reactions using projectile-fragmentation beams. The presentation will discuss experiments using re-accelerated beams at ISAC, TRIUMF investigating halo features and evolution of shell structure in light neutron-rich nuclei. A brief overview of the related experimental facilities will also be presented with a future outlook. Work done with the ISAC Direct Nuclear Reactions Collaboration.