

List of Publications

Articles published in journal/book:

1. **A.K. Patel**, N.K. Acharya. Study of Gas Transport Phenomenon in Layered Polymer Nanocomposite Membranes. In: K. Nayak, Smita Mohanty, Lakshmi Unnikrishnan. Trends and Applications in Advanced Polymeric Materials, Scrivener Publishing LLC (2017) 191-206
2. **A.K. Patel**, N.K. Acharya, Metal Coated and Nanofiller Polycarbonate for Hydrogen Transport, International Journal of Hydrogen Energy, 43 (2018) 21675-21682.

Manuscripts under review:

1. M. S. Paghdar, **A.K. Patel** and N.K. Acharya, A New Way to Determine Freezing Behavior of Polymer Blends (2018).
2. **A.K. Patel**, N.K. Acharya, Study of CO₂ Plasticization and Selectivity by Pt-Pd Coated Polycarbonate (2018).
3. **A.K. Patel**, S.D. Patel and N.K. Acharya, Nanosilica doped blend polymer membrane for gas permeation and separation (2019).

Conference Presentations

1. Oral presentation on **“Study of Gas Flow across Polymer Nanocomposites Membrane using Sensor”** in an International Conference entitled **“International program on Application of Nano-Materials in Textile”** during 23-25 April 2015 at Department of Textile Engineering, (MSU), Vadodara.
2. Oral presentation on **“Study of Gas Transport Phenomenon in Layered Polymer Nanocomposite Membrane”** in an International Conference entitled **“Advancement in Polymeric Materials (APM-2016)”** during 12-14 February 2016 at Central Institute of Plastic Engineering and Technology (CIPET), Ahmedabad.
3. Oral presentation on **“Effect of Nanocoating on Mass Transport for Polymer Membrane”** in a National Conference entitled **“Recent Scenario in Science and Technology (RSST-2016)”** during 27th February 2016 at Faculty of Technology and Engineering (MSU), Vadodara.
4. Poster presentation on **“Metal Coated and Nanofiller Polycarbonate Membrane for Hydrogen Transport”** in a National Conference entitled **“Recent Trends on Membranes and Separation Technology (RTMST 2017)”** during 22-23 November 2017 at CSIR-CSMCRI, Bhavnagar.
5. Poster presentation on **“Gas permeation through polymer blends and blend composite membranes”** in an International Conference entitled **“The 6th IWA-Regional Membrane Technology Conference (IWA-RMTC 2018)”** during 10-12 December 2018 at Faculty of Technology and Engineering (MSU), Vadodara.
6. Poster presentation on **“Nanocomposite Thermally Rearranged (TR) HAB-6FDA Membranes for Gas Separation”** in a National Conference entitled **“Indo-German Bilateral Workshop on Membranes for Water and Energy”** during 18-20 February 2019 at CSIR-CSMCRI, Bhavnagar.