

Curriculum Vitae

Dr. Mahesh J Kulkarni
Senior Principal Scientist
AcSIR Professor and Associate Dean (BS)
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About me

Dr. Mahesh J Kulkarni is a Senior Principal Scientist in the Biochemical Sciences Division of CSIR National Chemical Laboratory Pune. He is instrumental in setting up a mass spectrometry and proteomics facility at NCL. He has guided 15 Ph.D. students hitherto and has published about 94 articles in reputed journals like Molecular Cellular Proteomics, Journal of Proteome Research, Proteomics, RSC Advances, Molecular Biosystems, Journal of Proteomics, Scientific Reports, Aging Cell, Elife, BBA Molecular Basis of diseases etc. He has led several important projects as a Principal Investigators. Dr. Kulkarni has contributed significantly to understanding protein glycation in diabetes by using mass spectrometric and proteomics approaches. Recently, he has started working on developing value-added biosimilars and characterization of biotherapeutics and therapeutic mAbs. He has published more than 90 research papers, and editorial member of reputed journals such as Scientific Reports, Proteins and Peptide Letters, Clinical Proteomics Journal, Journal of proteins and proteomics, Chronicle of Diabetes Research and Practice. He has been elected Fellow of Maharashtra Academy of Sciences in 2016. He was Raman Research Fellowship, to visit University of Turku, Finland, 2016.

Education Qualification

- Ph. D in Crop Physiology, University of Agricultural Sciences, Bangalore.
- M.Sc (Agri) in Crop Physiology, University of Agricultural Sciences, Bangalore.
- B.Sc (Agri), University of Agricultural Sciences, Bangalore.

Honors/Awards/Membership

- Associate Editor, Frontiers in Medicine - Translational Medicine
- Editorial Board Member, Chronicle of Diabetes Research and Practice
- Member, Royal Society of Chemistry, UK
- Editorial Board Member, Scientific Reports
- Editorial Board Member, Proteins and Peptide Letters
- Editorial Board Member, Clinical Proteomics Journal
- Editorial Board Member, Current Proteomics Journal
- Chellaram Diabetes Institute Special Recognition Award 2018
- Elected as Fellow of Maharashtra Academy of Sciences, 2016
- Elected as General Secretary, Proteomics Society, India from 2016.
- Raman Research Fellowship, to visit University of Turku, Finland, 2016
- Editorial Member, Journal of Proteins and Proteomics, (Proteomics Society, India, Journal)

- NCL Research Foundation - Scientist of the year 2010
- Elected as Young Associate of Maharashtra Academy of Sciences, 2007
- Life member of Indian Society for Mass spectrometry.

Academic responsibilities:

AcSIR Associate Dean (Biological Sciences), 2021-2023

AcSIR Coordinator, NCL, 2017-2020

Academy of Scientific and Innovative Research (AcSIR) was established in 2010 (by a resolution of GOI on July 17, 2010) and formalized by an Act of Parliament vide The Gazette of India (dated February 7, 2012) and notified on April 3, 2012, as an Institution of National Importance. ([AcSIR - Academy of Scientific & Innovative Research | An Institution of National Importance, India](#)).

Number of PhD students guided: 15

Research Area: Mass spectrometry-based proteomics and metabolomics, Post-translational modifications, protein glycation in diabetes, Bioinformatics and Literature mining, Biotherapeutics

Total Publications (98):

1. Garg A, Alam M, Bai S, Dandawate M, Kumari N, Gupta S, Agrawal U, Nagarajan P, Reddy DS, **Kulkarni MJ**, Mukhopadhyay A*. Protective effects of rifampicin and its analog rifampicin quinone in a mouse model of obesity-induced type 2 diabetes. **ACS Pharmacology and Translational Science** (2022) (doi.org/10.1021/acsptsci.2c00082).
2. Pandya VK, Shankar S, Sonawane B, Rajesh S, Rathore R, Kumaran S, **Kulkarni MJ***. Mechanistic insights on anserine hydrolyzing activities of human carnosinases. **Biochim Biophys Acta General** (2022) (doi.org/10.1016/j.bbagen.2022.130290)
3. Patil G, Kulsange S, Kazi R, Chirmade T, Kale V, Mote C, Aswar M, Koratkar S, Agawane S, **Kulkarni M***. Behavioral and proteomic studies reveal methylglyoxal activate pathways associated with Alzheimer's disease. **ACS Pharmacology and Translational Science** (2022) (https://doi.org/10.1021/acsptsci.2c00143).
4. Vennapusa AR, Agarwal S, Hm HR, Aarthy T, Babitha KC, Thulasiram HV, **Kulkarni MJ**, Melmaiee K, Sudhakar C, Udayakumar M. Vemanna RS, Stacking herbicide detoxification and resistant genes improves glyphosate tolerance and reduces phytotoxicity in tobacco (*Nicotiana tabacum* L.) and rice (*Oryza sativa* L.) **Plant Physiology and Biochemistry** (2022) 189, 126-138
5. Ghosh A, Patil AB, Chirmade TP, Jathar SM, Bhambure RS, Sengupta D, Giri AP, Kulkarni MJ, Investigation of captopril-insulin interaction by mass spectrometry and computational approaches reveal captopril induces structural changes in insulin (2022) **ACS Omega** (accepted)
6. Singh P, et al. **Kulkarni M**, et al., Sengupta S*, Dash D*. A machine learning-based approach to determine infection status in recipients of BBV152 (Covaxin) whole-virion inactivated SARS-CoV-2 vaccine for serological surveys. **Comput Biol Med.** 2022 Apr 25;146:105419. doi: 10.1016/j.compbimed.2022.105419

7. Rana R*, Chauhan K, Gautam P, **Kulkarni M**, Banarjee R, Chugh P., Chhabra SS, Acharya R, Kalra SK, Gupta A, Jain S, Ganguly NK. Plasma-Derived Extracellular vesicles reveal Galectin-3 binding protein as Potential Biomarker for Early Detection of Glioma. **Front Oncol.** 2021 Nov 26;11:778754. doi: 10.3389/fonc.2021.778754.
8. Routaraya CB, Choudharia V, Prakasha D, Patil R, Jagtap S, Baid S, **Kulkarni MJ**, Kuchipudi SV, Kalpana Pai* Quantitative proteomic analysis reveals differential modulation of crucial stage specific proteins during promastigote to amastigote differentiation in *Leishmania donovani*", **J Proteins Proteom** (2021). <https://doi.org/10.1007/s42485-021-00080-z>
9. Kaur T, Shukla BN, Yadav V, **Kulkarni MJ**, and Alka Rao*. Comparison of glycoprofiles of Rituximab versions licensed for sale in India and an analytical approach for quality assessment. **J Proteomics.** 2021 May 17:104267. doi: 10.1016/j.jprot.2021.104267)
10. Naushin S, et al., **Kulkarni M**, et al. Sengupta S. Insights from a Pan India Sero-Epidemiological survey (Phenome-India Cohort) for SARS-CoV2. **Elife.** 2021 Apr 20;10:e66537. doi: 10.7554/eLife.66537.
11. Joshi RS*, Giri AP, **Kulkarni MJ**, Gupta M, Verma S, Chaudhry D, Deshmukh N and Chugh A. Antiviral drug prioritization for COVID-19 management based on rational selection. **Current Science**, 2021, VOL. 120, NO. 9, 1464.
12. Tiwari V, Mishra A, Singh S, Kumar Mishra S, Kumari Sahu K, Parul, **Kulkarni MJ**, Shukla R, Shukla S*. Protriptyline improves spatial memory and reduces oxidative damage by regulating NFkB-BDNF/CREB signaling axis in streptozotocin-induced rat model of Alzheimer's disease. **Brain Res.** 2021 Jan 7:147261. doi: 10.1016/j.brainres.2020.147261
13. Walke PB, Bansode SB, More NP, Chaurasiya AH, Joshi RS, **Kulkarni MJ***. Molecular investigation of glycosylated insulin-induced insulin resistance via insulin signaling and AGE-RAGE axis. **Biochim Biophys Acta Mol Basis Dis.** 2021;1867(2):166029. doi: 10.1016/j.bbadis.2020.166029. Online ahead of print. PMID: 33248275
14. Pradhan G, Sneha M, Sonwane BP, Santhakumari B, Rao A*, **Kulkarni MJ***. Multiple-parallel-protease digestion coupled with high-resolution mass spectrometry: An approach towards comprehensive peptide mapping of therapeutic mAbs. **J Proteomics.** 2020 Nov 22:104053. doi: 10.1016/j.jprot.2020.104053
15. Thoduvayil S, Dhandapani G, Brahma R, Rex DA., Mangalaparthy KK, Patel K, Kumar Tennyson MJ, Satheeshkumar PK, **Kulkarni MJ**, Pinto SM, Keshava Prasad TS, Madanan MG*. Triton X-114 fractionated subcellular proteome of *Leptospira interrogans* shows selective enrichment of pathogenic and outer membrane proteins in the detergent fraction" **Proteomics** (doi: 10.1002/pmic.202000170.)
16. Bai S, Chaurasiya AH, Banarjee R, Walke P, **Kulkarni MJ***. CD44, a predominant protein in methylglyoxal induced secretome of muscle cells, is elevated in diabetic plasma. **ACS Omega** (doi.org/10.1021/acsomega.0c01318)
17. Joshi RS*, Jagdale SS, Bansode SB, Shankar SS, Tellis MB, Pandya VK, Chugh A, Giri AP*, **Kulkarni MJ***. Discovery of potential multi-target-directed ligands by targeting host-specific SARS-CoV-2 structurally conserved main protease. **J Biomol Struct Dyn.** 2020 May 5:1-16.

18. Routaray CB, Bhor R, Bai S, Kadam NS, Jagtap S, Doshi PJ, Sundar S, Sawant S, **Kulkarni MJ**, Pai K. SWATH-MS based quantitative proteomics analysis to evaluate the antileishmanial effect of Commiphora wightii "Guggul" and Amphotericin B on a clinical isolate of Leishmania donovani. **J Proteomics**. 2020 May 5;223:103800
19. Das AA, Choudhury KR, Jagadeeshaprasad MG, **Kulkarni MJ**, Mondal PC, Arun Bandyopadhyay. Proteomic analysis detects deregulated reverse cholesterol transport in human subjects with ST-segment elevation myocardial infarction. **J Proteomics**. 2020 Jun 30;222:103796.
20. Patil GV, Joshi R, Kazi R, Kulsange S, **Kulkarni MJ***. A possible role of glycation in the regulation of amyloid β precursor protein processing leading to amyloid β accumulation. **Medical Hypotheses** 2020 Sep;142:109799
21. Pandya VK, Sonwane B, Rathore R, Unnikrishnan AG, Kumaran S, **Kulkarni MJ***. Development of multiple reaction monitoring assay for quantification of carnosine in human plasma. **RSC Advances**, 2020, Volume: 10 Issue: 2 Pages: 763-769
22. Nareshkumar A, Subbarao S, Vennapusa A, Vargheese A, Banarjee R, **Kulkarni MJ**, Vemanna RS, Udayakumar M, Enzymatic and non-enzymatic detoxification of reactive carbonyl compounds improves the oxidative stress tolerance in cucumber, tobacco and rice seedlings. **Journal of Plant Growth Regulation**. 2020 **39**, pages1359–1372.
23. Rathore R, Sonwane B, Jagadeeshaprasad MG, Kahar S, Santhakumari B, Unnikrsihnan AG, **Kulkarni MJ***. Glycation of glucose sensitive lysine residues K36, K438 and K549 of albumin is associated with prediabetes. **Journal of Proteomics** 2019 Sep 30;208:103481
24. Banarjee R, Sharma A, Bai S, Deshmukh A, **Kulkarni MJ***. Proteomic study of endothelial dysfunction in response to homocysteinylated albumin. **Journal of Proteins and Proteomics**. 2019. 10 (3), 167-178
25. Agawane SB, Gupta VS, **Kulkarni MJ**, Bhattacharya AK, Koratkar SS. Chemo-biological evaluation of antidiabetic activity of Mentha arvensis L. and it's role in inhibition of advanced glycation end products. **J Ayurveda Integr Med**. 2019 Jul - Sep;10(3):166-170.
26. Agawane SB, Gupta VS, **Kulkarni MJ**, Bhattacharya AK, Koratkar SS, Rao VK. Patho-physiological evaluation of Duranta erecta for the treatment of urolithiasis. **J Ayurveda Integr Med**. 2019 Jan-Mar;10(1):4-11
27. Jagadeeshaprasad MG, Subramani V, Unnikrishnan AG, **Kulkarni MJ***. Albumin abundance and its glycation Status Determine Hemoglobin Glycation. **ACS Omega**, 2018 Oct 31;3(10):12999-13008.
28. Ahmeda R, Kodgire S, Santhakumari B, Patil R, **Kulkarni M**, Gajanan Zore. Serum Responsive Proteome Reveals Correlation between Oxidative Phosphorylation and Morphogenesis in Candida albicans ATCC10231. **J Proteomics**. 2018 Aug 15;185:25-38.
29. Banarjee R, Sharma A, Bai S, Deshmukh A, **Kulkarni MJ***. Proteomic study of endothelial dysfunction induced by AGEs and its possible role in diabetic cardiovascular complications. **J Proteomics**. 2018 Sep 15;187:69-79.

30. Batkulwar KB, Godbole RK, Banarjee R, Kassar O, Williams R*, **Kulkarni MJ*** Advanced glycation end products modulate amyloidogenic APP processing and Tau phosphorylation: a mechanistic link between glycation and the development of Alzheimer's disease. **ACS Chem Neurosci**. 2018 May 16;9(5):988-1000.
31. Thakre A, Zore G, Kodgire S, Kazi R, Mulange S, Patil R, Shelar A, Santhakumari B, **Kulkarni M**, Kharat K, Karuppayil M Limonene inhibits Candida albicans growth by inducing apoptosis. **Medical Mycology**, Volume 56, Issue 5, 1 July 2018, Pages 565–578
32. Deshmukh A, Bai S, Aarthi T, Kazi RS, Banarjee R, Rathore R, Vijayakumar MV, Thulasiram HV, Bhat MK, **Kulkarni MJ***. Methylglyoxal attenuates insulin signaling and downregulates the enzymes involved in cholesterol biosynthesis. **Molecular BioSystems**, 2017, Oct 24;13(11):2338-2349
33. Dange MC, Bhonsle HS, Godbole RK, More SK, Bane SM, **Kulkarni MJ***, Kalraiya RD*. Mass spectrometry based identification of galectin-3 interacting proteins potentially involved in lung melanoma metastasis. **Mol Biosystems**. 2017 Oct 24;13(11):2303-2309.
34. Mary S, **Kulkarni MJ***, Mehendale SS, Joshi SR, Giri AP. Differential accumulation of vimentin fragments in preeclamptic placenta. **Cytoskeleton (Hoboken)**. 2017 Nov;74(11):420-425
35. Mary S, **Kulkarni MJ***, Joshi S, Mehendale S, Giri AP (2017). Tubulointerstitial nephritis antigen-like 1 protein is downregulated in the placenta of pre-eclamptic women. **Clinical Proteomics** 2017 Mar 21;14:8
36. Kazi RS, Banarjee RM, Deshmukh AB, Patil GV, Jagadeeshaprasad MG, **Kulkarni MJ***. Glycation inhibitors extend yeast chronological lifespan by reducing advanced glycation end products and by back regulation of proteins involved in mitochondrial respiration. **J Proteomics**. 2017 Mar 6;156:104-112.
37. Mary S, **Kulkarni MJ***, Malakar D, Joshi S, Mehendale S, Giri AP (2017). Placental proteomics provides insights into pathophysiology of pre-eclampsia and predicts possible markers in plasma. **J Proteome Res**. 2017 Feb 3;16(2):1050-1060
38. Batkulwar KB, Jana A, Godbole RK, Sengupta N and **Kulkarni MJ***. Hydralazine inhibits Amyloid beta (A β) aggregation, glycation and ameliorates A β 1-42 induced neurotoxicity., **RSC Advances**, , (2016), 6,108768-108776
39. Jana A, Batkulwar KB, **Kulkarni MJ***, Sengupta N*. Glycation induces conformational changes in amyloid- β peptide and enhances its aggregation propensity: Molecular Insights. **Phys Chem Chem Phys**. 2016 Nov 23;18(46):31446-31458
40. Vannuruswamy G, Jagadeeshaprasad MG, Kashinath K, Kesavan SK, Bhat S, Korwar AM, Chougale AD, Boppana R, Reddy DS*, **Kulkarni MJ***. Molecules with O-acetyl group protect protein glycation by acetylating lysine residues. **RSC Adv.**, 2016, 6, 65572
41. Bhat S, Jagadeeshaprasad MG, Patil YR, Shaikh ML, Regin BS, Mohan V, Giri AP, Balasubramanyam M, Boppana R, **Kulkarni MJ***. Proteomic insight reveals elevated levels of albumin in circulating immune complexes in diabetic plasma. **Mol Cell Proteomics**. 2016 15:2011-20

42. Jagadeeshaprasad MG, Batkulwar KB, Meshram NN, Tiwari S, Korwar AM, Unnikrishnan AG, **Kulkarni MJ***. Targeted quantification of N-1-(carboxymethyl) valine and N-1-(carboxyethyl) valine peptides of β -hemoglobin for better diagnostics in diabetes. **Clin Proteom** (2016) 13:7.
43. Jangale NM, Devarshi PP, Bansode SB, **Kulkarni MJ**, Harsulkar AM. Dietary flaxseed oil and fish oil ameliorates renal oxidative stress, protein glycation, and inflammation in streptozotocin-nicotinamide-induced diabetic rats. **J Physiol Biochem**. 2016 Jun;72(2):327-36.
44. Priyanka Singh, Ramesha Jayaramaiah, Sachin Agawane, Vannuruswamy Garikapati, Arvind Korwar, Atul Anand, Vitthal Dhayude, Mahemud Shaikh, Rakesh Joshi, Ramanamurthy Boppana, **Kulkarni M**, Hirekodathakallu Thulasiram, and Ashok Giri. Potential Dual Role of Eugenol in Inhibiting Advanced Glycation End Products in Diabetes: Proteomic and Mechanistic Insights **Scientific Reports**. 2016 Jan 7;6:18798. doi: 10.1038/srep18798.
45. Chilukuri H, Kolekar YM, Bhosle GS, Godbole RK, Kazi RS, **Kulkarni MJ***, and Moneesha Fernandes,* N-(3-aminoalkyl)proline derivatives with potent antiglycation activity. **RSC Adv.**, 2015, 5, 77332.
46. Korwar AM, Vannuruswamy G, Jagadeeshaprasad MG, Ramesha JH. Bhat S, Regin BS, Ramaswamy S, Giri AP, Mohan V, Balasubramanyam M and **Kulkarni MJ***. Development of diagnostic fragment ion library for glycated peptides of Human serum albumin: Targeted quantification in prediabetic, diabetic and microalbuminuria plasma by PRM, SWATH and MS^E. **Mol Cell Proteomics**. 2015 Aug;14(8):2150-9
47. Bansode SB, Batkulwar KB, Warkad S, Jana A, Sengupta N, **Kulkarni MJ***. Tolbutamide induces conformational change and promotes albumin glycation. **RSC Advances**, 2015, 40070-40075
48. Kolekar YM, Vannuruswamy G, Bansode SB, Santhakumari B, Thulasiram HV, **Kulkarni MJ***. Investigation of Antiglycation Activity of Isoprenaline. **RSC Advances**., 2015,5, 25051-25058.
49. Golegaonkar SB, Tabreza SS, Pandita A, Shalini SA, Jagadeesha Prasad MG, Bansode SB, Gopalan SC, **Kulkarni MJ***, and Mukhopadhyay A*. Rifampicin reduces Advanced Glycation End products and activates DAF-16 to increase life span in *Caenorhabditis elegans*. (2015). **Aging Cell**. 2015 Jun;14(3):463-73.
50. Tiwari S, Bothale M, **Kulkarni MJ**, Basu R, Basu A, Hasan I, Unnikrishnan AG. Association between Serum Albumin and HbA1c in Asian Indian Subjects. **Ind J Endocrinol Metabol**, 2014, 2015 Jan-Feb;19(1):52-5.
51. Bansode SB, Jana A, Batkulwar KB, Warkad S, Joshi RS, Sengupta N*, **Kulkarni MJ***. Molecular Investigations of Protriptyline as a Multi-Target Directed Ligand in Alzheimer's Disease. **PLoS One**. 2014 Aug 20;9(8):e105196. doi: 10.1371/journal.pone.0105196.
52. Mukherjee S, Jagadeeshaprasad M, Banerjee T, Ghosh S, Biswas M, Dutta S **Kulkarni MJ**, Patari S, Bandyopadhyay A. Proteomic analysis of human plasma in Chronic Rheumatic Mitral Stenosis reveals proteins involved in the Complement and Coagulation cascade. **Clinical Proteomics** 2014, 11:35 doi:10.1186/1559-0275-11-35

53. Mohammad N, Malvi P, Meena AS, Singh SV, Chaube B, Vannuruswamy G, **Kulkarni MJ**, Bhat MK. Cholesterol depletion by methyl-beta-cyclodextrin augments tamoxifen induced cell death by enhancing its uptake in melanoma. **Mol Cancer**. 2014 Sep 1;13(1):204.
54. Singh P, Ramesha HJ, Sarate P, Thulasiram HV, **Kulkarni MJ**, Giri AP. Insecticidal potential of defense metabolites from *Ocimum kilimandscharicum* against *Helicoverpa armigera*. **PLoS One**. 2014 Aug 6;9(8):e104377. doi: 10.1371/journal.pone.0104377.
55. Sacheti P, Patil R, Dube A, Bhonsle H, Thombre D, Marathe S, Vidhate R, Wagh P, **Kulkarni MJ**, Rapole S, Gade W. Proteomics of arsenic stress in the gram-positive organism *Exiguobacterium* sp. PS NCIM 5463. **Appl Microbiol Biotechnol**. 2014 Aug;98(15):6761-73.
56. Kesavan SK, Bhat S, Golegaonkar SB, Jagadeeshaprasad MG, Deshmukh AB, Patil HS, Bhosale SD, Shaikh ML, Thulasiram HV, Boppana R, **Kulkarni MJ***. Proteome wide reduction in AGE modification in streptozotocin induced diabetic mice by hydralazine mediated transglycation. **Scientific Reports**. 2013 Oct 15;3:2941. doi: 10.1038/srep02941.
57. Joglekar M, Panaskar S, Chougale A, **Kulkarni M**, Arvindekar A. A novel mechanism for antiglycative action of limonene through stabilization of protein conformation **Mol Biosyst**. 2013 Oct;9(10):2463-72
58. Bansode SB, Chougale AD, Joshi RS, Giri AP, Bodhankar SL, Harsulkar AM, **Kulkarni MJ***. Proteomic analysis of protease resistant proteins in the diabetic rat kidney. **Mol Cell Proteomics**. 2013 Jan;12(1):228-36
59. Korwar AM, Bhonsle HS, Ghole VS, Gawai KR, Koppikar CB and **Kulkarni MJ***. Proteomic profiling and interactome analysis of ER positive/ HER2/neu negative invasive ductal carcinoma of the breast: Towards proteomics biomarkers. **OMICS**. 2013 Jan;17(1):27-40
60. Bhonsle HS, Korwar AM, Chougale AD Kote SS, Dhande NL, Shelgikar KM, **Kulkarni MJ***. Proteomic study reveals downregulation of apolipoprotein A1 in plasma of poorly controlled diabetes: A pilot study. **Mol Med Report**. 2013 Feb;7(2):495-8.
61. Jangale N, Devarshi PP, Dubal AA, Ghule AE, Koppikar SJ, Bodhankar SL, Chougale AD, **Kulkarni MJ**, Harsulkar AM. Dietary flaxseed oil and fish oil modulates expression of antioxidant and inflammatory genes with alleviation of protein glycation status and inflammation in liver of streptozotocin–nicotinamide induced diabetic rats. **Food Chemistry**, Volume 141, Issue 1, 1 November 2013, Pages 187-195
62. Poonam Sacheti, Hemangi Bhonsle, Rajendra Patil, **Kulkarni MJ**, Rapole Srikanth and Wasudev Gade Arsenomics of *Exiguobacterium* sp. PS (NCIM 5463). **RSC Advances** 2013, 3 Issue: 25 Pages: 9705-9713
63. Chetan C. Oturkar CC, Othman MA, **Kulkarni MJ**, Madamwar D, Gawai kR. Synergistic action of flavin containing NADH dependant azoreductase and cytochrome P450 monooxygenase in azoaromatics mineralization. **RSC Advances**., 2013,3, 3062-3070.
64. Bhonsle HS, Korwar AM, Suresh KK, Bhosale SD Bansode SB, **Kulkarni MJ***. 'Zoom in' - A targeted database search for identification of glycation modifications analyzed by untargeted

tandem mass spectrometry" **Eur J Mass Spectrom.** Volume 18 Issue 6, Pages 475–481 (2012)

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66. Korwar AM, Bhonsle HS, Chougale AD, Kote SS, Gawai KR, Ghole VS, Koppikar CB, **Kulkarni MJ***. Analysis of AGE modified proteins and RAGE expression in HER2/neu negative invasive ductal carcinoma. **Biochem Biophys Res Commun.** 2012 Mar 16;419(3):490-4.
67. Bhonsle HS, Korwar AM, Kote SS, Golegaonkar SB, Chougale AD, Shaik ML, Dhande NL, Giri AP, Shelgikar KM, Boppana R, **Kulkarni MJ***. Low plasma albumin levels are associated with increased plasma protein glycation and HbA1c in diabetes. **J Proteome Res.** 2012 Feb 3;11(2):1391-6.
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69. Pratibha Srivastava, Hema N. Raut, Renuka S. Wagh , Hemalata M. Puntambekar, **Kulkarni MJ**. Purification and characterization of an antioxidant protein (16 kDa) from Terminalia chebula fruit. **Food Chemistry** 131 (2012) 141–148
70. Chougale AD, Bhat SP, Bhujbal SV, Zambare MR, Puntambekar S, Somani RS, Boppana R, Giri AP, **Kulkarni MJ***. Proteomic Analysis of Glycated Proteins from Streptozotocin-Induced Diabetic Rat Kidney. **Mol Biotechnol.** 2012 Jan;50(1):28-38.
71. Suresh KK, Bhosale SD, Thulasiram HV, **Kulkarni MJ***. Comparative and chemical proteomic approaches reveal gatifloxacin deregulates enzymes involved in glucose metabolism. **J Toxicol Sci.** 2011;36(6):787-96.
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74. Mahadik MV, **Kulkarni MJ**, Dhaneshwar SR. LC-UV and LC-MS evaluation of stress degradation behaviour of tenatoprazole. **Journal of Pharmaceutical and Biomedical Analysis** 2009; 50: 787–793.
75. Dhaneshwar SR, Mahadik MV, **Kulkarni MJ**. Column liquid chromatography-ultraviolet and column liquid chromatography/mass spectrometry evaluation of stress degradation behavior of escitalopram oxalate. **J AOAC Int.** 2009 Jan-Feb;92(1):138-47.
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