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Photograph



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Education			
Degree	Organization	Year	Subject
M.Sc.	University of Allahabad, Allahabad	2008	Biochemistry
Ph.D.	University of Allahabad, Allahabad	2014	Biochemistry
Post Doctorate	King Georges Medical University, Lucknow	2015	Biochemistry
Experience			
Organization	Title	Year	
King Georges Medical University, Lucknow	ICMR, Senior Research Fellow	Prior to 27 th Oct 2014	
King Georges Medical University, Lucknow	ICMR, Research Associate	27 th Oct 2014- June 2015	
Teaching Assignments			
1. Biochemistry LSS503 2. Biochemistry (Practical) LSS507 3. Biochemistry LSS565 4. Applied Enzymology LSS555 4. Applied Enzymology (Practical) LSS556 5. Clinical Biochemistry LSS559 6. Clinical Biochemistry (Practical) LSS560 7. Basics of Biochemistry-I LSS421 8. Secondary Metabolites and Metabolic Engg. LBC.550			
Research Project			
<ul style="list-style-type: none"> ➤ Effect of <i>Withania somnifera</i> phytoconstituents on miRNA expression profile in breast cells: Therapeutic and Cytoprotective role. (50 Lakhs, Amount Not Yet Received) ➤ Identification and validation of novel notch signaling pathway inhibitors as potential anticancer agents of natural origin. (10 Lakhs, Amount Not Yet Received) ➤ To study the molecular mechanism of natural compounds as notch signaling inhibitor in cancer cell lines: <i>in silico</i> and <i>in vitro</i> investigation. (3 Lakhs, Ongoing) 			
Professional Recognition /Awards/Scholarship			
<ul style="list-style-type: none"> ➤ Life member of Italo-Latin American Society of Ethnomedicine ➤ Life member of Indian Sciences Congress Association, India ➤ Life Member of Indian Academy of Biomedical Sciences Society, India 			

- Member of Publication Integrity & Ethics, London
- Member of Asian Council of Science Editors, Dubai, UAE
- Poster Award 27th Annual National Conference & International CME (November 25th-27th 2014)
- AU-CRET University Scholarship (2009-2010)
- UGC-Junior Research Fellowship (2009-2011)
- UGC-Senior Research Fellowship (2011-2014)
- ICMR-Senior Research Fellowship (2014)
- ICMR-Research Associate Fellowship (2014-2015)
- CSIR-NET (2014)

Peer Recognition

Editorial Board Member/Reviewer

- Journal of Herbal Medicine
- British Journal of Medicine and Medical Research
- World Journal of Pharmaceutical Sciences
- American Journal of Drug Delivery and Therapeutics
- American Journal of Ethnomedicine
- American Journal of Pharmacology and Pharmacotherapeutics
- SOJ Biochemistry

Area specializations/Research Interest

- Molecular Biology of Cancer (breast and prostate)
- Molecular biology of Diabetes (wound healing and inflammatory markers)
- Characterization, identification, biochemical and antimicrobial activities of Plant products

Publications

Research Papers and Review Articles

S. No.	Authors, title, journal, volume, page numbers
1	Kumar S , Hussain SR, Waseem M, Mahdi F, Bansal C, Ahmad MK. (2016) D allele frequency in insertion/deletion polymorphism of the angiotensin converting enzyme (ACE) gene is associated with development of breast cancer risk in Indian women. <i>Current Proteomics</i> , 13:4. (IF=0.6)
2.	Waseem M, Hussain SR, Kumar S , Serajuddin S, Mahdi F, Sonkar KS, BAnsai C, Ahmad AK. (2016) Association of <i>MTHFR</i> (C677T) gene polymorphism with breast cancer in north india. <i>Biomarkers in Cancer</i> , 8:111-117. doi:10.4137/BIC.S40446. (PMCID PMC5040218)
3.	Kushwaha PP, Rapalli KC, Kumar S (2016) Geminin a multi task protein involved in cancer pathophysiology and developmental process: A review. <i>Biochimie</i> 131 (2016) 115-127. (IF=3.017)
4.	Bais S S, Lawrence K, Kumar S , Lawrence R (2015). <i>Eichhorniacrassipes</i> (Mart.) Solm: A biotic resource for waste water treatment. <i>World J Pharmaceut Sci.</i> 3:1
5.	Sanjay S S, Pandey A C, Kumar S , Pandey A K. (2014).Membrane protective efficacy of ZnO nanoparticles," <i>OP Transactions on Nano-technology.</i> 1:1, 21-29
6.	Kumar S and Pandey AK. (2014). Medicinal attributes of <i>S. xanthocarpum</i> fruit consumed by several tribal communities as food: An antioxidant, anticancer and anti HIV perspective," <i>BMC Comp Alt Med</i> , 14:112 (IF= 2.08)
7.	Kumar S , Pandey S, Pandey A. K. (2014). In vitro antibacterial, antioxidant, cytotoxic activities of <i>Parthenium hysterophorus</i> and characterization of extracts by LC MS analysis. <i>BioMed Research</i>

	<i>International (Formerly titled Journal of Biomedicine and Biotechnology)</i> . Article ID 495154 (IF= 2.88)
8.	Kumar S , and Pandey A. K. (2014). Preliminary evaluation of biological activities and phytochemical analysis of <i>Syngonium podophyllum</i> leaf. <i>National Academy Science Letters</i> , 38:2, 143-146. (IF= 0.4)
9.	Kumar S , Kumar R, Diwedi A, and Pandey A. K. (2014). <i>In vitro</i> antioxidant, antibacterial, cytotoxic activity and <i>in vivo</i> efficacy of <i>Syngonium podophyllum</i> and <i>Eichhornia crassipes</i> leaf extracts on isoniazid induced oxidative stress and hepatic markers. <i>BioMed Res Int</i> . 2014: Article ID 459452. (IF = 2.88)
10.	Sharma A K, Kumar S and Pandey A K. (2014). Cell cycle inhibitory activity of <i>Piper longum</i> against A549 cell line and its protective effect against metal-induced toxicity in rats. <i>Ind J BiochemBiophys</i> . 2014, 51. (IF= 1.077)
11.	Sharma A K, Kumar S and Pandey A K. (2014). Ferric reducing, antiradical and cytotoxic activities of <i>Tinosporacordifoliastem</i> extract. <i>Biochem Anal Biochem</i> . 3:2
12.	Mishra A, Kumar S and Pandey AK. (2013). Scientific validation of the medicinal efficacy of <i>Tinosporacordifolia</i> ," <i>Scientific World J</i> , 2013, Article ID 292934. (IF= 1.73)
13.	Kumar S , Chashoo G, Saxena AK and Pandey AK, (2013). <i>Parthenium hysterophorus</i> : a probable source of anticancer, antioxidant and anti-HIV agent. <i>BioMed Res Int.</i> , 2013: Article ID 810734. (IF= 2.88)
14.	Mishra A, Sharma AK, Kumar S , Saxena AK and Pandey AK. (2013). <i>Bauhinia variegata</i> leaf extracts exhibit considerable antibacterial, antioxidant and anticancer activities. <i>BioMed Res Int</i> , 2013: Article ID 915436, 10 pages. (IF= 2.88)
15.	Kumar S , Gupta AK and Pandey AK.. (2013) <i>Calotropis procera</i> root extract has capability to combat free radical mediated damage. <i>ISRN Pharmacol</i> , 2013: Article ID 691372
16.	Kumar S , Mishra A, and Pandey AK. (2013) Antioxidant mediated protective effect of <i>Parthenium hysterophorus</i> against oxidative damage using <i>in vitro</i> models. <i>BMC Comp Alt Med</i> , 13:120 (IF= 2.08)
17.	Kumar S , and Pandey AK.. (2013). Phenolic content, reducing power and membrane protective activities of <i>Solanum xanthocarpum</i> root extracts. <i>Vegetos- An Int J Plant Res</i> , 26, 301-307. (IF= 0.04)
18.	Kumar S , Sharma UK, Sharma AK and Pandey AK. (2012). Protective efficacy of <i>Solanum xanthocarpum</i> root extracts against free radical damage: phytochemical analysis and antioxidant effect. <i>Cell Mol Biol</i> , 58, 171-178. (IF= 1.46)
19.	Kumar S , and Pandey AK. (2012.) Antioxidant, lipo-protective and antibacterial activities of phytoconstituents present in <i>Solanum xanthocarpum</i> root. <i>Int Rev Biophysical Chem</i> , 3, 42-47
20.	Mishra A, Kumar S , Bhargava, A, Sharma, B, and Pandey, A.K. (2011). Studies on <i>in vitro</i> antioxidant and anti staphylococcal activities of some important medicinal plants, <i>Cell Mol Biol</i> , 57, 16-25. (IF= 1.46)
21.	Pandey A K, Mishra A, Kumar S , and Chandra, A. (2010). Therapeutic Potential of <i>C. zeylanicum</i> extracts: An antifungal and antioxidant perspective, <i>Int J Biol Med Res</i> . 1(4): 228-233
22.	Kumar S and Pandey AK. (2015). Free radicals, from oxidative stress to disease and their mitigation by herbals, <i>British J Med Med Res</i> . 7 (6), 438-457
23.	Kumar S and Pandey AK. (2014). Pharmacological activities of some common Indian weeds: A review, <i>Mintage J Pharmaceut Med Sci</i> , 3, 12-17

24.	Kumar S , Gupta R, Kaleem AM, Pandey AK. (2014). Mitigation of pain and anesthetic drugs, <i>OA Anaesthetics</i> , 2 (1): 2
25.	Pandey A K, and Kumar S . (2014) Perspective on plant products as antimicrobials agents: A review, <i>Pharmacologia</i>
26.	Kumar S and Pandey AK. (2013). Chemistry and Biological Activities of Flavonoids: An Overview. <i>ScientificWorld J</i> , 2013,Article ID162750. (IF= 1.73)
27.	Kumar S , Ahamad MK, Waseem M, Pandey AK (2015). Drug targets for cancer treatment: An overview, <i>Med Chem</i> . 5:3, 115-123

Editorial Articles

28.	Kumar S . (2016) Biological/Biosimilar Drugs: A new hope for better and low cost treatment. <i>JOJ Case Stud</i> , 1(3) : 555563.
29.	Kumar S . (2016) Geminin as an emerging anticancer drug target. <i>JOJ Case Stud</i> , 1(1) : 555554.
30.	Kumar S . (2016) Novel Wnt and Notch signaling natural inhibitors as double edged sword against cancer war: an approach towards computer based drug design. <i>Cancer Therapy & Oncology</i> , 1(4): 555570. DOI: 10.19080/CTOIJ.2016.01.555570
31.	Kumar S (2015). MicroRNAs an evolving prognostic, diagnostic and therapeutic target in prostate cancer. <i>World J Pharmaceut Sci</i> . 3:3, 387-389
32.	Kumar S (2014). Emerging trends in pharmaceutical sciences: <i>An introduction</i> . <i>World J Pharmaceut Sci</i> . 2:12, 1592-1593

Book Chapters

1.	Kumar S and Chaitanya RK (2016). Antioxidants as hope to future therapeutic agents. <i>In: Role of antioxidants in health and disease prevention</i> . Agrawal B and Pandey A. (Ed.). Anubhav Publishing House, Allahabad, 211006. 27-33. ISBN:978-93-80134-75-8.
2.	Kushwaha PP and Kumar S (2017). Advances in Biochemistry of Medicinal Plants. <i>In: Biochemistry and therapeutic uses of medicinal plants</i> . Mahdi AA, Sharma YK, Abid M, Khan MMAA. (Ed.). Discovery Publishing House Pvt. Ltd., New Delhi, India. 41-54. ISBN: 978-93-5056-866-8.

Articles in Conference Proceedings

1.	Kumar S , and Pandey, AK, (2013) Phytochemicals analysis, cytotoxic and radical scavenging activities of <i>Partheniumhysterophorus</i> . In: Proceedings of Intl Conf on health, environment and industrial biotechnology (ICHEIB BioSangam 2013). Editor S. Sharma, McGraw Hill Education (India) Pvt Ltd., New Delhi. pp 271-274. ISBN (13): 978-9-33-290137-7
2.	Kumar R, Diwedi A, Kumar S and Pandey A. K. (2014) Effect of <i>Eichhorniacrassipes</i> leaf aqueous extract on isoniazid induced oxidative stress and hepatic markers in albino wistar rats. In: Proceedings of All India Seminar on Recent Advances in Biotechnology and Human Health Care (March 2014). Editors R. Shrivastava, and B. Modhera, 1-7

Workshop/Conferences

1. "**Fifth all India summer research training program on Molecular Techniques**" at Sengunthar College, Salempur, Erode, Tamil Nadu. (June 2008)
2. "**Training on handling and operation of HPLC**" at Instrumentation Department, Indian Institute of Integrated Medicine,

Jammu. (June 2012)

3. ***“Interactive workshop on Biotechnology”*** at Department of Biochemistry, University of Allahabad. (9th -10nd May, 2010)
4. ***“National workshop On Climate Change: Perspectives in Health and Biotechnology”*** at Department of Zoology University of Allahabad. (2nd -5th December, 2010)
5. ***“Characterization Techniques in Nanotechnology”*** at The National Academy of Sciences, India, Allahabad. (12th-13th February, 2011)
6. ***“Noble laureate Conclave”*** at Sanjay Gandhi Post Graduate Institute of Medical Sciences (SGPGI) Lucknow. (8th -9th March, 2011)
7. ***“4th inspire internship program/science conclave: congregation of Nobel Laureates and Eminent Scientists.”*** at IIT Allahabad. (26th November-2nd December, 2011)
8. ***“Molecular biology application in herbal drug design and diagnostic.”*** At Department of Biochemistry, University of Allahabad. (31st March- 2nd April 2011)
9. ***“In silico approach for drug discovery”*** at Department of Biochemistry, University of Lucknow. (9th -10th September 2011)
10. ***“Computational method in physical, geological modeling and drug designing.”*** At University of Allahabad. (29th September -1st October 2011).
11. ***“Workshop on research paper writing.”*** Organized by NASI- Allahabad. (22nd - 24th October 2011)
12. Workshop on ***“Scientific paper writing”*** at Lucknow. Organized by NASI- Allahabad. (6th-8th January, 2012)
13. ***“Molecular genetics and environmental genotoxicity”*** at Department of Zoology, University of Allahabad (3rd- 5th February 2012)
14. ***“Advance immunology course”*** At Department of Biochemistry, KGMU, Lucknow. (22nd -23rd February, 2013)
15. ***“Awareness workshop for RajatJayantiVigyanSancharak Fellowship, 2013-14”*** At The National Academy of Sciences, Allahabad, India. (30th September, 2013).
16. ***“1st Update on molecular diagnosis of infectious diseases.”*** Organized by Post Graduate Department of Microbiology, KGMU, Lucknow. (21st July, 2014).
17. ***“National forensic odontology continuing dental education programe and forensic workshop.”*** Organized by Department of Oral Pathology and Microbiology, KGMU, Lucknow. (2nd -3rd September, 2014).
18. ***“10th Annual INDO-US Emergency Medicine Summit”***. Organized by King Georges Medical University, Lucknow. (October 18th-19th 2014).
19. ***“Self financed short term course on recent advances in fermentation technology (SFC-RAFT 2015)”***. Organized by Motilal Nehru National Institute of Technology Allahabad, at Department of Biotechnology, MNNIT, Allahabad. (14th -18th January, 2015).

Papers presented in Conferences/Symposia

1. International Conference on ***“5th World Congress of Cellular and Molecular Biology”*** Indore, India. (2nd-6th November, 2009)
2. National Conference on ***“Emerging Trends in Biochemistry and Satellite Symposium of the Academy of Environmental Biology”***. Conducted by Department of Biochemistry, University of Allahabad, India. (23rd-24th January, 2010)
3. National Conference on ***“Bioprospective-Access for Sustainable Development”***. Held at Department of Applied

Mechanism (Biotechnology) MotiLal Nehru National Institute of Technology, Allahabad .India. (19th-20th February, 2010)

4. **“3rd International Conference on PARTHENIUM”** ,.Organised by ICAR and IARI, New Delhi, India. (8th-10nd December, 2010)
5. National conference on **“Frontiers in biological sciences”** organized by VVS Purvanchal University UP. (4th -5th December, 2011)
6. **“VIIIth Annual Conference of Indian association of medical microbiologist-UP Chapter”**. Organized by MLN Medical College Allahabad. (11th February, 2012)
7. National seminar on **“Challenges in combating diseases: cause to care”**. Organized by Department of zoology MD University Rohtak, Haryana. Sponsored by MDU Rohtak and CSIR New Delhi. (23rd March, 2012).
8. **“82 Annual Session of the Academy**. Organized by The National Academy of Sciences at Banaras Hindu University, Varanasi. (29th November- 1st December, 2012)
9. International Conference on **“Biotechnology: A rendezvous with basic sciences for global prosperity”** (BTBS-2012). Organized by society for plant research and Vegetos at PUSA New Delhi. (26th -27th December, 2012)
10. **“100th Indian Science Congress**, At Calcutta University Kolkata. (3rd -7th January, 2013)
11. International Symposium (Indo-UK genetic education forum) on **“Current trends in genetic and genomic medicine”**. Dr. Ram ManoharLohia institute of medical sciences, Lucknow. (31st January, 2013)
12. National Seminar on **“Exciting frontiers of research in sciences and technology”**. Organized by Indian science congress association, Allahabad chapter at Department of Chemistry, University of Allahabad, Allahabad. (28th February- 1st March, 2013)
13. Attended **“Second annual conference of The Indian Academy of Biomedical Sciences (IABS) and International Symposium on animal models of human diseases”**. at Department of Biochemistry, King George’s Medical University, Lucknow. (29th January, 2013)
14. Attended **“National Symposium on lead awareness”**. at Department of Biochemistry, King George’s Medical University, Lucknow. (5th-6th October, 2013)
15. **“International conference and exhibition on pharmacognosy, phytochemistry and natural products”**. Organized by OMICS Group Conferences, in Hyderabad. (21st-23rd October, 2013)
16. Attended **“Indo-US symposium on impact of early life adversity on developing brain”**. at Department of Biochemistry, King George’s Medical University, Lucknow. (29th October, 2013)
17. National Symposium on **“Recent advances in Biochemistry and Biotechnology: Applications in health, environmental and agriculture”** at Department of Biochemistry, University of Lucknow, Lucknow. (29th -31th October, 2013)
18. **“International Conference on health, environment, and industrial biotechnology”**. At Motilal Nehru National Institute of Technology Allahabad, Allahabad. (21st -23th November, 2013)
19. Presented paper under Young Scientist Award Category in **“International conference on health, environment, and industrial biotechnology”**. At Motilal Nehru National Institute of Technology Allahabad, Allahabad. (21st -23th November, 2013)
20. **“101th Indian Science Congress**, At University of Jammu, Jammu. (3rd-7th January, 2014)
21. “National Seminar on **“Challenges of changing scenario of biodiversity through ages: support for sustainable**

development". At Faculty of Sciences DeenDayalUpadhyay Govt. Post Graduate College, Saidabad, Allahabad. (30th -31st March, 2014)

22. "**National Science Congress Association, Allahabad Chapter**". At Department of Chemistry, University of Allahabad, Allahabad. (30th -31st March, 2014)

23. "**National Technology Day**" Organized by, The National Academy of Sciences, India at Allahabad (11th May, 2014)

24. "**27th Annual National Conference & International CME, Indian Society for Atherosclerosis Research Innovations in Atherosclerosis & Cardiac Diseases**". Organized by Department of Pathology, KGMU, Lucknow. (November 25th-27th 2014).

25. "**84th Annual Scientific Session of The National Academy of Sciences**". Organized by, The National Academy of Sciences, India at Jai Narayan Vyas University, Jodhpur, Rajasthan. (4th - 6st December, 2014)

26. "**102nd Indian Science Congress**". Organized by, The Indian Science Congress Association, India, Jai University of Mumbai, Mumbai. (3rd– 7th January, 2015)

27. International conference on "**Recent advances in research and treatment of human diseases & 4th annual meeting of Indian Academy of Biomedical Sciences**". Organized by, Indian Academy of Biomedical Sciences at CSIR-IICT, Hyderabad, India. (9th– 11th January, 2015)

Research Grants

1. Effect of *Withania somnifera* phytoconstituents on miRNA expression profile in breast cells: Therapeutic and Cytoprotective role.

Funding Agency: Department of Science and Technology, Government of India, Science & Engineering Research Board (SERB), **Rs. 50,000,00/-**

2. Identification and validation of novel notch signaling pathway inhibitors as potential anticancer agents of natural origin.

Funding Agency: University Grants Commission, Start-Up Grant, **Rs. 10,000,00/-**

3. To study the molecular mechanism of natural compounds as Notch signaling inhibitor in cancer cell lines: *in silico* and *in vitro* investigation

Funding Agency: Central University of Punjab, Research Seed Money, **Rs. 3,000,00/-**