

## **Abstract**

Metal halide perovskites are a new class of compounds which has intrinsic defect tolerant property and belong to a group of bright emitters. Through this project we are investigating a new pathway for the synthesis of Mn doped CsPbCl<sub>3</sub> perovskites nanocrystals, that is Mn doped CsPbCl<sub>3</sub> perovskites are successfully synthesized on a mesoporous alumina film. The developed perovskite films maintain uniformity over the film which in turn can be used for several optoelectronic purposes. Detailed characterizations including UV-Vis, Photoluminescence studies, XRD, ICP-MS, BET adsorption studies were carried out to study the formed Mn doped CsPbCl<sub>3</sub> perovskite.