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IRIS : A reaction spectroscopy facility with solid $H_2/D_2 target^1$ MATTHIAS HOLL, St Mary's Univ., TRIUMF, RITU KANUNGO, St Mary's Univ., MARTIN ALCORTA, TRIUMF, CORINA ANDREOIU, Simon Fraser Univ., HARRIS BIDAMAN, CHRISTINA BURBADGE, Univ., of Guelph, DEVIN BURKE, ALAN CHEN, McMaster Univ., BARRY DAVIDS, TRIUMF, ALEJAN-DRA DIAZ VARELA, PAUL GARRETT, Univ., of Guelph, GREG HACKMAN, TRIUMF, SHIGERU ISHIMOTO, KEK, SATBIR KAUR, Dalhousie Univ., St Mary's Univ., MATTHEW KEEFE, St Mary's Univ., REINER KRUECKEN, TRI-UMF, IYMAD MANSOUR, JASPREET RANDHAWA, St Mary's Univ., ALISHER SANETULLAEV, Inha Univ., ALAN SHOTTER, Univ., of Edinburgh, JENNA SMITH, TRIUMF, JUNKI TANAKA, RCNP Osaka, ISAO TANIHATA, RCNP Osaka, Osaka Univ., JOSEPH TURKO, Univ., of Guelph, ORRY WORKMAN, St Mary's Univ. — The charged particle reaction spectroscopy station IRIS at TRI-UMF is designed to allow studies of inelastic scattering and transfer reactions for low intensity beams. To do so, a novel solid H_2/D_2 target is used in combination with a low pressure ionization chamber for the identification of incoming beam particles. The light ejectiles are measured using a $\Delta E - E$ telescope consisting of an annular silicon detector followed by CsI(Tl) array. Another $\Delta E - E$ telescope, consisting of two segmented silicon detectors, is used to identify the heavy outgoing particles. An overview of the facility will be given and examples from recent experiments that illustrate that facilitys capability for reaction studies of exotic nuclei will be shown.

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