

#### 4) Individual Teachers Detail:

### Professor Mohammad Sarwar Alam



**Prof. M. S. Alam**

**Dean, School of  
Chemical & Life  
Sciences**

**Professor & Head  
Department of  
Chemistry**

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**Affiliation:**

Department of Chemistry, School of Chemical and Life Sciences, Jamia Hamdard

**Education:**

M. Phil., Ph. D. (Aligarh Muslim University)

**Specialization:**

Organic Chemistry

**Teaching Subjects:**

Chemistry of natural products, Modern analytical techniques

**Research Interests:**

Chemistry of natural products (Bioactivity guided isolation and characterization of active principles from medicinal plants)  
Medicinal chemistry (Design and Synthesis of biologically active anti-inflammatory, blood glucose lowering and anti cancer molecules)  
Design and synthesis of semi-synthetic analogues as antidiabetic agents  
Modification of polymers

**Awards/Fellowships/Recognitions:**

Senior Research Fellowship (CSIR), Department of Chemistry, Aligarh Muslim University, Aligarh (1987-1990).  
Editorial board member of Inflammation and Cell Signalling.  
Appointed Vice Chancellor's Nominee of Uttar Pradesh Technical University (UPTU) for selection committee of faculty members at ABES Engineering College, Ghaziabad.  
Appointed member of Board of Research Studies of University of Kashmir, Barkatullah University Bhopal, Uttar Pradesh Technical University (UPTU), Lucknow  
Elected Vice Chairman of Asian Polymer Association  
Elected Secretary of Asian Polymer Association  
Elected Vice President of Indian Society of Analytical Scientists- Delhi Chapter  
Expert reviewer of papers in international journals

**Patents:**

Title: An Andrographolide compound and process of preparation thereof. Indian patent application No: **2460/DEL/2014**.

### Total number of publications: 160

**List of selected publications:**

1. Ali, Y., Alam, M. S., Hamid, H., Husain, A., Dhulap, A., Bano, S., Kharbanda., C (2017), Design, synthesis and biological screening of Novel 2,4-dichlorophenoxy acetic acid substituted thiazolidin-4-ones as anti-inflammatory agents:. Bioorganic and Medicinal Chemistry Letters, Bioorganic and Medicinal Chemistry Letters,

27(4), 1017-1025. **[Impact Factor: 2.420]**

2. Ali, Y., Alam, M. S., Hamid, H., Husain, A., Dhulap, A., Hussain, F., Kharbanda, C. (2016). Molecular modeling and synthesis of some new 2-imino-4-thiazolidinone derivatives with promising TNF- $\alpha$  inhibitory activity. *New Journal of Chemistry*, 40(1), 711-723. **[Impact factor: 3.277]**
3. Anjum, S., Arora, A., Alam, M. S., & Gupta, B. (2016). Development of antimicrobial and scar preventive chitosan hydrogel wound dressings. *International Journal of Pharmaceutics*, 508(1-2), 92-101. **[Impact factor: 3.994]**
4. Ismail, T., Shafi, S., Singh, S., Sidiq, T., Khajuria, A., Rouf, A., Kumar, H. M. S. (2016). Synthesis and immunopotentiating activity of novel isoxazoline functionalized coumarins. *European Journal of Medicinal Chemistry*, 123, 90-104. **[Impact factor: 3.902]**
5. Ismail, T., Shafi, S., Srinivas, J., Sarkar, D., Qurishi, Y., Khazir, J., Kumar, H. M. S. (2016). Synthesis and tyrosinase inhibition activity of trans-stilbene derivatives. *Bioorganic Chemistry*, 64, 97-102. **[Impact factor: 2.252]**
6. Khan, I., Tantray, M. A., Hamid, H., Alam, M. S., Kalam, A., & Dhulap, A. (2016). Synthesis of benzimidazole based thiadiazole and carbohydrazide conjugates as glycogen synthase kinase-3 $\beta$  inhibitors with anti-depressant activity. *Bioorganic and Medicinal Chemistry Letters*, 26(16), 4020-4024. **[Impact Factor: 2.420]**
7. Khan, I., Tantray, M. A., Hamid, H., Alam, M. S., Kalam, A., Hussain, F., & Dhulap, A. (2016). Synthesis of pyrimidin-4-one-1,2,3-triazole conjugates as glycogen synthase kinase-3 $\beta$  inhibitors with anti-depressant activity. *Bioorganic Chemistry*, 68, 41-55. **[Impact factor: 2.252]**
8. Khan, I., Tantray, M. A., Hamid, H., Alam, M. S., Kalam, A., Shaikh, F., Hussain, F. (2016). Synthesis of novel pyrimidin-4-one bearing piperazine ring-based amides as glycogen synthase kinase-3 $\beta$  inhibitors with antidepressant activity. *Chemical Biology and Drug Design*, 87(5), 764-772. **[Impact factor: 2.802]**
9. Kharbanda, C., Alam, M. S., Hamid, H., Javed, K., Bano, S., Ali, Y., Pasha, M. A. Q. (2016). Novel benzothiazole based sulfonylureas/sulfonylthioureas: Design, synthesis and evaluation of their antidiabetic potential. *New Journal of Chemistry*, 40(8), 6777-6786. **[Impact factor: 3.277]**
10. Kharbanda, C., Alam, M. S., Hamid, H., Javed, K., Bano, S., Ali, Y., Pasha, M. A. Q. (2016). Novel piperine derivatives with antidiabetic effect as PPAR- $\gamma$  agonists. *Chemical Biology and Drug Design*, 354-362. **[Impact factor: 2.802]**
11. Moheman, A., Alam, M. S., Gupta, A., Dhakate, S. R., Kumar, A., & Mohammad, A. (2016). Fabrication of nanofiber stationary phases from chopped polyacrylonitrile co-polymer microfibers for use in ultrathin layer chromatography of amino acids. *RSC Advances*, 6(93), 90100-90110. **[Impact factor: 3.289]**
12. Tantray, M. A., Khan, I., Hamid, H., Alam, M. S., Dhulap, A., & Kalam, A. (2016). Synthesis of aryl anilinomaleimide based derivatives as glycogen synthase kinase-3 $\beta$  inhibitors with potential role as antidepressant agents. *New Journal of Chemistry*, 40(7), 6109-6119. **[Impact factor: 3.277]**
13. Tantray, M. A., Khan, I., Hamid, H., Alam, M. S., Dhulap, A., & Kalam, A. (2016). Synthesis of benzimidazole-based 1,3,4-oxadiazole-1,2,3-triazole conjugates as glycogen synthase kinase-3 $\beta$  inhibitors with antidepressant activity in: *In vivo*

models. RSC Advances, 6(49), 43345-43355. **[Impact factor: 3.289]**

14. Tantray, M. A., Khan, I., Hamid, H., Alam, M. S., Umar, S., Ali, Y., Hussain, F. (2016). Synthesis of novel oxazolo[4,5-b]pyridine-2-one based 1,2,3-triazoles as glycogen synthase kinase-3 $\beta$  inhibitors with anti-inflammatory potential. Chemical Biology and Drug Design, 87(6), 918-926. **[Impact factor: 2.802]**
15. Tummalapalli, M., Berthet, M., Verrier, B., Deopura, B. L., Alam, M. S., & Gupta, B. (2016). Composite wound dressings of pectin and gelatin with aloe vera and curcumin as bioactive agents. International Journal of Biological Macromolecules, 82, 104-113. **[Impact factor: 3.138]**
16. Tummalapalli, M., Berthet, M., Verrier, B., Deopura, B. L., Alam, M. S., & Gupta, B. (2016). Drug loaded composite oxidized pectin and gelatin networks for accelerated wound healing. International Journal of Pharmaceutics, 505(1-2), 234-245. **[Impact factor: 3.994]**
17. Khan I, Tantray MA, Hamid H, Alam MS, (2017) Natural and synthetic bioactive inhibitors of glycogen synthase kinase, European Journal of Medicinal Chemistry 125 464-477. **[Impact factor: 3.902]**
18. Ali, Y., Alam, M. S., Hamid, H., Husain, A., Bano, S., Dhulap, A., Haider, S. (2015). Design, synthesis and biological evaluation of piperic acid triazolyl derivatives as potent anti-inflammatory agents. European Journal of Medicinal Chemistry, 92, 490-500. **[Impact factor: 3.902]**
19. Ali, Y., Alam, M. S., Hamid, H., Husain, A., Shafi, S., Dhulap, A., Haider, S. (2015). Design and synthesis of butenolide-based novel benzyl pyrrolones: Their TNF- $\alpha$  based molecular docking with in vivo and in vitro anti-inflammatory activity. Chemical Biology and Drug Design, 86(4), 619-625. **[Impact factor: 2.802]**
20. Bano, S., Alam, M. S., Javed, K., Dudeja, M., Das, A. K., & Dhulap, A. (2015). Synthesis, biological evaluation and molecular docking of some substituted pyrazolines and isoxazolines as potential antimicrobial agents. European Journal of Medicinal Chemistry, 95, 96-103. **[Impact factor: 3.902]**
21. Haider, S., Alam, M. S., & Hamid, H. (2015). 1,3,4-thiadiazoles: A potent multi targeted pharmacological scaffold. European Journal of Medicinal Chemistry, 92, 156-177. **[Impact factor: 3.902]**
22. Kharbanda, C., Alam, M. S., Hamid, H., Javed, K., Bano, S., Ali, Y., Haider, S. (2015). Ameliorative effects of trichosanthes dioica extract in suppressing inflammatory mediators and attenuating oxidative stress. Planta Medica, 81(5), 348-356. **[Impact factor: 2.152]**
23. Kharbanda, C., Alam, M. S., Hamid, H., Javed, K., Dhulap, A., Bano, S., & Ali, Y. (2015). Antidiabetic effect of novel benzenesulfonylureas as PPAR- $\gamma$  agonists and their anticancer effect. Bioorganic and Medicinal Chemistry Letters, 25(20), 4601-4605. **[Impact Factor: 2.420]**
24. Moheman, A., Alam, M. S., & Mohammad, A. (2016). Recent trends in electrospinning of polymer nanofibers and their applications in ultra thin layer chromatography. Advances in Colloid and Interface Science, 229, 1-24. **[Impact Factor: 7.813]**
25. Tummalapalli, M., Deopura, B. L., Alam, M. S., & Gupta, B. (2015). Facile and green synthesis of silver nanoparticles using oxidized pectin. Materials Science and

Engineering C, 50, 31-36. **[Impact factor: 3.420]**

26. Ali, Y., Alam, M. S., Hamid, H., Husain, A., Kharbanda, C., Bano, S., Haider, S. (2014). Attenuation of inflammatory mediators, oxidative stress and toxic risk evaluation of *apocynum androsaefolium* bark extract. *Journal of Ethnopharmacology*, 155(3), 1513-1521. **[Impact factor: 3.902]**
27. Chavan, S. R., Dash, R. C., Alam, M. S., & Hirwani, R. R. (2014). Identification of new novel scaffold for aurora A inhibition by pharmacophore modeling and virtual screening. *Molecular Diversity*, 18(4), 853-863. **[Impact Factor: 2.080]**
28. Gupta, B., Tummalapalli, M., Deopura, B. L., & Alam, M. S. (2014). Preparation and characterization of in-situ crosslinked pectin-gelatin hydrogels. *Carbohydrate Polymers*, 106(1), 312-318. **[Impact Factor: 4.219]**
29. Haider, S., Alam, M. S., Hamid, H., Shafi, S., Dhulap, A., Hussain, F., Kharbanda, C. (2014). Synthesis of novel 2-mercaptobenzoxazole based 1,2,3-triazoles as inhibitors of proinflammatory cytokines and suppressors of COX-2 gene expression. *European Journal of Medicinal Chemistry*, 81, 204-217. **[Impact factor: 3.902]**
30. Kharbanda, C., Alam, M. S., Hamid, H., Javed, K., Bano, S., Dhulap, A., Haider, S. (2014). Synthesis and evaluation of pyrazolines bearing benzothiazole as anti-inflammatory agents. *Bioorganic and Medicinal Chemistry*, 22(21), 5804-5812. **[Impact Factor: 2.923]**
31. Kharbanda, C., Alam, M. S., Hamid, H., Javed, K., Shafi, S., Ali, Y., Haider, S. (2014). Novel benzenesulfonylureas containing thiophenylpyrazoline moiety as potential antidiabetic and anticancer agents. *Bioorganic and Medicinal Chemistry Letters*, 24(22), 5298-5303. **[Impact Factor: 2.420]**
32. Khazir, J., Hyder, I., Gayatri, J. L., Prasad Yandratil, L., Nalla, N., Chasoo, G., Sampath Kumar, H. M. (2014). Design and synthesis of novel 1,2,3-triazole derivatives of coronopilin as anti-cancer compounds. *European Journal of Medicinal Chemistry*, 82, 255-262. **[Impact factor: 3.902]**
33. Mir, F., Shafi, S., Zaman, M. S., Kalia, N. P., Rajput, V. S., Mulakayala, C., Alam, M. S. (2014). Sulfur rich 2-mercaptobenzothiazole and 1,2,3-triazole conjugates as novel antitubercular agents. *European Journal of Medicinal Chemistry*, 76, 274-283. **[Impact factor: 3.902]**
34. Nazreen, S., Alam, M. S., Hamid, H., Yar, M. S., Dhulap, A., Alam, P., Pillai, K. K. (2014). Thiazolidine-2,4-diones derivatives as PPAR- $\gamma$  agonists: Synthesis, molecular docking, in vitro and in vivo antidiabetic activity with hepatotoxicity risk evaluation and effect on PPAR- $\gamma$  gene expression. *Bioorganic and Medicinal Chemistry Letters*, 24(14), 3034-3042. **[Impact Factor: 2.420]**
35. Nazreen, S., Alam, M. S., Hamid, H., Yar, M. S., Shafi, S., Dhulap, A., Pillai, K. K. (2014). Design, synthesis, in silico molecular docking and biological evaluation of novel oxadiazole based thiazolidine-2,4-diones bis-heterocycles as PPAR- $\gamma$  agonists. *European Journal of Medicinal Chemistry*, 87, 175-185. **[Impact factor: 3.902]**
36. Nazreen, S., Alam, M. S., Hamid, H., Yar, M. S., Shafi, S., Dhulap, A., Pillai, K. K. (2014). Design, synthesis, in silico molecular docking and biological evaluation of novel oxadiazole based thiazolidine-2,4-diones bis-heterocycles as PPAR- $\gamma$  agonists. *European Journal of Medicinal Chemistry*, 87, 175-185. **[Impact factor: 3.902]**
37. Bano, S., Javed, K., Ahmad, S., Rathish, I. G., Singh, S., Chaitanya, M., Alam, M. S.

- (2013). Synthesis of some novel chalcones, flavanones and flavones and evaluation of their anti-inflammatory activity. *European Journal of Medicinal Chemistry*, 65, 51-59. **[Impact factor: 3.902]**
38. Chaudhary, S. C., Siddiqui, M. S., Athar, M., & Alam, M. S. (2013). Geraniol inhibits murine skin tumorigenesis by modulating COX-2 expression, ras-ERK1/2 signaling pathway and apoptosis. *Journal of Applied Toxicology*, 33(8), 828-837. **[Impact Factor: 2.722]**
39. Gupta, B., Tummalapalli, M., Deopura, B. L., & Alam, M. S. (2013). Functionalization of pectin by periodate oxidation. *Carbohydrate Polymers*, 98(1), 1160-1165. **[Impact Factor: 4.219]**
40. Haider, S., Alam, M. S., Hamid, H., Shafi, S., Nargotra, A., Mahajan, P., Panda, A. K. (2013). Synthesis of novel triazole based benzoxazolinones: Their TNF- $\alpha$  based molecular docking with in-vivo anti-inflammatory, antinociceptive activities and ulcerogenic risk evaluation. *European Journal of Medicinal Chemistry*, 70, 579-588. **[Impact factor: 3.902]**
41. Khan, R., Shawl, A. S., Tantry, M., & Alam, M. S. (2013). Erratum: New coumarin glycosides from *rhododendron lepidotum* (fitoterapia (2008) 79:3 (232-233)). *Fitoterapia*, 89(1), 288. **[Impact Factor: 2.408]**
42. Khazir, J., Singh, P. P., Reddy, D. M., Hyder, I., Shafi, S., Sawant, S. D., Kumar, H. M. S. (2013). Synthesis and anticancer activity of novel spiro-isoxazoline and spiro-isoxazolidine derivatives of  $\alpha$ -santonin. *European Journal of Medicinal Chemistry*, 63, 279-289. doi:10.1016/j.ejmech.2013.01.003, **[Impact factor: 3.902]**
43. Haider, S., Nazreen, S., Alam, M. M., Hamid, H., & Alam, M. S. (2012). Anti-inflammatory and anti-nociceptive activities of *Platanus orientalis linn.* and its ulcerogenic risk evaluation. *Journal of Ethnopharmacology*, 143(1), 236-240. **[Impact Factor: 3.055]**
44. Haider S, Nazreen S, Alam M, Gupta G, Hamid H, Mohammad Sarwar Alam (2012) Anti-inflammatory and anti-nociceptive activities of ethanolic extract and its various fractions from *Adiantum capillus veneris* Linn. *J Ethnopharmacol*, 138, 741-747, **[Impact Factor: 3.055]**
45. Nazreen, S., Kaur, G., Alam, M. M., Shafi, S., Hamid, H., Ali, M., & Alam, M. S. (2012). New flavones with antidiabetic activity from *callistemon lanceolatus* DC. *Fitoterapia*, 83(8), 1623-1627. **[Impact Factor: 2.408]**
46. Rathish, I. G., Javed, K., Ahmad, S., Bano, S., Alam, M. S., Akhter, M., Samim, M. (2012). Synthesis and evaluation of anticancer activity of some novel 6-aryl-2-(p-sulfamylphenyl)-pyridazin-3(2H)-ones. *European Journal of Medicinal Chemistry*, 49, 304-309. **[Impact factor: 3.902]**
47. Shafi, S., Mahboob Alam, M., Mulakayala, N., Mulakayala, C., Vanaja, G., Kalle, A. M., Alam, M. S. (2012). Synthesis of novel 2-mercapto benzothiazole and 1,2,3-triazole based bis-heterocycles: Their anti-inflammatory and anti-nociceptive activities. *European Journal of Medicinal Chemistry*, 49, 324-333. **[Impact factor: 3.902]**
48. Bano, S., Javed, K., Ahmad, S., Rathish, I. G., Singh, S., & Alam, M. S. (2011). Synthesis and biological evaluation of some new 2-pyrazolines bearing benzene sulfonamide moiety as potential anti-inflammatory and anti-cancer agents. *European Journal of Medicinal Chemistry*, 46(12), 5763-5768. **[Impact factor:**

**3.902]**

49. Bashir, R., Ovais, S., Yaseen, S., Hamid, H., Alam, M. S., Samim, M., Javed, K. (2011). Synthesis of some new 1,3,5-trisubstituted pyrazolines bearing benzene sulfonamide as anticancer and anti-inflammatory agents. *Bioorganic and Medicinal Chemistry Letters*, 21(14), 4301-4305. **[Impact Factor: 2.420]**
50. Haider, S., Nazreen, S., Alam, M. M., Gupta, A., Hamid, H., & Alam, M. S. (2011). Anti-inflammatory and anti-nociceptive activities of ethanolic extract and its various fractions from *Adiantum capillus veneris* Linn. *Journal of Ethnopharmacology*, 138(3), 741-747. **[Impact factor: 3.902]**
51. Ismail, T., Shafi, S., Gupta, A., Khajuria, A., Sidiq, T., Reddy, D. M., Kumar, H. M. S. (2011). Study of the adjuvanticity of lysine lipopeptides; carbamate analogs elicit strong Th1 and Th2 response to ovalbumin in mice. *International Immunopharmacology*, 11(11), 1855-1863. **[Impact Factor: 2.551]**
52. Ahmad, S., Rathish, I. G., Bano, S., Alam, M. S., & Javed, K. (2010). Synthesis and biological evaluation of some novel 6-aryl-2-(p-sulfamylphenyl)-4,5-dihydropyridazin-3(2H)-ones as anti-cancer, antimicrobial, and anti-inflammatory agents. *Journal of Enzyme Inhibition and Medicinal Chemistry*, 25(2), 266-271. **[Impact Factor: 3.428]**
53. Kaur, G., Athar, M., & Alam, M. S. (2010). Dietary supplementation of silymarin protects against chemically induced nephrotoxicity, inflammation and renal tumor promotion response. *Investigational New Drugs*, 28(5), 703-713. **[Impact Factor: 3.281]**
54. Rahman A, Soni A, Venkata N., Palle P, Dastidar S G, Ray A, Mohammad Sarwar Alam, Cliffe I and Sattigeri V (2010), Synthesis and biological activity of N-substituted aminocarbonyl-1, 3-dioxolanes as VLA-4 antagonist, *Bioorg Med Chem Lett*, 20, 5514-5520. **[Impact Factor: 2.331]**.
55. Kaur G, Athar M, Mohammad Sarwar Alam (2010), Eugenol precludes cutaneous chemical carcinogenesis in mouse by preventing oxidative stress and inflammation and by inducing apoptosis, *Mol Carcinog*, 49, 290-301. **[Impact Factor: 4.722]**.
56. Bashir R, Yaseen, S, Ovais, S, Ahmad, S, Hamid H, Mohammad Sarwar Alam, Mohammad Samim, Kalim Javed (2010) Synthesis and biological evaluation of some novel sulfamoylphenyl-pyridazinone as anti-inflammatory agents (Part-II), *J Enzym Inhib Med Chem*, 25, 266-271, **[Impact Factor: 3.428]**
57. Sharmin E, Alam M S, Philip R.K, Ahmad S., Linseed amide diol/DGEBA epoxy blends for coating applications: Preparation, characterization, ageing studies and coating properties. *Prog Org Coat*, 67, (2), 170-179 (2010), **[Impact Factor: 2.632]**.
58. Kaur G, Alam MS, Athar M (2009), Cumene hydroperoxide debilitates macrophage physiology by inducing oxidative stress: possible protection by alpha-tocopherol, *Chem Biol Interact*, 179 (2-3), 94-102, **[Impact Factor: 2.618]**.
59. Chaudhary S C, Alam M S, Siddiqui M S, Athar M (2009) Chemopreventive effect of farnesol on DMBA/TPA-induced skin tumorigenesis: Involvement of inflammation, Ras-ERK pathway and apoptosis. *Life Sci*, 85 (5-6), 196-205. **[Impact Factor: 2.685]**.
60. Chaudhary SC, Alam MS, Siddiqui MS, Athar M (2009), Perillyl alcohol attenuates Ras-ERK signaling to inhibit murine skin inflammation. *Chem Biol Interact*, 179 (2-

3), 145-53. **[Impact Factor: 2.618]** .

61. Rathish IG, Kalim Javed, Sameena Bano, Shamim Ahmad, MS Alam, KK Pillai (2009), Synthesis and blood glucose lowering effect of novel pyridazinone substituted benzenesulfonylurea derivatives, *Eur J Med Chem*, 44, 2673-2678. **[Impact Factor: 3.902]**.
62. Reehana Khan, Abdul Sami Shawl, Mudasir Tantray and M. Sarwar Alam (2008) New Coumarin glycosides from *Rhododendron lepidotum* Wall, *Fitoterapia*, 79 (3), 232-233, **[Impact Factor: 2.408]**.
63. Kaur G, Sarwar Alam M, Athar M (2008), Quercus infectoria galls possess antioxidant activity and abrogate oxidative stress-induced functional alterations in murine macrophages. *Chem Biol Interact*, 171(3), 272-82, **[Impact Factor: 2.618]**.
64. Abid H Banday, Swarn Singh, M Sarwar Alam (2007), Doma M Reddy, B D Gupta and H M Sampath Kumar Synthesis of novel steroidal D- ring substituted isoxazoline derivatives of 17 - oxoandrostanes, *Steroids*, 73, 370-374 (2007), **[Impact Factor: 2.639]**.
65. Lone IA, Kaur G, Athar M, Alam MS (2007), Protective effect of *Rumex patientia* (English Spinach) roots on ferric nitrilotriacetate (Fe-NTA) induced hepatic oxidative stress and tumour promotion response, *Food Chem Toxicol*, 45, 1821-1829. **[Impact Factor: 3.584]**.
66. Sarwar Alam M, Kaur G, Jabbar Z, Javed K, Athar (2007), M *Eruca sativa* seeds possess antioxidant activity and exert a protective effect on mercuric chloride induced renal toxicity, *Food Chem Toxicol*, 45, 910-20, **[Impact Factor: 3.584]**.
67. Kaur G, Lone IA, Athar M, Alam MS (2007), Protective effect of *Didymocarpus pedicellata* on ferric nitrilotriacetate (Fe-NTA) induced renal oxidative stress and hyperproliferative response. *Chem Biol Interact*, 165, 33-44. **[Impact Factor: 2.618]**

### Books/Chapters

1. Chitosan based novel wound dressing systems. Bhuvanesh Gupta, Abha Arora, **M. Sarwar Alam**. Book chapter in Chitin and chitosan: Research guide to literature, P.K. Dutta (Ed.), MNNIT, Allahabad.
2. B. Gupta, R. Agarwal and M.S. Alam, " **Hydrogels for wound healing applications**", Woodhead Publishing, In Press (2010).

### Ph. D. Students/Research projects

Ph. D. students guided: 28  
Ph. D. students enrolled: 03  
R & D projects undertaken: 07

### Other activities

- University Proctor since 2014
- Dean, School of Interdisciplinary Sciences and Technology from 2014 - 2017
- Head, Department of Chemistry, Jamia Hamdard from 2001 – 2014
- Chairman Admission Committee, Jamia Hamdard for the academic session 2005 - 06 and 2006 - 07

- Director, Open and Distance Learning, Jamia Hamdard from 2008 - 2009
- Coordinator, Post Graduate Diploma in Chemoinformatics (PGDC) in Open and Distance Learning, Jamia Hamdard from 2003 till date
- In charge, Purchase and Stores, Jamia Hamdard from 2001 - 2005
- Resource person in the Refreshers Course in Chemistry conducted by Aligarh University from 28<sup>th</sup> July to 18<sup>th</sup> August 2004.
- Resource person in the Refreshers Course in Chemistry conducted by Punjabi University from 15<sup>th</sup> Feb. to 16<sup>th</sup> Feb 2011.
- Secretary, Games Committee, Jamia Hamdard from 2000 - 2004