

Abstract

Operation and performance of the Resistive Plate Chamber (RPCs) crucially depends upon the conductive coating on the outer side of the electrodes acting as high voltage provider. Surface resistivity of the electrode coat has a remarkable influence on the efficiency, noise rates and spatial dispersion of the induced charge by the RPC. Spatial dispersion of induced charge measurements shows that RPC of lower surface resistivity shows more dispersion of induced charge as compared to that RPC of higher surface resistivity. Also Knee voltages of the RPC increase as their surface resistivity decrease.