List of Publications and Presented Papers in International/National Conferences

Publications in Journals/Conference proceedings

1. **Khushbu Gohel** and D. K. Kanchan, Ionic conductivity and relaxation studies in PVDF-HFP:PMMA based gel polymer blend electrolyte with $LiClO_4$ salt . *Journal Of Advanced Dielectrics*, Vol. 8, No. 1 (2018) 1850005. DOI: 10.1142/S2010135X18500054

2. **Gohel, K.**, Kanchan, D.K. Effect of PC:DEC plasticizers on structural and electrical properties of PVDF–HFP:PMMA based gel polymer electrolyte system. *J Mater Sci: Mater Electron* **30,** 12260–12268 (2019). https://doi.org/10.1007/s10854-019-01585-6. https://doi.org/10.1007/s10854-019-01585-6

3. **Khushbu Gohel**, D. K. Kanchan, Hiren K. Machhi, Saurabh.S.Soni, C.Maheshwaran. Gel polymer electrolyte based on PVDF−HFP:PMMA incorporated with propylene carbonate (PC) and diethyl carbonate (DEC) plasticizers : Electrical, Morphology, Structural and Electrochemical properties. *Mater. Res. Express* **7** 025301(2020). https://doi.org/10.1088/2053-1591/ab6c06

4. **Khushbu Gohel** and D. K. Kanchan. Ionic transport studies in PVDF-HFP-PMMA-(PC+DEC)-$LiClO_4$ gel polymer electrolyte *AIP Conference Proceedings* 1832, 140047 (2017). doi: 10.1063/1.4980829

5. **Khushbu Gohel**, D. K. Kanchan, and C. Maheshwaran. Electrical and dielectric properties of PVdF-HFP – PMMA – (PC + DEC)- $LiClO_4$ based gel polymer electrolyte Citation: *AIP Conference Proceedings* 1942, 140081 (2018). doi: 10.1063/1.5029212

6. **Khushbu Gohel** and D. K. Kanchan. Conductivity and dielectric behaviour of lithium ion conducting gel polymer electrolyte *AIP Conference Proceedings* 2009, 020034 (2018). doi: 10.1063/1.5052103

Paper in Journals other than thesis work

7. C. Maheshwaran, D. K. Kanchan, **Khushbu Gohel**, Kuldeep Mishra, Deepak Kumar. Effect of $Mg(CF_3SO_3)_2$ concentration on structural and electrochemical properties of ionic liquid incorporated polymer electrolyte membranes. *J Solid State Electrochem* **24,** 655–665 (2020). https://doi.org/10.1007/s10008-020-04507-3

8. Deepak Kumar, **Khushbu Gohel**, D. K. Kanchan, Kuldeep Mishra. Dielectrics and battery studies on flexible nanocomposite gel polymer electrolyte membranes for sodium batteries. *J Mater Sci: Mater Electron* **31,** 13249–13260 (2020). https://doi.org/10.1007/s10854-020-03877-8

9. C.Maheshwaran, D.K.Kanchan, Kuldeep Mishra, Deepak Kumar, **Khushbu Gohel**. Flexible magnesium-ion conducting polymer electrolyte membranes: mechanical, structural, thermal, and electrochemical impedance spectroscopic properties. *J Mater Sci: Mater Electron* **31,** 15013–15027 (2020). https://doi.org/10.1007/s10854-020-04065-4

10. C.Maheshwaran, D.K.Kanchan, Kuldeep Mishra, Deepak Kumar, **Khushbu Gohel**. Effect of active MgO nano-particles dispersion in small amount within magnesium-ion conducting polymer electrolyte matrix, *Nano-Structures & Nano-Objects* 24, 100587 (2020). https://doi.org/10.1016/j.nanoso.2020.100587

Presented papers in International / National conferences

1. **Khushbu Gohel**, D. K. Kanchan, Ionic transport studies in PVDF-HFP-PMMA-(PC+DEC)-$LiClO_4$ gel polymer electrolyte. *61th DAE Solid State Physics Symposium*, KIIT University, Bhubaneswar, 26-30 December 2016.

2. **Khushbu Gohel**, D.K. Kanchan and C. Maheshwaran, Electrical and Dielectric Properties of PVdF-HFP – PMMA – (PC+DEC) - $LiClO_4$ Based Gel Polymer Electrolyte. *62nd DAE Solid State Physics Symposium*, BARC, Bombay, 26-30 December 2017.

3. **Khushbu Gohel**, D.K.Kanchan Experimental investigation of Lithium ion conducting gel polymer electrolyte. *12th National Conference On Solid State Ionics (NCSSI—12)*, BITS, Pillani, 22-24 December 2017.

4. **Khushbu Gohel**, D.K. Kanchan, Conductivity and Dielectric Behavior Of Lithium Ion Conducting Gel Polymer Electrolyte, *National Conference on Advanced Materials and Nanotechnology (AMN-2018)*, Department of Physics and Materials Science & Engineering JIIT, Noida, 15-17 March 2018.

5. **Khushbu Gohel**, D.K.Kanchan, Experimental investigation of PC-DEC modified PVdF-HFP:PMMA based gel polymer electrolyte, *International Symposium on Functional Materials (ISFM-2018): Energy and Biomedical Applications*, Hotel Shivalikview, Chandigarh, India, 13-15 April 2018.

6. Dharmesh Kothari, **Khushbu Gohel**. Study of Electrical properties of ceramic $Li_{1.3}Al_{0.3-x}M_xTi_{1.7}(PO_4)_3$ (M= Sc, Y) NASICON Material, *15th Asian Conference on Solid State Ionics (ACSSI2K16)*, IIT Patna, 27-30 November 2016.

7. **Khushbu Gohel**, D.K. Kanchan and C. Maheshwaran, Effect of lithium salt and plasticizer on conductivity and ion dynamics behavior in PVDF-HFP-PMMA based gel polymer electrolyte. *National Conference on Recent Trends in Materials Science (RTMS-2018)*, Department of Physics, Faculty of Science, The M.S.University of Baroda, 24-25 March, 2018

8. **Khushbu Gohel**, D.K. Kanchan, Lithium-ion conducting PVDF-HFP based gel polymer electrolytes: Structural and Electrochemical Properties. *International Conference on Recent Trends in Nanomaterials for Clean Energy*, Applied Physics Department, S. V. National Institute of Technology, Surat-395007, Gujarat, India 16-17 February 2019.

9. **Khushbu Gohel**, D. K. Kanchan, Electrochemical properties of PVDF-HFP: PC-DEC with $LiClO_4$ polymer gel electrolyte membrane. 2nd *National Conference On Emerging Trends In Materials Science* (NCETMS-2019), PG & RESEARCH DEPARTMENT OF PHYSICS & CHEMISTRY, Government Arts College, Tiruvannamalai, Tamil Nadu, 27-27 September 2019.

10. **Khushbu Gohel**, D. K. Kanchan, Investigation on structural, electrical, and conductivity relaxation of nano-composite gel polymer electrolyte doped with Al_2O_3 nano-filler. *13th National Conference On Solid State Ionics* (NCSSI—13), IIT, Roorkee, 16-18 December 2019.

11. **Khushbu Gohel**, D. K. Kanchan, C. Maheshwaran, Structural, Electrochemical and Ion Transport Studies of Plasticized PVDF-HFP-PMMA-$LiClO_4$ Complex based Nanocomposite Gel Polymer Electrolyte Doped with Al_2O_3 Nanofiller. *6th International Conference on Nanoscience and Nanotechnology* (Virtual Conference), SRM Institute of Science and Technology, Kattankulathur, 01-03 February 2021.