List of Publications

1. "Dielectric and structural modification of proton beam irradiated polymer composite" Sejal Shah, N. L. Singh, Anjum Qureshi, Dolly Singh, K.P. Singh, V. Shrinet, A. Tripathi. *Nuclear Instrument and Methods in Physics Research* B **266** (2008) 1768 -1774.

2. "Modification of polymer composite by proton beam irradiation"
Sejal Shah, Anjum Qureshi, N. L. Singh, K. P. Singh, V. Ganesan. *Soft Materials,* **6(2)** (2008) 75-84.

3. "Structural and chemical modification of polymer composite by proton irradiation"
Sejal Shah, Anjum Qureshi, N.L.Singh, P.K. Kulriya, K.P.Singh, D.K.Avasthi. *Surface and Coating Technology* **203** (2009) 2595.

4. "Dielectric response of proton irradiated polymer composite films"
Sejal Shah, Anjum Qureshi, N.L.Singh, K.P.Singh, D.K.Avasthi. *Radiation Measurement* **43** (2008) S603-S606.

5. "Swift heavy ion induced modification in dielectric and microhardness properties of Polymer Composites"
N.L.Singh, Sejal Shah, Anjum Qureshi, F. Singh, D.K.Avasthi, V.Shrinet, V. Ganesan. *Polymer Degradation and stability* **93** (2008) 1088-1093

6. "Radiation induced modifycation of organometallic compound dispersed polymer composites"
N.L.Singh, Sejal Shah, Anjum Qureshi, K.P.Singh, V. Shrinet, P.K.Kulriya, A. Tripathi. *Radiation Effects and Defects in Solids* **163(2)** (2008) 181–189

7. "Effect of ion beam irradiation on palladium (II) acetyl acetonate dispersed polymer matrix"
N.L.Singh, Sejal Shah, Anjum Qureshi, P. Kulariya, D.K.Avasthi, A. M. Avasthi. *Radiation Effects and Defects in Solids,* **164(10)**(2009) 619.

8. "Effect of Ion Beam Irradiation on Metal Particle Doped Polymer Composites"
N.L.Singh, Sejal Shah, Anjum Qureshi, A.Tripathi, F.Singh, D.K.Avasthi, P.M.Raole. *Bull of Mat. Sci*, Communicated

9. "Ion beam induced modification of metal nanoparticles dispersed polymeric films" Sejal Shah, N L Singh, V Shivakumar, Indra Sulania, A. Tripathi, F Singh, D K Avasthi, R. V. Upadhyay. Int. Conf. on Electrolyte Ceramics (ICE-09) Dec 13-17, 2009, New Delhi, India. Accepted for poster presentation

*10. "AC conductivity and dielectric properties of proton irradiated ferric oxalate dispersed PVC films"
Sejal Shah, Anjum Qureshi, Dolly Singh, N.L.Singh, K.P.Singh, V. Shrinet *Ind. J. Pure & Appl. Phy.* **46** (2008) 439-442.

*11. "Modification of polymer composite films using 120 MeV Ni^{10+} ions"
Anjum Qureshi, N. L. Singh, Sejal Shah, P. Kulriya, F. Singh, D. K. Avasthi. *Nuclear Instrument and Methods in Physics Research B* **266** (2008) 1775.

*12. "Ion beam modification of Polymethyl methacrylate (PMMA) polymer matrix filled with organometallic complex"
Anjum Qureshi, N. L. Singh, Sejal Shah, F. Singh, D. K. Avasthi. *J. Macromolecular Science, Part A: Pure and Applied Chemistry* **45**(2008)265.

*13. "Study of microhardness and electrical properties of proton irradiated polyether sulfone" Nilam Shah, Dolly Singh, Sejal Shah, Anjum Qureshi, N.L.Singh, K.P. Singh. *Bulletin of Material Science* **30** (2007) 477.

*14. "AC electrical properties of proton irradiated EVA films"
Anjum Qureshi, Sejal Shah, Dolly Singh, N. L. Singh, K. P. Singh. *Indian Journal of Physics* **83(8)** (2009) 1117.

*15. "Surface modification of polycarbonate by plasma treatment"
Anjum Qureshi, Sejal Shah, S Pelagade, N.L.Singh, S Mukherjee, A Tripathi, U P Despande and T Shripathi. *Journal of Physics-Conference series* – In press.

*16. "Surface free energy analysis for bipolar pulsed argon plasma treated polymer films"
S Pelagade, N L Singh , Sejal Shah, Anjum Qureshi , R S Rane, S Mukherjee, U P Deshpande, V Ganesan and T Shripathi. *Journal of Physics-Conference series* – In press.

Publications in Plasma Physics

*1. "Effect of surface produced negative ions on the sheath in a fusion grade negative ion source"

Sejal Shah and M. Bandyopadhyay. *Plasma Physics and Controlled Fusion* **51** (2009) 35015.

*2. "Influence of surface produced negative ions on sheath structure"

Sejal Shah and M. Bandyopadhyay. *Journal of Physics-Conference series* – In press.

*** are not included in thesis**