REVIEW ON SOLID ELECTROLYTES FOR BATTERY APPLICATIONS

Tamanna Rani1, Gourav Singla1, Paramjyot Kumar Jha1#

1Department of Physics (UIS), Chandigarh University, Gharuan, Punjab-140413, India

E-mail IDs: tamannagoyal159@gmail.com , gsinghla@gmail.com

*\*Corresponding author:* *paramjyotjha@gmail.com***#**

**Abstract:** As we know, one of the best technologies that can increase the specific energy density is a solid-state battery. Solid sulfide electrolytes are observed as a best to be used in All- Solid- State- Batteries (ASSBs). This review article mainly focuses on the materials structural and electrical properties along with applications of solid-state electrolytes. The bulk properties of the conductors and the idea of tuning the conductivity through the interfacial effect are also discussed. In the present paper, a brief description of NASICON, Gel polymer electrolytes and their properties are also introduced. The main aim of this review is to provide a greater understanding of the physical parameters affecting the diffusion process which allows for more efficient research on improving the solid-state ion conductor.