

List of Publications:

* 1) "Ion beam modification and analysis of organometallics dispersed polymer films".
Anjum Qureshi, N. L. Singh, A. K. Rakshit, F. Singh, V. Ganesan, *Nuclear Instruments and Methods B* 244 (2006) 235-238.

*2) "Analysis of organometallics dispersed polymer composite irradiated with oxygen ions". N. L. Singh, **Anjum Qureshi**, A. K. Rakshit and D. K. Avasthi, *Bulletin Material Science* 29(2006) 605-609.

3) "Surface modification of poly ethylene terephthalate by plasma treatment". N. L. Singh, **Anjum Qureshi**, Nilam Shah, A. K. Rakshit, S. Mukherjee, A. Tripathi and D. K. Avasthi, *Radiation Measurements* 40 (2007) 746-749.

*4) "Effect of swift heavy ion irradiation on dielectric properties of polymer composite films". N. L. Singh, **Anjum Qureshi**, F. Singh and D. K. Avasthi, *Material Science and Engineering B* 137(2007)85-92.

*5) "Modification of polycarbonate induced by swift heavy ions". N. L. Singh, **Anjum Qureshi**, F. Singh and D. K. Avasthi, *Material Science and Engineering A* 457(2007)195-198.

*6) "Ion beam modification and analysis of polymer composites". **Anjum Qureshi**, N. L. Singh, Keyur Somani, A. K. Rakshit, F. Singh, D. K. Avasthi, *Indian Journal of Pure and Applied Physics* 45 (2007)57-61.

7) "Effect of 50MeV Li-ion irradiation on thermal and structural characteristics of polymer blends". Anita Sharma, **Anjum Qureshi**, N. L. Singh, V. Shrinet, F. Singh, D.K. Avasthi, A. K. Rakshit, *Indian Journal of Pure and Applied Physics* 45 (2007)127-130.

***8)** "Ion beam modification of nickel dimethylglyoxime dispersed polymer films". **Anjum Qureshi**, N. L. Singh, A. K. Rakshit, D. K. Avasthi, V. Ganesan, *Surface and Coatings Technology in press (2007)*.

***9)** "Swift ion induced modification in polyimide films". **Anjum Qureshi**, N. L. Singh, A. K. Rakshit, F. Singh, D. K. Avasthi, *Surface and Coatings Technology in press (2007)*.

10) "Surface modification of polymeric blends by nitrogen plasma immersion ion implantation". N. L. Singh, **Anjum Qureshi**, A. K. Rakshit, S. Mukherjee, A. Tripathi and D. K. Avasthi, *Surface and Coatings Technology in press (2007)*.

***11)** "Modification of polymer blends by swift heavy ion irradiation". N. L. Singh, **Anjum Qureshi**, Sejal Shah, Dolly Singh, F. Singh, D. K. Avasthi, *Submitted Indian Journal of Pure and Applied Physics*.

***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, *Submitted Journal of Macromolecular Science Pure and Applied Chemistry*.

13) "Surface modification of polycarbonate by plasma immersion ion implantation". N. L. Singh, **Anjum Qureshi**, S. Mukherjee, D. K. Avasthi, U. Deshpande, T. Shrivasthi, *Submitted Radiation Measurements*.

14) "Dielectric response of proton irradiated polymer composite films". Sejal Shah, **Anjum Qureshi**, N. L. Singh, K. P. Singh, D.K. Avasthi, *Submitted Radiation Measurements*.

15) "AC dielectric properties and surface morphology of proton irradiated ferric oxalate dispersed PVC film". Sejal Shah, Dolly Singh, **Anjum Qureshi**, N. L. Singh, K. P. Singh, V. Shrinet, *Submitted Indian Journal of Pure and Applied Physics*.

16) "Radiation induced modification of organometallic compound dispersed polymer composites". N. L. Singh, Sejal Shah, **Anjum Qureshi**, K. P. Singh, V. Shrinet, P. K. Kulariya, A. Tripathi, *Submitted Radiation Effects and Defects in Solids*.

17) "Effect of ion beam irradiation effect on metal particle doped polymer composites". **Anjum Qureshi**, Sejal Shah, Dolly Singh, N. L. Singh, Anita Sharma, F. Singh, D. K. Avasthi, Communicated for the presentation in International conference on Surface Modification of Materials by Ion Beam (SMMIB), 30th Sept-5th Oct, 2007, Mumbai.

*18) "Modification of polymer composite films using 120 MeV Ni^{10+} ions". **Anjum Qureshi**, N. L. Singh, Sejal Shah, P. Kulariya, F. Singh, D. K. Avasthi, Communicated for the presentation in International conference on Ion Beam Analysis (IBA), 23rd Sept-26th Sept, 2007, Hyderabad.

19) "Swift heavy ion induced modification on the dielectric properties of polymer composites". Sejal Shah, N. L. Singh, **Anjum Qureshi**, V. Shrinet, F. Singh, D. K. Avasthi, Communicated for the presentation in International conference on Surface Modification of Materials by Ion Beam (SMMIB), 30th Sept-5th Oct, 2007, Mumbai.

Proceedings:

20) "Dielectric properties of 50MeV Li^{3+} ion irradiated PET films". Anita Sharma, **Anjum Qureshi**, N. L. Singh, D. K. Avasthi, V. Shrinet, *DAE Symposium on Solid State Physics 47C (2004) 697*.

***21)** “Dielectric and microhardness properties of organometallic compound dispersed polymer films”. **Anjum Qureshi**, N. L. Singh, Keyur Somani, A. K. Rakshit, D.K.Avasthi, *DAE Symposium on Solid State Physics 50C (2005)* 375.

22) “Surface modification of polymeric blends by plasma immersion ion implantation”. **Anjum Qureshi**, N. L. Singh, A. K. Rakshit, S. Mukherjee, A. Tripathi and D. K. Avasthi, *Proceeding of National Symposium on Vacuum Science & Technology and Its Applications to Plasma, IVSNS OP 18 (2005)*.

***23)** “Modification Effect of oxygen ion irradiation on the thermal stability of polyether sulfone”. N. L. Singh, **Anjum Qureshi**, A. K. Rakshit, A. Jeykumar, *Proceeding of 15th National Symposium on Thermal Analysis, Venugopal et al (2006)* 197.

24) “Effect of ion beam metal nanoparticle doped polymeric films”. Sejal Shah, Anjum Qureshi, Dolly Singh, N. L. Singh, K. P. Singh, P. Kularia, A. Tripathi, *DAE Symposium on Solid State Physics 51 (2006)* 311.

25) “Dielectric response of metal doped polymeric films”. Sejal Shah, Dolly Singh, Anjum Qureshi, N. L. Singh, V. Shrinet, *DAE Symposium on Solid State Physics 51 (2006)* 513.

*** This work is included in the thesis.**