

VECC NEWSLETTER

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AWARDS & HONOURS

Ms. Sneha Das, PhD student of Physics Group, VECC, HBNI, received one of the **Best Oral Presentation Award** in "Joint ICTP-IAEA Workshop on Nuclear Structure and Decay Data: Experiment, Theory and Evaluation", held at ICTP, Italy, during October 3-14, 2022. The presentation



was on "Single particle and collective excitations above $Z = 82$ ", based on the results of experimental studies of nuclei above $Z=82$ and below $N=126$ magic shell closures. The evolution of level structures from single particle to collective nature has been explored, using in-beam γ spectroscopy techniques and lifetime measurements.

Ms. Chandrani Sen, PhD student of Physics Group, VECC, HBNI, received one of the **Best Poster Award** at the DAE-BRNS Symposium on Nuclear Physics, held at Cotton University at Guwahati,



during December 1-5, 2022. The poster was presented on the topic: "Investigation of odd-even effect in giant dipole resonance width in medium

mass nuclei". The collective dynamics associated with nuclear giant dipole resonance vibration is strongly correlated to the underlying nucleonic motions. In the poster, Chandrani investigated whether any odd-even effects influence the IVGDR width. For this purpose, IVGDR width of ^{63}Cu and ^{64}Ni have been calculated by employing the statistical thermal shape fluctuation model, where the associated driving potential is obtained self-consistently using the nuclear energy density functional formalism.

Mr. Devesh Kumar, Scientific Officer (D), Physics group, VECC received the **Best Poster Award** in "66th DAE-BRNS symposium on Nuclear Physics", held at Cotton University, Guwahati, during December 1-5, 2022. In the poster, entitled "Lifetime measurements in neutron rich $^{133,135}\text{Xe}$ ", Devesh presented the results of lifetime



measurements in odd-A Xe isotopes around doubly magic ^{132}Sn . Measured lifetime values were used for obtaining transition probabilities in $^{133,135}\text{Xe}$. The excited states of Xe isotopes were populated using Beta decay of Iodine isotopes, which were produced from radio-chemical separation of fission products of alpha, delivered from K-130 cyclotron, induced fission of ^{238}U . The experiment was performed using γ - γ fast timing array of CeBr_3 detectors at VECC, VENTURE, coupled with two HPGe Clover detectors.

Mr. Apar Agarwal, SRF HBNI-VECC, of EHEP&A group and working for the development of Muon