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## **GDR STUDIES AT VECC FACILITY**

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The study of Giant Dipole Resonance (GDR), even after almost 70 years of its discovery, still remains an intriguing and a very relevant topic of research, particularly in the case of hot and fast rotating nuclei. Many new facets of this giant collective mode of vibration are being brought to light recently owing to the new age powerful detection systems. Particularly for the nuclei with large asymmetries in the number of neutrons and protons the study of its GDR decay modes opened up very interesting research prospects worldwide. Even with low energy light-ion and heavy-ion accelerated beams and employing the powerful large volume and modular high energy photon spectrometer LAMBDA at VECC, Kolkata, India, a number of very interesting experimental observations have been made recently, which radically changes the present understanding of GDR vibrations in moderately hot nuclei in general. The availability of higher energy heavy-ion beams from the near ready superconducting cyclotron at VECC will open up many more interesting and challenging prospects with the LAMBDA spectrometer. Exciting challenges and opportunities are also on offer for studying the properties and dynamics of hot exotic nuclei with stable and RI beams through high energy gamma decays from giant resonances.

A few of some very interesting results obtained recently at VECC with the LAMBDA spectrometer and further research possibilities will be discussed during the conference.