

Pawan Kumar Maurya (M.Sc., Ph.D.)

Professor & Head

Department of Biochemistry
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Research Interests: Aging, oxidative stress, neuropsychiatric disorders

Teaching Interest: Biochemistry & Metabolism

Career: (~13 Years)

Teaching & Research

- Professor, Department of Biochemistry, CUH (August 2021-till date)
- Associate Professor, Department of Biochemistry, CUH (August 2018-August 2021)
- Assistant Professor, Amity University Uttar Pradesh (September 2008-August 2018)
- Lecturer, SBS-PGI of Biomedical Science & Research, Dehradun (December 2007-September 2008)

Research

- Post-doctoral Research Fellow, Taipei Medical University, Taipei, Taiwan (May 2011-March 2012)
- Post-doctoral Research Fellow, Federal University of Sao Paulo, Brazil (October 2014-September 2014)

Education:

- M.Sc. Biochemistry (2003), Ph.D. Biochemistry (2008)-University of Allahabad, CSIR-NET-Life Science

Research Profile as on 22.03.2022:

- Citation: **2877** (h-index-**30**, i10-index-**61**)
- No. of Papers Published in peer reviewed Journals: **73**; Books: **09**; Book chapters: **21**; Conferences/proceedings: **20**

Link: (<https://scholar.google.co.in/citations?user=aUr486UAAAAJ&hl=en>)

Publications:

1. Yadav S, **Maurya, PK***. Correlation between telomere length and biomarkers of oxidative stress in human aging. *Rejuvenation Research*. 2022 Feb 3. [PMID: 35044242] doi: 10.1089/rej.2021.0045.. (**Impact Factor: 4.663**).

2. Yadav S, **Maurya, PK***. Recent advances in the protective role of metallic nanoparticles in red blood cells. *3 Biotech*. 12(1):28; 2022 [PMID: 35036276]. (**Impact Factor: 2.406**).
3. Yadav S, **Maurya, PK***. Biomedical applications of metal oxide nanoparticles in aging and age-associated diseases. *3 Biotech*. 11 (7):1-15; 2021. [PMID: 34221809]. (**Impact Factor: 2.406**).
4. Kumar A, **Maurya PK***. Quercetin mitigates red blood cell membrane bound Na⁺, K⁺-ATPase transporter during human aging. *Journal of Membrane Biology*. 254(5-6):459-462; 2021 [PMID: 34480589]. (**Impact Factor: 1.843**).
5. Talarico F, Xavier G, Ota VK, Spindola LM, **Maurya PK**, Tempaku PF, Moretti PS, Gadelha A, Noto M, Noto C, Cordeiro Q, Bressan RA, Jong S, Santoro ML, Breen G, Belangero SI. Altered aging biological markers in a cohort of antipsychotic-naïve first-episode psychosis patients. *Psychoneuroendocrinology*. 132:105350; 2021. [PMID: 34271521] (**Impact Factor: 4.905**)
6. Kuhad U, Goel G, **Maurya PK**, Kuhad RC. Sukshmjeevanu in Vedas: The Forgotten Past of Microbiology in Indian Vedic Knowledge. *Indian Journal of Microbiology*. 61(1):108-110; 2021 [PMID: 33505101]. (**Impact Factor: 2.461**).
7. Aggarwal T, Wadhwa R, Gupta R, Collet T, Chellapan DK, Gupta G, Perumalsamy H, Mehta M, Satija S, Hansbro PM, Dua K, **Maurya PK***. MicroRNAs as Biomarker for Breast Cancer. *Endocrine, Metabolic & Immune Disorders - Drug Targets*. 20(10):1597-1610; 2020 [PMID: 32342824]. (**Impact Factor:1.973**).
8. Rahmawati E, Yang WCV, Lei YP, **Maurya PK**, Chen HW, Tzeng CR. Decreased level of neurotrophic factor neuritin 1 in women with ovarian endometriosis after receiving gonadotropin-releasing hormone agonist treatment. *International Journal of Molecular Sciences*. 20(18): 4352, 2019. [PMID: 31491902]. (**Impact Factor: 5.923**).
9. Wadhwa R, Aggrawal T, Thapliyal N, Kumar S, Priya, Yadav P, Kumari V, Reddy BSC, Chandra P, **Maurya PK***. Red blood cells as an efficient in vitro model for evaluating the efficacy of metallic nanoparticles. *3 Biotech*. 9:279; 2019. (**Impact Factor: 2.406**).
10. Kumar A, Purohit B, **Maurya PK**, Pandey LM, Chandra P. Engineered Nanomaterial Assisted Signal-amplification Strategies for Enhancing Analytical Performance of Electrochemical Biosensors. *Electroanalysis*. 24 June 2019. (**Impact Factor: 3.223**).
11. Aggrawal T, Wadhawa R, Thapliyal N, Sharma K, Rani V, **Maurya PK***. Oxidative, inflammatory, genetic and epigenetic biomarkers associated with chronic obstructive pulmonary disorder. *Journal of Cellular Physiology*. 234(3):2067-2082; 2019. [PMID: 30171697 DOI: 10.1002/jcp.27181.] (**Impact Factor: 6.384**).
12. Wadhwa R, Pandey P, Gupta G, Aggarwal T, Kumar N, Mehta M, Satija S, Gulati M, Madan JR, Dureja H, Balusamy SR, Perumalsamy H, **Maurya PK**, Collet T, Tambuwala

- MM, Hansbro PM, Chellappan DK, Dua K. Emerging Complexity and the Need for Advanced Drug Delivery in Targeting *Candida* Species. *Current Topics in Medicinal Chemistry*. 19(28):2593-2609; 2019. doi: 10.2174/1568026619666191026105308. PMID: 31746290 (**Impact Factor: 3.295**).
13. Kumar V, Wadhwa R, Kumar N, **Maurya PK***. Comparative study of chemically synthesised and *Camellia sinensis* leaf extract mediated silver nano-particles. *3 Biotech*. 9(1):7; 2019. [PMID: 30622845 DOI: 10.1007/s13205-018-1544-0] (**Impact Factor: 2.406**).
 14. Mehta M, Deeksha, Sharma N, Vyas M, Khurana N, **Maurya PK**, Singh H, Andreoli de Jesus TP, Dureja H, Chellappan DK, Gupta G, Wadhwa R, Collet T, Hansbro PM, Dua K, Satija S. Interactions with the macrophages: An emerging targeted approach using novel drug delivery systems in respiratory diseases. *Chemico-Biological Interactions*. 304:10-19; 2019. (**Impact Factor: 5.192**).
 15. Dua K, Wadhwa R, Singhvi G, Rapalli VK, Shukla SD, Shastri MD, Gupta G, Satija S, Mehta M, Khurana N, Awasthi R, **Maurya PK**, Thangavelu L, Kumar SR, Tambuwala MM, Collet T, Hansbro PM, Chellappan DK. The potential of siRNA based drug delivery in respiratory disorders: recent advances and progress. *Drug Development Research*. 80 (6): 714-730; 2019 (**Impact Factor: 4.360**).
 16. Wadhwa R, Aggarwal T, Malya V, Kumar N, Gupta G, Chellappan DK, Dureja H, Mehta M, Satija S, Gulati M, **Maurya PK**, Collet T, Hansbro PM, Dua K. Identification of biomarkers and genetic approaches towards chronic obstructive pulmonary disease. *Journal of Cellular Physiology*. Feb. 234 (10): 16703-16723; 2019 (**Impact Factor: 6.384**).
 17. Rahmawati E, Yang WCV, **Maurya PK**, Lei YP, Chen HW, Tzeng CR. Gonadotropin-releasing hormone agonist induces downregulation of tensin 1 in women with endometriosis. *Acta Obstetrica et Gynecologica Scandinavica*. 98(2):222-231; 2019.[PMID: 30312486 DOI: 10.1111/aogs.13481]. (**Impact Factor: 3.636**).
 18. Mahato K, Nagpal S, Shah MA, Srivastava A, **Maurya PK**, Roy S, Jaiswal A, Singh R, Chandra P. Gold nanoparticle surface engineering strategies and their applications in biomedicine and diagnostics. *3 Biotech*. 9(2):57; 2019. [PMID: 30729081 DOI: 10.1007/s13205-019-1577-z] (**Impact Factor: 2.406**).
 19. Dua K, Malya V, Singhvi G, Wadhwa R, Krishna RV, Shukla SD, Shastri MD, Chellappan DK, **Maurya PK**, Satija S, Mehta M, Gulati M, Hansbro N, Collet T, Awasthi R, Gupta G, Hsu A, Hansbro PM. Increasing Complexity and Interactions of Oxidative stress in Chronic Respiratory Diseases: An Emerging Need for Novel Drug Delivery Systems. *Chemico-Biological Interactions*. 99:168-178; 2019. [PMID: 30553721 DOI: 10.1016/j.cbi.2018.12.009] (**Impact Factor: 5.192**).
 20. Wadhwa R, Gupta R, **Maurya PK***. Oxidative stress and accelerated aging in

neurodegenerative and neuropsychiatric disorder. *Current Pharmaceutical Design*. 24(40):4711-4725; 2018. [PMID: 30644343 DOI: 10.2174/1381612825666190115121018.] (**Impact Factor: 3.116**).

21. **Maurya PK**, Rizzo LB, Xavier G, Tempaku PF, Ota VK, Santoro ML, Spíndola LM, Moretti P, Mazzotti DR, Gadelha A, Gouvea ES, Noto C, Maes M, Cordeiro Q, Bressan RA, Brietzke E, Belangero SI. Leukocyte telomere length variation in different stages of schizophrenia. *Journal of Psychiatric Research*. 96 (2018):218-223; 2018 [PMID: 29102816 DOI: 10.1016/j.jpsychires.2017.10.016.] (**Impact Factor: 4.791**).
22. Kumar P, Wadhawa R, Gupta R, Chandra P, **Maurya PK***. Spectroscopic determination of intracellular quercetin uptake using erythrocyte model and its implications in human aging. *3 Biotech*. 8(12):498; 2018. [PMID: 30498671 DOI: 10.1007/s13205-018-1524-4.] (**Impact Factor: 2.406**).
23. Aggrawal T, Wadhawa R, Rohil V, **Maurya PK***. Biomarkers of oxidative stress and protein-protein interaction in chronic obstructive pulmonary disease. *Archives of Physiology and Biochemistry*. 124(3):226-231; 2018.[PMID:29020824 DOI:10.1080/13813455.2017.1387796] (**Impact Factor: 4.076**).
24. Xavier G, Spindola KM, Ota VK, Carvalho CM, **Maurya PK**, Tempaku PF, Moretti PN, Mazotti DR, Sato JR, Brietzke E, Miguel EC, Oliveira RG, Mari J, Bressan RA, Gadelha A, Pan PM, Belangero SI. Effect of male-specific childhood trauma on telomere length. *Journal of Psychiatric Research*. 107:104-109; 2018. [PMID: 30384090 DOI: 10.1016/j.jpsychires.2018.10.012] (**Impact Factor: 4.791**).
25. Tempaku PF, Hirotsu C, Mazzotti DR, Xavier G, **Maurya PK**, Rizzo LB, Brietzke E, Belangero SI, Poyares D, Tufik S. Long-sleepers, insomnia and insomnia with short objective sleep duration are independently associated with short telomere length. *Journal of Clinical Sleep Medicine* 14(12):2037-2045; 2018. [PMID: 30518442 DOI: 10.5664/jcsm.7532] (**Impact Factor: 4.062**).
26. Salehi B, Martorell M, Arbiser JL, Sureda A, Martins N, **Maurya PK**, Sharifi-Rad M, Kumar P, Sharifi-Rad J. Antioxidants: Positive or Negative Actors? *Biomolecules*. 8(4):124; 2018. [PMID: 30366441 DOI: 10.3390/biom8040124]. (**Impact Factor: 4.879**).
27. Rizzo LB, Swardfager W, **Maurya PK**, Graiff MZ, Pedrini M, Asevedo E, Cassinelli AC, Bauer ME, Cordeiro Q, Scott J, Brietzke E, Cogo-Moreira H. An immunological age index in bipolar disorder: a confirmatory factor analysis of putative immunosenescence markers and associations with clinical characteristics. *International Journal of Methods in Psychiatric Research*. 27(4):e1614; 2018. [PMID: 29691917 DOI: 10.1002/mpr.1614] (**Impact Factor: 4.035**).
28. Deori NM, Kale A, **Maurya PK**, Nagotu S. Peroxisomes: role in cellular ageing and age related disorders. *Biogerontology*. 19(5):303-324; 2018. [PMID: 29968207 DOI: 10.1007/s10522-018-9761-9] (**Impact Factor: 4.277**).

29. Mahato K, Kumar A, **Maurya PK**, Chandra P. Shifting paradigm of cancer diagnoses in clinically relevant samples based on miniaturized electrochemical nanobiosensors and microfluidic devices. *Biosensors and Bioelectronics*. 100:411-428; 2018 [PMID: 28957706 DOI: 10.1016/j.bios.2017.09.003] (**Impact Factor: 10.275**).
30. Gandhi S, Banga I, **Maurya PK**, Eremin S. Gold nanoparticles-single chain fragment variable antibody as immunoprobe for rapid detection of morphine by dipstick. *RSC Advances*. **8**: 1511-1518 ; 2018 (**Impact Factor: 3.361**).
31. Mahto K, **Maurya PK***, Chandra P. Fundamentals and commercial aspects of nanobiosensors in point-of-care clinical diagnostics. *3 Biotech*. 8(3):149; 2018. [PMID: 29487778 DOI: 10.1007/s13205-018-1148-8] (**Impact Factor: 2.406**).
32. Baranwal A, Srivastava A, Kumar P, Bajpai VK, **Maurya PK**, Chandra P. Prospects of Nanostructure Materials and their Composites as Antimicrobial Agents. *Frontiers in Microbiology*. 9:422; 2018. [PMID: 29593676 DOI: 10.3389/fmicb.2018.00422] (**Impact Factor: 5.640**).
33. **Maurya PK**, Rizzo LB, Xavier G , Tempaku PF, Zeni-Graiff M ,Mazzotti DR, Zugman A, Pan P, Noto C, Maes M, Asevedo E, Mansur RB, Cunha GR, Gadelha A, Bressan RA, Belangero SI , Brietzke E. Shorter leukocyte telomere length in patients at ultra high risk for psychosis. *European Neuropsychopharmacology*. 27(5):538-542; 2017 [PMID: 28274506 DOI: 10.1016/j.euroneuro.2017.02.008] (**Impact Factor: 4.600**).
34. Zeni-Graiff M, Rios AC, **Maurya PK**, Rizzo LB, Sethi S, Yamagata AS, Mansur RB, Pan P, Asevedo E, Cunha GR, Zugman A, Bressan RA, Gadelha A, Brietzke E. Peripheral levels of superoxide dismutase and glutathione peroxidase in a sample of youth in ultra-high risk for psychosis: A pilot study. *CNS Spectrums*. 24(3):333-337; 2019 (**Impact Factor: 3.790**).
35. Rios AC, **Maurya PK**, Pedrini M, Zeni-Graiff M, Asevedo E, Mansur RB, Wieck A, Grassi-Oliveira R, McIntyre RS, Hayashi MAF, Brietzke E. Microbiota abnormalities and the therapeutic potential of probiotics in the treatment of mood disorders. *Reviews in the Neurosciences*. 28(7):739-749; 2017 [PMID: 28593878 DOI: 10.1515/revneuro-2017-0001]. (**Impact Factor: 4.353**).
36. **Maurya PK**, Noto C, Rizzo LB, Rios AC, Nunes SOV, Barbosa DS, Sethi S, Zeni M, Mansur RB, Maes M, Brietzke E. The role of oxidative and nitrosative stress in accelerated aging and major depressive disorder. *Prog. Neuropsychopharmacol. Biol. Psychiatry*. 65:134-144; 2016 [PMID: 26348786 DOI: 10.1016/j.pnpbp.2015.08.016]. [Citations:11] (**Impact Factor: 4.361**).
37. Kumar P, Chaudhary N, Sharma NK, **Maurya PK***. Detection of oxidative stress biomarkers in myricetin treated red blood cells. *RSC Advances*. 6:100028-10002016; 2016 [DOI:10.1039/C6RA15213A]. (**Impact Factor: 3.361**).

38. **Maurya PK***, Kumar P, Nagotu S, Chand S, Chandra P. Multi-target detection of oxidative stress biomarkers in quercetin and myricetin treated human red blood cells. *RSC Advances*. 6: 53195-53202; 2016. [DOI: 10.1039/C6RA05121A]. (**Impact Factor: 3.361**).
39. Tempaku PF, Mazzotti DR, Hirotsu C, Andersen ML, Xavier G, **Maurya PK**, Rizzo LB, Brietzke E, Belangero SI, Bittencourt L, Tufik S. The effect of the severity of obstructive sleep apnea syndrome on telomere length. *Oncotarget*. 7(43):69216-69224; 2016. [PMID: 27690344 DOI: 10.18632/oncotarget.12293]. (**Impact Factor: 6.359**).
40. Levandowski ML, Tractenberg SG, Azeredo LA, Nardi T, Rovaris DL, Bau CHD, Rizzo LB, **Maurya PK**, Brietzke E, Tyrka AR, Oliveira RG. Crack cocaine addiction, early life stress and accelerated cellular aging among women. *Prog. Neuropsychopharmacol. Biol. Psychiatry*. 71:83-89; 2016 [PMID: 27346744 DOI: 10.1016/j.pnpbp.2016.06.009]. (**Impact Factor: 4.361**).
41. Zeni-Graiff M, Rizzo LB, Mansur RB, **Maurya PK**, Sethi S, Cunha GR, Asevedo E, Pan P, Zugman A, Yamagata AS, Higuchi C, Bressan RA, Gadelha A, Brietzke E. Peripheral immune-inflammatory abnormalities in ultra-high risk for psychosis. *Schizophrenia Research*. 176(2-3):191-5; 2016 [PMID: 27424266 DOI: 10.1016/j.schres.2016.06.03]. (**Impact Factor: 4.939**).
42. Mansur RB, Cunha GR, Asevedo E, Zugman A, Zeni-Graiff M, Rios AC, Sethi S, **Maurya PK**, Levandowski ML, Gadelha A; Pan PM, Stertz L, Belangero SI, Kauer-Sant'Anna M, Teixeira AL, Mari JJ, Rohde LA, Miguel EC, McIntyre RS, Grassi-Oliveira R; Bressan RA, Brietzke E. Socioeconomic Disadvantage Moderates the Association between Peripheral Biomarkers and Childhood Psychopathology. *PloS One*. 11(8):e0160455; 2016. [PMID: 27489945 DOI: 10.1371/journal.pone.0160455]. (**Impact Factor: 3.240**).
43. Baranwal A, Mahato K, Srivastava A, **Maurya PK**, Chandra P. Phytofabricated metallic nanoparticles and their clinical applications. *RSC Advances*. 6, 105996-106010; 2016 [DOI 10.1039/C6RA23411A] (**Impact Factor: 3.361**).
44. **Maurya PK***, Kumar P, Chandra P. Age dependent detection of erythrocytes glucose-6-phosphate dehydrogenase and its correlation with oxidative stress. *Archives of Physiology and Biochemistry*. 122(2):61-6; 2016. [PMID: 26711700 DOI: 10.3109/13813455.2015.1136648] (**Impact Factor: 4.076**).
45. Kumar P, Chand S, **Maurya PK***. Quercetin modulated erythrocyte membrane sodium hydrogen exchanger during human aging: correlation with erythrocyte ATPase's. *Archives of Physiology and Biochemistry*. 122(3):141-7; 2016. [PMID: 26835548 DOI: 10.3109/13813455.2016.1150299]. (**Impact Factor: 4.076**).
46. Kumar N, **Maurya PK**, Kant R, Rizvi SI. (-) - Epicatechin in vitro ameliorates erythrocyte protein carbonyl content in hypertensive patients: comparison with L-ascorbic acid. *Archives of Physiology and Biochemistry*. 122(3):155-60; 2016. [PMID: 26939969]

DOI: 10.3109/13813455.2016.1159699]. (**Impact Factor: 4.076**).

47. Chandra P, Prasad A, Mahato K, Joshi SN, **Maurya PK**, Srivastava A. Bioinspired composite materials: applications in diagnostics and therapeutics. *Journal of Molecular and Engineering Materials*. 2016. [DOI: 10.1142/S2251237316400049] .
48. **Maurya PK**, Kumar P and Chandra P. Biomarkers of oxidative stress in erythrocytes as a function of human age. *World Journal of Methodology*. 5(4): 216-222; 2015 [PMID: 26713282 DOI: 10.5662/wjm.v5.i4.216].
49. Kumar P, Chand S, Chandra P, **Maurya PK***. Influence of dietary capsaicin on redox status in red blood cells during human aging. *Advanced Pharmaceutical Bulletin*. 5(4): 583-586; 2015 [PMID: 26819932 DOI: 10.15171/apb.2015.078]. (**Impact Factor: 0.885**).
50. Kumar P, **Maurya PK***. Epigallocatechin-3- gallate protects erythrocyte Ca²⁺-ATPase and Na⁺/K⁺-ATPase against oxidative induced damage during aging in humans. *Advanced Pharmaceutical Bulletin*. **4**: 443-447; 2014. [PMID: 25364660 DOI 10.5681/apb.2014.065] (**Impact Factor: 0.885**).
51. Li LH, Yen MY, Ho CC, Wu P, Wang CC, **Maurya PK**, Chen PS, Chen W, Hsieh WY, Chen HW. Non-cytotoxic nanoparticles enhance antimicrobial activities of cefmetazole against multidrug-resistant *Neisseria Gonorrhoeae*. *PLoS One*. 8(5):e64794; 2013. [PMID: 23705013 DOI 10.1371/journal.pone.0064794] (**Impact Factor: 3.240**).
52. Kumar P, **Maurya PK***. L-cysteine efflux in erythrocytes as a function of human age: correlation with reduced glutathione and total antioxidant potential. *Rejuvenation Research*. **16 (3)**:179-184; 2013. [PMID: 23442131 DOI 10.1089/rej.2012.1394] (**Impact Factor: 4.663**).
53. **Maurya PK***, Prakash S. Decreased activity of Ca⁺⁺-ATPase and Na⁺/K⁺-ATPase during aging in humans. *Applied Biochemistry and Biotechnology*. **170 (1)**: 131-137; 2013. [PMID: 23483411 DOI 10.1007/s12010-013-0172-8] (**Impact Factor: 2.926**).
54. LeeYM, Chen HW, **Maurya PK**, Su CM, Tzeng CR. MicroRNA regulation via DNA methylation during the morula to blastocyst transition in mice. *Molecular Human Reproduction*. **18(4)**:184-93; 2012. [PMID: 22053057 DOI 10.1093/molehr/gar072] (**Impact Factor: 4.025**).
55. Kumar N, Kant R, **Maurya PK**, Rizvi SI. Concentration dependent effect of (-) epicatechin on Na⁺/K⁺-ATPase and Ca²⁺-ATPase inhibition induced by free radicals in hypertensive patients: comparison with L-ascorbic acid. *Phytotherapy Research*. **26 (11)**: 1644-1647; 2012. [PMID: 22371366 DOI 10.1002/ptr.4624] (**Impact Factor: 5.878**).
56. Khanna A, **Maurya PK***. Role of tea catechins in prevention of aging and age-related disorders. *TANG*. **2**: 1-11; 2012. [https://doi.org/10.5667/tang.2011.0016]

57. **Maurya PK***, Prakash S. Intracellular uptake of (-) epicatechin by human erythrocytes as a function of human age. *PhytotherapyResearch*. **25(6)**: 944-946; 2011. [PMID: 21626601 DOI 10.1002/ptr.3343] (**Impact Factor: 5.878**).
58. Pandey KB, Mehdi MM, **Maurya PK**, Rizvi SI. Plasma protein oxidation and its correlation with antioxidant potential during human aging. *Disease Markers*. **29 (1)**: 31-36; 2010. [PMID: 20826915 DOI 10.3233/DMA-2010-0723] (**Impact Factor: 3.434**).
59. Kumar N, Kant R, **Maurya PK***. Concentration dependent effect of (-) epicatechin in hypertensive patients. *Phytotherapy Research*. **24 (10)**: 1433-1436; 2010. [PMID: 20127878 DOI 10.1002/ptr.3119] (**Impact Factor: 5.878**).
60. **Maurya PK***, Kumar P, Siddiqui N, Tripathi P, Rizvi SI. Age associated changes in erythrocyte glutathione peroxidase activity: Correlation with total antioxidant potential. *Indian Journal of Biochemistry and Biophysics*. **47**: 319-321; 2010. [PMID: 21280570] (**Impact Factor: 1.077**).
61. **Maurya PK**, Rizvi SI. Age dependent changes in glutathione-S-transferase: correlation with total total antioxidant potential and red cell intracellular glutathione. *Indian Journal of Clinical Biochemistry*. **25(4)**: 398-400; 2010. [PMID: 21966113 DOI 10.1007/s12291-010-0047-5]
62. Rizvi SI, Pandey KB, Jha R, **Maurya PK**. Ascorbate recycling by erythrocytes during aging in humans. *Rejuvenation Research*. **12**: 3-6; 2009. [PMID: 19072252 DOI 10.1089/rej.2008.0787] (**Impact Factor: 4.663**).
63. **Maurya PK**, Rizvi SI. Protective role of tea catechins on erythrocytes subjected to oxidative stress during human aging. *NaturalProductResearch*. **23(12)**: 1072-1079; 2009. [PMID: 18846469 DOI 10.1080/14786410802267643] (**Impact Factor: 2.861**).
64. Chandra P, **Maurya PK**, Kumar P, Tripathi P, Srivastava AK. Diagnosis of rheumatic infections caused by group A *Streptococcus pyrogenes*: future investigation by nanotechnology. *Digest Journal of Nanomaterials and Biostructures*. **4(4)**: 645-650; 2009. (**Impact Factor: 1.750**).
65. **Maurya PK**, Arora K, Sarkar S. Role of L-ascorbic acid in the stability of human erythrocytes during aging in humans. *Indian Journal of Gerontology*. **23**: 1-9; 2009.
66. **Maurya PK**, Rizvi SI. Alterations in plasma nitric oxide during aging in humans. *Indian Journal of Biochemistry and Biophysics*. **46**: 130-132; 2009. [PMID: 19374267] [Citations:12] (**Impact Factor: 1.077**).
67. Rizvi SI, **Maurya PK**. L-cysteine influx in erythrocytes as a function of human age. *Rejuvenation Research*. **11(3)**: 661-665; 2008. [PMID: 18593284 DOI 10.1089/rej.2007.0652] (**Impact Factor: 4.663**).

68. Rizvi SI, **Maurya PK**. Alterations in antioxidant enzymes during aging in humans. *Molecular Biotechnology*. **27**: 58-61; 2007. [PMID: 17914165] (**Impact Factor: 2.695**).
69. Rizvi SI, **Maurya PK**. Markers of oxidative stress in erythrocytes during aging in humans. *Annals of the New York Academy of Sciences*. **1100**: 373-382; 2007. [PMID: 17460201] (**Impact Factor: 5.691**).
70. Rizvi SI, Jha R, **Maurya PK**. Erythrocyte plasma membrane redox system in human aging. *Rejuvenation Research*. **9(4)**: 470-474; 2006. [PMID: 17105387] (**Impact Factor: 4.663**).
71. Kumar P, **Maurya PK***. Age-related changes in erythrocyte membrane sulfhydryl group and β -D-glucuronidase activity. *Healthy Aging Research*. 4(9):1-5; 2015. [DOI <http://dx.doi.org/10.12715/har.2015.4.9>].
72. Malhotra V, Chandra P, **Maurya PK***. Control of bacterial biofilms in industrial and medical settings. *GERF bulletin of biosciences*. 6 (1); 1-4; 2015.
73. Kumar P, Patel VH, Kumar S, Khanna A, Siddiqui N, Kumari K, Chaudhary N, **Maurya PK***. Deficiency of serum 25-hydroxy vitamin D level in humans belong to high rainfall and high altitude area of Indian region. *Indian Research Journal Of Genetics and Biotechnology*. 9(4): 551-555; 2017.
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Books:

1. Novel Therapeutic Approaches targeting Oxidative Stress

Editors: **Pawan Kumar Maurya** and Imteyaz Qamar; Publisher: ELSEVIER INC.,
Hampshire, Cambridge, USA; **2022**.

ISBN: 9780323909051

2. Nanobioanalytical Approaches to Medical Diagnostics

Editors: **Pawan Kumar Maurya** and Pranjali Chandra; Publisher: ELSEVIER INC.,
Hampshire, Cambridge, USA; **2022**

ISBN: 9780128188231

3. Cardiovascular Toxicity and Therapeutic Modalities Targetting Cardio-oncology: From Basic Research to Advanced Study

Editors: Imteyaz Qamar and **Pawan Kumar Maurya**; Publisher: ELSEVIER INC.,
Philadelphia, Pennsylvania, USA; **2022**

ISBN: 9780323904612

4. Role of Oxidative Stress in Pathophysiology of Diseases

Editors: **Pawan Kumar Maurya** and Kamal Dua; Publisher: Springer-Nature, Singapore; **2020**

ISBN: 978-981-15-1567-5

5. Nanotechnology in Modern Animal Biotechnology: Concepts and Applications

Editors: **Pawan Kumar Maurya** and Sanjay Singh; Publisher: ELSEVIER INC., Philadelphia, Pennsylvania, USA; **2019**; ISBN: 9780128188231

6. Nanotechnology in Modern Animal Biotechnology: Recent Trends and Future Perspectives

Editors: Sanjay Singh and **Pawan Kumar Maurya**; Publisher: Springer-Nature, Singapore; **2019**

ISBN: 978-981-13-6003-9

7. Oxidative stress: Diagnostic methods and application in medical science

Editors: **Pawan Kumar Maurya** and Pranjali Chandra; Publisher: Springer-Nature, Singapore; **2017**; ISBN: 978-9811047107

8. Iron supplement, Oxidative Stress & Pregnancy: a critical balance

Editors: Hari Shanker, **Pawan Kumar Maurya**, Neeta Kumar, Rajat Sandhir, Sunita Mittal, D.N. Rao; Publisher: LAP LAMBERT Academic Publishing; **2017**; ISBN: 978-6202023894

9. Oxides for Medical Applications

Editors: Piyush Kumar, Ganeshlenin Kandasamy, Jitendra Pal Singh and **Pawan Kumar Maurya**

Publisher: ELSEVIER INC., Boulevard, Oxford, UK. **2022 (In press)**

Book chapters:

1. Kumar V, Kumar N, Mehra A, Shrivastava P, **Maurya PK***. Microparticles for cancer therapy. *“Advanced Drug Delivery Systems in the Management of Cancer”*. Chapter 29, Page No. 359-371; 2021. Elsevier Inc. <https://doi.org/10.1016/B978-0-323-85503-7.00019-5>. ISBN: 9780323855037.
2. Kumar N, Patwal T, Kumar V, Shrivastava P, Mehra A, **Maurya PK***. Clinical trials in drug delivery for the treatment of cancer. Chapter 39, Page No. 509-519; 2021. Elsevier Inc. <https://doi.org/10.1016/B978-0-323-85503-7.00002-X>. ISBN: 9780323855037.

3. Kaur H, Kaur R, Rani V, Sharma K, **Maurya PK***. Antipsychotic Drugs. “*Advances in Neuropharmacology: Drugs and Therapeutics*”. CRC Press. 2020.
4. Wadhwa R, Bharathala S, Aggarwal T, Sehgal N, Kumar N, Gupta G, Chellappan DK, **Maurya PK**, Pinto TDJA, Collet T, Dureja H, Hansbro PM, Dua K. Pulmonary Bioadhesive Drug Delivery Systems and Their Applications. “*Bioadhesives in Drug Delivery*”. Page No. 371; 2020. John Wiley & Sons. ISBN: 9781119640196.
5. Gupta R, **Maurya PK***. Effects of yoga on oxidative stress during aging. “*Role of Oxidative Stress in Pathophysiology of Diseases*”. 2020. Springer-Nature.
6. Wadhwa R, Shukla SD, Chellappan DK, Gupta G, Collet T, Hansbro N, Oliver B, Williams K, Hansbro PM, Dua K, **Maurya PK***. Phytotherapy in Inflammatory Lung Diseases: An Emerging Therapeutic Interventional Approach. “*Phytochemistry: An in-silico and in-vitro Update*”. Page No. 331-347; 2019. Springer-Nature (**Invited**). ISBN: 978-981-13-6919-3.
7. Brietzke E, Yamagata AS, **Maurya PK**, Rizzo LB. Neuroprogression and accelerated ageing in severe psychiatric disorders. “*Neuroprogression in Psychiatry*”. **Chapter 03. 2019**. Oxford University Press, UK. (**Invited**). Editors: Flavio Kapczinski, Michael Berk, and Pedro Magalhães. ISBN: 9780198787143.
8. Aggarwal T, Wadhwa R, Thapliyal N, Gupta R, Hansbro PM, Dua K, **Maurya PK***. Recent Trends of Nano-materials as Antimicrobial Agents. “*Nanotechnology in modern animal biotechnology: Recent trends and future prospective*”. Springer-Nature, Singapore; 2019.
9. **Maurya PK**. Animal biotechnology as a tool to understand and fight aging. “*Animal Biotechnology: Models in Discovery and Translation*”. Chapter 10; Page No. 177-191; **2014**. Elsevier Inc; **USA**. (**Invited**). Editor: Ashish S Verma & Anchal Singh
10. **Maurya PK**, Kumar P, Kumar P and Brietzke E. Methods for monitoring oxidative stress using conventional and advanced nanodiagnostic methods. “*Nanobiosensors for Personalized and Onsite Biomedical Diagnosis*”. Chapter 25; Page No. 521-536; **2016**. The Institution of Engineering and Technology, Michael Faraday House, **Stevenage, United Kingdom**. (**Invited**). [DOI 10.1049/pbhe001e_ch25] Editor: Pranjal Chandra
11. Sharma S, Srivastava R, Srivastava A, **Maurya PK** and Chandra P. Biomedical Potential of Marine Sponges. “*Marine Sponges: Chemicobiological and Biomedical Applications*”. Springer, Page No. 329-340; **2016**. (DOI 10.1007/978-81-322-2794-6_16). Editor: Ramjee Palella
12. Srivastava R, Sharma S, Kumar P, **Maurya PK** and Chandra P. Nano-diagnostic methods based on marine enzymes “*Marine Enzymes Biotechnology: Production and Industrial Applications, Part III - Application of Marine Enzymes*” Elsevier Inc; **USA**. **2016**. Editor: Kim S.-K.

13. Arora N, **Maurya PK** and Kacker P. Opportunities and challenges in translational drug discovery. "Translational Bioinformatics and its Application". Springer-Nethaland, Page No. 58-87; **2017**. Editor: Dongging Wei
14. Mahato K, Baranwal A, Srivastava A, **Maurya PK**, Chandra P. Smart Materials for Biosensing Applications. *Techno-Societal 2016*. Springer, pp 421-431; 2016.
15. Kumar P, **Maurya PK**, Singh RK and Kamle M. Beneficial uses and Application of Plant Growth promoting rhizobacteria (PGPR) in Sustainable agriculture. "Microbiology for Sustainable Agriculture, Soil Health and Environmental Protection". Apple Academic Press, USA. 2017 (In press). Editor: Deepak Verma
16. Mahato K, Kumar S, Srivastava A, **Maurya PK**, Singh R, Chandra P. Electrochemical Immunosensors: Fundamentals and Applications in Clinical Diagnostics. "Handbook of Immunoassay Technologies". ELSEVIER, Academic Press 2018.

Editorial:

1. Prasad A, Mahato K, **Maurya PK**, Chandra P. Biomaterials for biosensing application. *J Anal Bioanal Tech*. 2016, 7:2. <http://dx.doi.org/10.4172/2155-9872.1000e124>
2. Prasad A, Mahato K, **Maurya PK**, Chandra P. Nanobiosensors: Next Generation Point-of-Care Biomedical Devices for Personalized Diagnosis. *J Anal Bioanal Tech*, 2016, 7:e125. <http://dx.doi.org/10.4172/2155-9872.1000e125>

Conferences:

1. **Maurya PK** and Rizvi SI. 8th Asia / Oceana Regional Congress of Gerontology and Geriatrics. Beijing. October 22nd -25th, 2007. China. **Received fellowship of \$500.**
2. **Maurya PK** and Rizvi SI. National Conference on "emerging trends in biochemistry and satellite symposium of the academy of environmental biology". Allahabad. January 23rd- 24th, 2010. India.
3. **Maurya PK** and Rizvi SI. National Symposium on "emerging trends in biomedical sciences". Dehradun. February 27th -28th, 2009. India.
4. **Maurya PK** and Rizvi SI. 3rd Uttarakhand Science & Technology Congress, Roorkee. November 10th -11th, 2008. India.
5. **Maurya PK** and Rizvi SI. Indian Ageing Congress-2006. 13th Biennial Conference of Association of Gerontology (India) and 4th Annual Conference of Indian Academy of Geriatrics. Bhubaneswar. December 22nd -24th, 2006. India.
6. **Maurya PK** and Rizvi SI. National Seminar on "New Strides in Microbiology, Biochemistry, Biotechnology & Agriculture Science". Dehradun. February 3rd -4th, 2007. India.

7. **Maurya PK** and Rizvi SI. National Symposium & 1st UPACBICON, Aligarh. November 15th-16th, 2008. India.
8. **Maurya PK** and Rizvi SI. Society for Free Radical Research. A Satellite Meeting, New Delhi. February 11th -12th, 2008. India.
9. **Maurya PK** and Rizvi SI. 32nd Annual Conference of Association of Clinical Biochemists of India (ACBI). Patna. December 18th -21st – 2005. India.
10. **Maurya, PK**. 7th International Symposium of the International Society for the Development of Natural Products. Noida. November 15th – 17th, 2012. India.
11. **Maurya PK** and Kumar P. Global R & D Summit. New Delhi. 2013. India.
12. Arora A, **Maurya PK**, Sharma A. Protective role of l-ascorbic acid on erythrocytes subjected to oxidative stress during human aging. *New Biotechnology* 25, S2; 2009.
13. Sharma A, Arora A, **Maurya PK**. Protective effect of (-) epigallocatechin gallate against oxidative stress during erythrocyte aging in humans. *New Biotechnology* 25, S3; 2009.
14. Rahmawati E, **Maurya PK**, Kao AP, Chen HW, Tzeng CR. The biosignatures of human endometriosis with and without GnRH agonist treatment. *Fertility and Sterility* 100 (3), S362-S363; 2013.
15. Rahmawati E, **Maurya PK**, Kao AP, Chen HW, Tzeng CR. Tensin 1, MMP14, Caveolin 2, Neuritin 1 and ATP2A3 as a Candidate Panel Biomarker of Endometriosis. ACE 2014. 3rd Asian conference on endometriosis. October 24th – 26th, 2014. Songeui Medical Campus. The catholic University of Korea. Seoul, Korea.
16. Rahmawati E, **Maurya PK**, Kao AP, Chen HW, Tzeng CR. Down-regulation of Tensin 1 gene expression in human endometriotic tissue following GnRH agonist treatment. The fifth congress of Asia pacific initiative on reproduction. April 4th – 6th, 2014. Brisbane, Australia. (Awarded in best poster category).
17. Rizzo LB, Pedrini M, Asevedo E, Yamazaki JK, Graiff MZ, **Maurya PK**, Cassenelli AC, Cordeiro C and Brietzke E. The immenseness in early and late stage of Bipolar disorder 1. Society of Biological Psychiatry Annual Meeting. May 14th -16th, 2015. Toronto, Canada.
18. Levandowski M, Tractenberg S, Rizzo LB, **Maurya PK**, Brietzke E, De Nardi T, Wieck A, Grassi-Oliveira R. Telomere Length in Crack/Cocaine Use Disorder with Early Life Stress. *Neuropsychopharmacology*. 40: S592-S593; 2015.
19. Graiff MZ, Rizzo LB, **Maurya PK**, Gadelha A, Brietzke E. Cytokines Pro and anti-inflammatory cytokines in young guys at risk of mental state to develop schizophrenia and bipolar disorder. IV Congresso Clinica Psiquiatrica. March 31st-2nd April, 2016. Sao Paulo, Brazil.

20. Rahmawati E, Yan WV, Le YP, **Maurya PK**, Chen HW, Tzeng CR. GnRHa improves IVF outcome in women with endometriosis by increasing implantation marker HOXA10, activating apoptosis and autophagy-related protein, and downregulating tensin 1 and neuritin 1. 2017 Annual Meeting of Taiwanese Society for Reproductive Medicine. 26-27 August 2017, Taipei, Taiwan.
21. Belangero SI, Talarico F, Spindola L, **Maurya PK**, Xavier G, Ota V, Moretti P, Gadelha A, Gouvea E, Noto C, Cordeiro Q, Bressan R, Jong S, Santoro M, Breen G. Indication of cell aging based on DNA methylation in early stage of Schizophrenia. *European Neuropsychopharmacology*. 29: S947; 2019.
22. Micali D, Xavier G, Spindola L, Ota V, **Maurya PK**, Tampaku P, Moretti M, Pan P, Rohde L, Gadelha A, Mazzotti D, Sato J, Junior GS, Bressan R, Belangero SI. Leukocyte Telomere length analysis in children and adolescents at risk of developing mental disorders. *European Neuropsychopharmacology*. 29: S931-S932; 2019.

Foreign Fellowships / Invitations / Awards:

- Participated in Launch of Scheme and Portal “**SHREYSH**” at India Habitat Centre, New Delhi. 27th February 2019.
- Awarded the **post-doctoral research fellowship** (2014-2016) in a special scheme of “**Science without Borders-Attraction of Young Talent**” **Level A** by Ministry of Education and Ministry of Science and Technology through their respective funding agency CAPES, Government of **Brazil**.

Title of Project: *Bio-signature of accelerated aging in mental disorder*

- Awarded the **post-doctoral research fellowship** (2011-2012) by Taipei Medical University, Taipei, **Taiwan**.

Title of Project: *Translational genomic approaches in endometriosis*

- “**Distinguished Service Award**” for outstanding contribution in the field of “Aging Research” by Society of Biological Science and Rural Development, Allahabad, India on the occasion of National workshop on “Recent Technologies for Food Security and Rural Development” held on February, 19-25, 2018.
- Nominated for **Indian National Science Academy (INSA) Young Medal Award** for the year 2013 & 2014.
- International travel grant of **500 USD** to attend 8th Asia / Oceania Regional Congress of Gerontology and Geriatrics. Beijing. October 22nd -25th, 2007. **Beijing, China**.
- Delivered invited talk at centre for food technology, University of Allahabad, Allahabad, India. (2009, 2010, 2013).

- Delivered invited talk at Institute of Life Sciences, Ahmdabad University, India (2013, 2014).
- Invited as external examiner to conduct practical exam of Biochemistry at SBS PGI, Dehradun, UK.
- Invited as external examiner at Allahabad Agriculture Institute Deemed University, Allahabad, India.

Ph.D. Supervision:

Awarded: 02; Ongoing: 03

Membership:

- Association of Gerontology India (AGI), India- Life Member
- Association of Microbiologist of India (AMI)—Life Member