

## **BIO-DATA**

1.Name and full correspondence address: Dr (Mrs). Abha Meena



Principal Scientist (CSIR-CIMAP) & Associate Professor (AcSIR)

Molecular Bioprospection and Product Development Department, CSIR-Central Institute of Medicinal and Aromatic Plants, Lucknow-226015, Uttar Pradesh, India.

Email(s) and contact number(s) : a.meena@cimap.res.in, abhameena.am@gmail.com

Tel: +91-522-2718626

Fax: +91-522-2714161

### **Academic Qualification (Undergraduate Onwards)**

S.No	Degree	Year	Subject	University
1	PhD	2016	Pharmacology	Department of Pharmacology University of Cambridge, U.K
2	M.Tech	2007	Biotechnology	Centre for Biotechnology, Anna University, Chennai, India
3	B.Tech	2005	Biotechnology	University Schools of Studies, G.G.S.I.P.U, Delhi, India

### **Work experience**

S.No	Position Held	Name of the Institute	From	To
1	Principal Scientist	CSIR-CIMAP	June 2019	Present
2	Senior Scientist	CSIR-CIMAP	June 2015	June 2019
3	Scientist	CSIR-CIMAP	Jan 2011	June 2015
4	Demonstrator	Department of Pharmacology, University of Cambridge. U.K	Oct 2010	Oct 2014
5	Junior Scientist	CSIR-CIMAP	Jan 2008	Jan 2011
6	Assistant Professor	NIT Warangal, A.P India	July 2007	Dec 2007

## Professional Recognition/ Award/ Prize/ Certificate, Fellowship received by the applicant.

1. Awarded **Cambridge Commonwealth Trust Scholarship** for pursuing Ph.D. at the Department of Pharmacology, University of Cambridge, U.K (2010-2014)
2. Awarded **Department of Pharmacology funding** for pursuing Ph.D. (2010-2014)
3. Awarded **Lucy Cavendish College funding** for Pursuing Ph.D. (2010-2014)
4. Awarded **Department of Biotechnology, India fellowship** for doing Masters of Technology at Center for Biotechnology, Anna University, Chennai, India (2005-2007)

## Publications (List of papers published in SCI Journals)

### INTERNATONAL JOURNALS

1. Molecular regulation of autophagy and suppression of protein kinases by aescin, a triterpenoid saponin impedes lung cancer cell proliferation and mobility. Singh J, Hussain Y, **Meena A\***, Sinha R A, Luqman S. *International Journal of Biological Macromolecules*. 126328. 2023. (IF: 8.2)
2. Escin enhanced the efficacy of sorafenib by autophagy-mediated apoptosis in lung cancer cells. Hussain Y, Singh J, **Meena A\***, Sinha R A, Luqman S. *Phytotherapy Research*. 2023. Doi: doi.org/10.1002/ptr.7948. 2023. (IF: 7.2)
3. New frontiers in the design and discovery of therapeutics that target calcium ion signalling: a novel approach in the fight against cancer. Singh J, **Meena A\***, Luqman S. *Expert Opinion on Drug Discovery*. (Accepted) Aug 2023. (IF: 6.3)
4. Enzymatic synthesis of cellulose nanocrystals from lemongrass and its application in improving anti-cancer drug release, uptake and efficacy. Kumar P, Seth R, **Meena A\***, Sharma D. *Industrial Crops and Products*. 192, 115933. 2023. (IF: 5.9)
5. Exploration of selected monoterpenes as potential TRPC channel family modulator in lung cancer an *in-silico* upshot. Singh A, Mishra A, **Meena A\***, Mishra N, Luqman S. *Journal of Biomolecular Structure and Dynamics*. Doi: doi.org/10.1080/07391102.2023.2241900. 2023. (IF: 4.4)
6. Dalbergia sissoo phytochemicals as EGFR inhibitors: an in vitro and in silico approach. Naika H N, Kanjariya D, Parveen S, **Meena A**, Ahmad I, Patel H, Meena R, Jauhari S. *Journal of Biomolecular Structure and Dynamics*. 2023. Doi: doi.org/10.1080/07391102.2023.2229437. (IF: 4.4)
7. Myricitrin from bayberry as a potential inhibitor of cathepsin-D: Prospects for squamous lung carcinoma prevention. Singh S, Maurya A. K, **Meena A\***, Mishra N, Luqman S. *Food and Chemical Toxicology*. 179. 113988. 2023. (IF: 4.3)
8. Narirutin modulates cell cycle phases and inhibits the proliferation of hormone-refractory prostate cancer cells by targeting hyaluronidase. Singh S, Maurya A. K, **Meena A\***, Mishra N, Luqman S. *Food and Chemical Toxicity*. 2023.174. 113638. 2023. (IF: 4.3)
9. Narirutin downregulates lipoxygenase-5 expression and induces G0/G1 arrest in triple-negative breast carcinoma cells. Singh S, Maurya A. K, **Meena A\***, Mishra N, Luqman S. *BBA General Subjects*. 1867. 130340. 2023 (IF: 4.1)
10. 3,5,7-trihydroxyflavone restricts the proliferation of androgen-independent human prostate adenocarcinoma cells by inducing ROS-mediated apoptosis and reduces tumour formation in

mice. Raza W, **Meena A\***, Luqman S. *Journal of Biochemical and Molecular Toxicology*. Doi: doi.org/10.1002/jbt.23474. 2023. (IF: 3.56)

11. Gossypol enhances the efficacy of sorafenib by triggering autophagy and apoptosis in metastatic lung cancer cells: An upshot of Chou-Talalay combination index process. Hussain Y, **Meena A\***, Sinha R A. *Toxicology in Vitro*. 105666. 2023 (IF: 3.2)

## 2022

12. Dietary flavonoid narirutin as a prospective antagonist of oncogenic pri/pre-microRNAs. Singh S, Srivastava P. N, **Meena A\***, Luqman S. *Phytotherapy Research*. 36, 963–983. 2022. (IF: 7.2)
13. Purpurin ameliorates alcohol-induced hepatotoxicity by reducing ROS generation and promoting Nrf2 expression. Hussain Y, Singh J, Raza W, **Meena A\***, Rajak S, Sinha R A, Luqman S. *Life Science*. 309. 120964. 2022 (IF: 6.2)
14. Green and proficient process for industrial-scale preparation of *Gymnema sylvestre* standardized-extract enriched with gymnemic acids through polymer-matrix-adsorption to reduce hyperglycemia. Kumar D, Singh V K, Yadav N P, Tandon S, Shanker K, Chanotiya C S, Kumar N, Khare P, Pal A, Chanda D, Saikia D, Hussain Y, **Meena A**, Dhawan S S, Rout P K\*. *Journal of Industrial and Engineering Chemistry*. 116. 229-238. 2022. (IF: 6.1)
15. Enzymes-based green synthesis, characterisation and toxicity studies of cellulose nanocrystals/fibers produced from the roots of *Vetiveria zizanioides* roots agro-waste. Seth R, **Meena A\***, Meena R. *Environmental Science and Pollution Research*. Doi: 10.1007/s11356-022-24455-x. 2022. (IF: 5.8)
16. Quorum Quenching-Guided Inhibition of Mixed Bacterial Biofilms and Virulence Properties by Protein Derived From Leaves of *Carissa carandas*. Shukla M, Singh V, Habeeballah H, Alkhanani F. M, Lata M, Hussain Y, Mukherjee M, Pasupuleti M, **Meena A**, Mishra B, N\*, Haque S\*. *Frontiers in Cellular and Infection Microbiology*. 12: 836819. doi: 10.3389/fcimb.2022.836819. 2022 (IF: 5.7)
17. Carvacrol arrests the proliferation of hypopharyngeal carcinoma cells by suppressing ornithine decarboxylase and hyaluronidase activities. Fatima K, Luqman S\*, **Meena A**. *Frontier in Nutrition*. 9. 857256. 2022 (IF: 5)
18. Carvacrol as a prospective regulator of cancer targets/signalling pathways. Singh J, Luqman S, **Meena A\***. *Current Molecular Pharmacology* doi: 10.2174 / 18744672156662207051429542022. 2022. (IF: 2.7)

## 2021

19. Neomenthol prevents the proliferation of skin cancer cells by restraining tubulin polymerization and hyaluronidase activity. Fatima K, Masood N, Wani ZA, **Meena A**, Luqman S\*. *Journal of Advanced Research*. 34. 93-107. 2021 (IF: 10.7)
20. Geraniol exerts its antiproliferative action by modulating molecular targets in lung and skin carcinoma cells. Fatima K, Wani Z A, **Meena A**, Luqman S\*. *Phytotherapy Research*. 35. 3861-3874. 2021 (IF: 7.2)
21. Purpurin: A natural anthraquinone with multifaceted pharmacological activities. Singh J, Hussain Y, Luqman S, **Meena A\***. *Phytotherapy Research*. 35. 2418-2428. 2021 (IF: 7.2)
22. Lemongrass derived cellulose nanofibers for controlled release of curcumin and its mechanism of action. Kumari P, Raza W, **Meena A\***. *Industrial Crops and Products*. 173. 114099. 2021. (IF: 5.9)
23. Acacetin and pinostrobin as a promising inhibitor of cancer-associated protein kinases. Singh S, Meena A, Luqman S, **Meena A\***. *Food and Chemical Toxicology*. 151. 112091. 2021. (IF: 4.3)

24. Exploration of Chemopreventive Potential of Linalool in Targeting Lung Cancer Biomarkers. Singh J, **Meena A\***. *Endocrine Metabolic & Immune Disorders - Drug Targets*. 22. 1416-1424. 2021. **(IF: 2.4)**
25. Synthesis of non-toxic anti-cancer active forskolin-indole-triazole conjugates along with their In-silico Succinate Dehydrogenase Inhibition Studies. Ponnam D, Arigari N. K, Venkata S. S. K, Jonnala K. K\*, Singh S, **Meena A**, Mishra P, Luqman S. *Journal of Heterocyclic Chemistry*. 58. 2090-2101. 2021 **(IF: 2)**

## 2020

26. Baicalin mediated regulation of key signalling pathways in cancer. Singh S, **Meena A**, Luqman S\*. *Pharmacological Research*. 164. 105387. 2020. **(IF: 9.3)**
27. Prospects of tangeretin as a modulator of cancer targets/pathways. Raza W, Luqman S, **Meena A\***. *Pharmacological Research*. 161. 1052020. 2020. **(IF: 9.3)**
28. Application of enzyme-mediated cellulose nanofibers from lemongrass waste for the controlled release of anti-cancer drugs. Kumari P, **Meena A\***. *Environmental Science and Pollution Research*. 28, 46343-46355. 2020 **(IF: 5.8)**
29. Flavonoid display ability to target microRNAs in cancer pathogenesis. Singh S, Raza W, Pareen S, **Meena A**, Luqman S\*. *Biochemical Pharmacology*. 189. 114409. 2020 **(IF: 5.8)**
30. Green synthesis of gold nanoparticles from Lawsonia inermis and its catalytic activities following the Langmuir-Hinshelwood mechanism. Kumari P, **Meena A\***. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*. 606. 125447. 2020. **(IF: 5.2)**
31. Cirsimaritin, a lung squamous carcinoma cells proliferation inhibitor: An in-silico and in-vitro study. Pathak G, Singh S, Kumari P, Raza W, Hussain Y, **Meena A\***. *Journal of Biomolecular Structure & Dynamics*. 13. 1-12. 2020. **(IF: 4.4)**
32. Cirsilineol inhibits proliferation of lung squamous cell carcinoma by inducing ROS mediated apoptosis. Pathak G, Singh S, Kumari P, Hussain Y, Raza W, Luqman S, **Meena A\***. *Food and Chemical Toxicology*. 143. 111550. 2020. **(IF: 4.3)**
33. Emerging role of phytochemicals in targeting predictive, prognostic, and diagnostic biomarkers of lung cancer. Singh J, Luqman S, **Meena A\***. *Food and Chemical Toxicology*. 144. 111592. 2020. **(IF: 4.3)**
34. Acacetin, a flavone with diverse therapeutic potential in cancer, inflammation, infections and other metabolic disorders. Singh S, Gupta P, **Meena A**, Luqman S\*. *Food and Chemical Toxicology*. 145:111708. 2020. **(IF: 4.3)**
35. Research progress in improving shortcomings of the anti-cancer drug (s) considering flavonoid (s) synergy with novel approaches. Hussain Y, Luqman S, **Meena A\***. *Currents Topics in Medicinal Chemistry*. 20. 1791-1809. 2020. **(IF: 3.26)**
36. Flavonoids as prospective aromatase inhibitors in breast cancer prevention/therapy. Seth R, Kushwaha S, Luqman S, **Meena A\***. *Current molecular pharmacology*. 14. 1112-1124. 2020 **(IF: 2.7)**
37. Diversity of Essential Oil-Secretory Cells and Oil Composition in Flowers and Buds of Magnolia sirindhorniae and Its Biological Activities. Ghosh D, Chaudhary N, Uma Kumari U, K. Singh J, Tripathi P, Meena A, Luqman S, Yadav A, Chanotiya. C. S, Pandey G, Kumar N\*. *Chemistry & Biodiversity*. 18. e2000750. 2020.**(IF 2.9)**
38. Pharmacology of Carissa carandas leaf extract: Anti-proliferative, Antioxidant and Antimicrobial investigation. Pathak G, Singh S, Singhal M, Singh J, Hussain Y, Gupta M, **Meena A\***. *Plant Biosystems*. doi.org/10.1080/11263504.2020.1762787. 2020. **(IF: 2.0)**

## 2019

39. Targeting Ca<sup>2+</sup> signalling through phyto-molecules to combat cancer. Singh J, Hussain Y, Luqman S, **Meena A\***. *Pharmacological Research*.146. 104282. 2019. **(IF: 9.3)**
40. Rutin protects t-butyl hydroperoxide-induced oxidative impairment via modulating the Nrf2 and iNOS activity. Singh S, Singh DK, **Meena A**, Dubey V, Masood N, Luqman S. *Phytomedicine*. 55. 92-104. 2019 **(IF: 7.9)**
41. Application of the combinatorial approaches of medicinal and aromatic plants with nanotechnology and its impacts on healthcare. Kumari P, Luqman S, **Meena A\***. *Daru Journal of Pharmaceutical Science*. 27. 475-489. 2019. **(IF: 3.6)**
42. Cellulose nanofibers from lignocellulosic biomass of lemongrass using enzymatic hydrolysis: characterisation and cytotoxicity assessment. Kumari P, Pathak G, Gupta R, Sharma D, **Meena A\***. *Daru Journal of Pharmaceutical Science*. 27. 683-693. 2019. **(IF: 3.6)**
43. Rutin restricts hydrogen peroxide-induced alterations by up-regulating the redox-system: An in vitro, in vivo and in silico study. Singh S, Dubey V, **Meena A**, Siddiqui L, Maurya AK, Luqman S. *European Journal of Pharmacology*. 835:115-125. 2018. **(IF: 4.432)**

## 2018

44. Isothymusin, a natural polyphenolic constituent as a promising inhibitor of cancer cell proliferation. Singh S, Kanojiya D, Kumari P, Luqman S, **Meena A\***. *Cancer Medicine*. 7: 49-50. 2018. **(IF: 4.452)**

## 2016

45. Binding studies and biological evaluation of  $\beta$ -carotene as a potential inhibitor of human calcium/calmodulin-dependent protein kinase IV. Naz H, Khan P, Tarique M, Rahman S, **Meena A**, Ahamad S, Luqman S, Islam A, Ahmad F, Hassan MI. *International Journal of Biological Macromolecules*. 96:161-170. 2016. **(IF: 6.953)**
46. Impact of biochar amendment on enzymatic resilience properties of mine spoils. Jain S, Mishra D, Khare P, Yadav V, Deshmukh Y, **Meena A**. *Science of the Total Environment*. 544: 410-421. 2016. **(IF: 7.963)**

## 2015

47. Development of crystalline cellulosic fibers for sustained release of drug. Mishra D, Yadav V, Khare P, Jyotsahna, Das M R, Meena A, K. Shanker. *Currents topics in Medicinal Chemistry*.16: 2026-35. 2015. **(IF 3.2)**
48. Sustained signalling by PTH modulates IP<sub>3</sub> accumulation and IP<sub>3</sub> receptors through cyclic AMP junctions. Meena A, Tovey SC, Taylor CW. *Journal of Cell Science*. 128: 408-420. 2015. **(IF: 5.285)**

## 2014

49. Reliable encoding of stimulus intensities within random sequences of intracellular Ca<sup>2+</sup> spikes. Thurley K, Tovey SC, Moenke G, Prince VL, Meena A, Thomas AP, Skupin A, Taylor CW, Falcke M. *Science Signalling*. 7: 331: ra59. 2014. **(IF: 8.192)**
50. Genomic identification of potential targets unique to *Candida albicans* for the discovery of antifungal agents. Tripathi H, Luqman S, **Meena A**, Khan F. **Current Drug Targets**. 15: 136-49. 2014 **(IF: 3.465)**

## 2012

51. Neoflavonoids and tetrahydroquinolones as possible cancer chemopreventive agents. Luqman S, **Meena A**, Singh P, Kondratyuk TP, Marler LM, Pezzuto JM, Singh N. *Chemical Biology and Drug Design*. 80: 616-24. 2012 (IF: 2.87)

## 2011

52. In silico exploration of anti-inflammatory activity of natural coumarinolignoids. **Meena A**, Yadav DK, Srivastava A, Khan F, Chanda D, Chattopadhyay SK. *Chemical Biology and Drug Design*. 78: 567-79. 2011 (IF 2.87)

53. Suppression of tumor necrosis factor- $\alpha$ -induced nuclear factor  $\kappa$ B activation and aromatase activity by capsaicin and its analog capsazepine. Luqman S, **Meena A**, Marler LE, Kondratyuk TP, Pezzuto JM. *Journal of Medicinal Food*. 14:1344-51. 2011 (IF: 2.78)

## 2010

54. Development of QSAR model for immunomodulatory activity of natural coumarinolignoids. Yadav DK, **Meena A**, Srivastava A, Chanda D, Khan F, Chattopadhyay SK. *Drug Design Development Therapy*. 4 : 173-86. 2010 (IF: 4.162)

## Talks and Conferences

1. Parveen S, **Meena A**, Luqman S. Hordenine prevents lung cancer cell proliferation by inducing S-phase arrest through inhibiting tubulin polymerization and targeting KRAS. International conference on drug discovery 2022. 10-12 Nov 2022. Pg PDD140. BITA Pilani, K K Birla Goa Campus
2. Singh J, **Meena A\***, Luqman S. In silico docking analysis of selected terpenoids in targeting lung cancer biomarkers. International conference on drug discovery 2022. 10-12 Nov 2022. Pg PDD131. BITA Pilani, K K Birla Goa Campus
3. Seth R, **Meena A\***. Enzymen mediated synthesis of nanofibers from agricultural waste: characterisation and toxicity studies. International Conference on Emerging Materials for sustainable development (EMSD-2022). 9-11 Oct 2022, pg 142. CSIR-CSIO, Chandigarh
4. Raza W, **Meena A\***, Luqman S. Galangin restricts the proliferation of androgen-independent human prostate adenocarcinoma cells by inducing ROS-mediated apoptosis. International Conference on Biodiversity and Bioprospecting. 22-24 June, 2022, pg 46. Kathmandu, Nepal (**Poster First Prize**)
5. Singh J, Seth R, Luqman S, **Meena a\***. Borneol prevents Lung Cancer by Inducing ROS-independent apoptosis and targeting AKT. International Conference on Biodiversity and Bioprospecting. 22-24 June, 2022, pg 50. Kathmandu, Nepal
6. Parveen S, **Meena A**, Luqman S. Cinchonine targets lung cancer biomarkers; An in silico and in vitro investigation. International Conference on Biodiversity and Bioprospecting. 22-24 June 2022, pg 58. Kathmandu, Nepal
7. Hussain Y, **Meena A\***. Hesperidin potentiste ROS-dependent cytotoxicity with Sorafenib in hepatocellular carcinoma cells. International Conference on Biodiversity and Bioprospecting. 22-24 June, 2022, pg 59. Kathmandu, Nepal

8. Singh J, Luqman S, **Meena A\***. Fridelin Targets B-Raf and Prevents Lung Cancer by inducing ROS-Mediated apoptosis. 8<sup>th</sup> International Symposium on Current Trends in Drug Discovery Research. 12-14 March 2022. Pg 227. CDRI, Lucknow
9. Raza W, **Meena A\***, Luqman A. Galangin Targets G2/M Phase of the Cell Cycle and Suppress the Proliferation of Skin Carcinoma cells by Increasing ROS. 8<sup>th</sup> International Symposium on Current Trends in Drug Discovery Research. 12-14 March 2022. Pg 276. CDRI, Lucknow
10. Hussain Y, **Meena A\***. Naringenin Potentiates ROS-Dependent Cytotoxicity with Sorafenib in Hepatocellular Carcinoma Cells. 8<sup>th</sup> International Symposium on Current Trends in Drug Discovery Research. 12-14 March 2022. Pg 278. CDRI, Lucknow
11. Kumari P, **Meena A\***. Green cellulose nanofibers for controlled drug release of curcumin. 4<sup>th</sup> International Conference on Soft Materials. 13-18 Dec 2020 **(Flash Talk)**
12. Kumari P, **Meena A\***. Application of green synthesised cellulose nanofibers from lemongrass waste for controlled release of anti-cancer drug. National Conference on Nanomaterials in Biology 9-12 Oct 2019. 1: 37. University of Rajasthan.
13. Pathak G, Singh S, Kumari p, Luqman S, **Meena A\***. Inhibitory effects of Cirsimaritin on cell proliferation and targets involved in the promotion and progression of Lung cancer. Current Trends in Drug Discovery Research-2019-p22-4: Pg 133. Feb 20-23, 2019, CDRI, Lucknow, India.
14. Pathak G. Singh S, Sehgal M, Luqman S, **Meena A\***. Antioxidant and antimicrobial activities of *Carissa carandas* leaf extracts International Conference on Phytomedicine-ICPM/2019/OP-071: Pg. 56. Aug 29-31, 2018, Department of Botany, Bharathiar University, Coimbatore, India. **(Oral Presentation)**
15. Singh S, Kanojiya D, Kumari P, Luqman S, **Meena A\***. Isothymusin, a natural polyphenolic constituent as a promising inhibitor of cancer cell proliferation. The International Conference on Cell Death in Cancer and Toxicology: Pg 49-50. Feb 20-22. 2018. CSIR-Indian Institute of Toxicology Research, Lucknow. India
16. Kumari P, Khare P, **Meena A\***. Comparative study of cellulose nanofibers obtained from lignocellulosic biomass using enzymatic and acid hydrolysis methods. International Conference on Nanotechnology: Ideas, Innovations and Initiatives-2017-7M-Poster-87: Pg 30. Dec 6-8, 2017. Centre of Nanotechnology, Dept. of Mechanical and Industrial Engineering, IIT Roorkee, India.
17. Kumari P, Khare P, **Meena A\***. Application of lignocellulosic fibres for the synthesis of Cellulose nano-fibrils using enzymatic method. Expanding Horizon of Nanotechnology-NANOSCITECH/17/0233: Pg 120. Nov 9-10, 2017. Panjab University, Chandigarh, India.
18. Siddiqui L, Singh S, Dubey V, **Meena A**, Luqman S\*. Enumerating the chemopreventive efficacy of plant secondary metabolites during oxidative stress in human erythrocytes International Conference on Medicinal Plants: Resource for Affordable New Generation Healthcare-**T IB 66: Pg 90. Feb 22-25, 2015 CSIR-CIMAP, Lucknow.**
19. **Meena A**, Tovey SC, Taylor CW\*. Sustained signalling by PTH modulates IP<sub>3</sub> accumulation and IP<sub>3</sub> receptors via cyclic AMP junctions. Pharmacology Science Day-vol 1: Pg 17. Sep 24, 2013. Lee Hall, Wolfson College, University of Cambridge. U.K.

20. Pal A, Chanda D, Chanotiya CS, Jha H, Luqman S, Trivedi P, Agarwal J, **Meena A**, Khan F, Bawankule DU. Modulation of Rifampicin-induced cytokines in liver tissues of swiss albino mice by *Vetiveria zizanioides* root extract. 12<sup>th</sup> International Congress of Ethnopharmacology SNPSJU0533: Pg 224. Feb 17-19, 2012, Jadavpur University, Kolkata, India.
21. **Meena A\***. Prolonged cAMP-mediated inositol trisphosphate receptor sensitisation. Science Day Vol 1:Pg 18. Aug 25, 2012. Laboratory of Molecular Biology, University of Cambridge. U.K .
22. **Meena A**, Tovey SC, Taylor CW\*. Sustained signalling from parathyroid hormone to inositol 1,4,5-trisphosphate receptors via cyclic AMP junctions Pharmacology science day-vol 1:Pg 12. Sep 23, 2012, Department of Pharmacology, University of Cambridge. U.K.
23. Tripathi H, **Meena A**, Khan F\*, Luqman S. Identification of unique proteins of *Candida albicans* as antifungal drug targets. 80<sup>th</sup> Annual Meeting of the Society of Biological Chemists (India) Metabolic Pathway Modulation: Applications in Health and Agriculture DB-12: Pg 147. Nov 12-15, 2011, Lucknow, India.
24. **Meena A**, Kapoor S, Khan F\*. *In silico* exploration of Betulinic acid molecular target and quantitative structure-activity relationship. 97<sup>TH</sup> Indian Science congress: Pg 117. Jan 3 -7, 2010. Lucknow, India.
25. Luqman S, **Meena A**, Negi AS\*. Neoflavonoids in cancer chemoprevention: A molecular docking investigation. 4th International Symposium on Current Trends in Drug Discovery Research, CTDDR: Pg 41. Feb 17 -21 2010. CDRI, Lucknow, India.
26. **Meena A**, Srivastava A, Yadav DK, Chanda D, Khan F\*, Chattouadhyay SK. Insilico Target Identification of natural coumarinlignoids against immuno-modulatory activity.. International Symposium on current status and opportunities in Aromatic and Medicinal Plants, AROMED: Pg 194, Feb 21 -24 2010. CSIR-CIMAP, Lucknow, India (**Poster First Prize**)
27. Mishra S, **Meena A**, Singh S, khan F, Shukla R\*. Detection of substrate binding motifs for morphin biosynthetic pathway intermediates in Novel wound inducible (R, S) - reticuline 7-Methyltransferase of *Papaver Somniferum*. International Symposium on current status and opportunities in Aromatic and Medicinal Plants :Pg 51, Feb 21-24, 2010. CSIR-CIMAP, Lucknow, India.
28. Singh S, Kumar JK, Saikia D, Shanker K, Khan F, **Meena A**, Negi AS, Banerjee B\*. Anti-tubercular activity of novel labdane diterpenoide form curcuma amada and its semisynthetic analogues. International Symposium on current status and opportunities in Aromatic and Medicinal Plants:Pg 155. Feb 21 -24. 2010. CSIR-CIMAP, Lucknow, India.
29. Luqman S, **Meena A**, Marler LE, Kondralyuk TP, Pezzuto JM\*. Inhibition of NFkB activation and Aromatase activity by vanilloids: An invitro & in silico study. Eight International Congress of Targeted Therapies in Cancer. Aug 21-23, 2009. Washington DC. USA.
30. Yadav DK, **Meena A**, Negi AS, Khan F\*. Biological Activity Prediction of Gallic Acid Derivatives through Quantitative Structure-Activity Relationship (QSAR). National Semina on Environmental Degradation and Biodiversity: Problems & Prospects. Nov 29-30 Nov, 2009. Lucknow, India.
31. Sharma A\*, Roy S, Tripathi PT, Mishra M, Roy P, Khan F, **Meena A**. *In-silico* Insight to predict and Analyse Putative Metal Binding Sites for Phytoremediation in MAP's. Proceedings of

32. **Meena A**, Khan F, Sharma A. Identification and modelling of proteins present in *Curcuma Longa* using splice alignment methodology: Comparative Genomics approach. Tripathi KP, Roy S, Khanna P, Sanchita, Fourth National Interactive Meet-90, Nov 29 -30, 2008. **(Poster First Prize)**

### Responsibility

- **Project Investigator Project title:** Modulation of TRPC channel-mediated angiogenesis in lung carcinoma cells using selected monoterpenes. Funded by SERB- DST, New Delhi, India for the period of 2022-2025 (Funding amount 36.7 Lakhs)
- **Project Investigator Project title:** 'Molecular expression study of Ca<sup>2+</sup> pumps/channels in Lung cancer cell and its modulation through plant secondary metabolites' funded by SERB- DST, New Delhi, India for the period of 2017-2020 (Funding amount 39.9 Lakhs)
- **Project Investigator Project title:** 'Molecular target-based approach towards cancer chemoprevention by flavonoids via ROS mediated cascades' funded by Department of Science and Technology, U.P, India for the period of 2018-2021 (funding amount 10.44 Lakh)
- **Project Investigator Project title:** 'Studies on identification and interaction of novel antifungal targets & phytomolecules for combating drug resistance in *Candida albicans*' funded by the Department of Science and Technology, U.P, India for the period of 2010-2013 (funding amount 6.9 Lakh)
- **Co-Project Investigator Project title:** 'Target-based evaluation of natural products and their analogues as anti-cancer agents' funded by Department of Science and Technology, U.P, India for the period of 2011-2014 (funding amount 7.16 Lakh)

### Book Chapter

- Raza W. Singh J, Hussain Y, Luqman S, **Meena A\***. 2023 'FDA approval for phytochemicals in the treatment of cancer'. Phytonutrients in the Treatment of Gastrointestinal Cancer. Bentham Sciences Press. United Arab Emirates.
- Kumari P, Seth R, **Meena A\***. 2021. Consequences of Nanomaterials on Human Health and Ecosystem. Nanotoxicology: Toxicity Evaluation of Nanomedicine Applications (Edition: 1<sup>st</sup>) CRC Press. United States.
- Kumari P, Luqman. S, **Meena A\***. 2019. Nanomaterials: A promising and prospective approach for drug delivery. Environmental Chemistry for a Sustainable World. Springer, Germany.
- Dr. Pulok K Mukherjee, Chanda D, Chanotiya CS, Luqman S, Jha H, Agarwal J, Trivedi P, **Meena A**, Khan F, Pal A, Bawankule DU. Modulation of Rifampicin-induced TNF- $\alpha$  and IFN- $\gamma$  Expression in Hepatic Tissues of Swiss Albino Mice by *Vetiveria zizanioides* root extract. Traditional Medicine and Globalization-The Future of Ancient Systems of Medicine 2012. Maven Publishers, India.
- Khan F, **Meena A**, Sharma A. Docking-based Virtual Screening of Anti-cancer Drugs. Medicinal Plant Biotechnology 2010. CAB International, U.K.

## Patent as team member

Sl No.	Title	Country	Filed on (Date)	Granted on (Date)	Names of other inventors
1	Novel composition of essential oil-based formulation for its use as room disinfectant and room freshener	India	Application No. 0174NF2021; dated: 13.10.2021		Luqman S, Yadav NP, Chanotiya CS, Shanker K, Bawankule DU, Chanda D, <b>Meena A</b> , Pal A, Tandon S, Darokar MP, Trivedi PK, Kumari U KM, Singh S, Singh DK, Hussain Y, Sinha P, Bhatt D, Kumar A, Yadav P

## Technology/product as team member

Sl. No.	Title	Period during which developed	Date of transfer	Organization / Industry	Total fees realized	Your Role*
1	Immunity Booster-based on kalmegh CIM-Megh	2021	12/02/2021	M/s. Meghdoot Gramodyog Seva Sansthan, Lucknow	Rs. 50 Lacs + GST	Team Member
1	Hand Sanitizer Gel/Liquid	2019-2020	26.09.2020	M/s. Vyom India Organics Private Limited, B-346 Rajendra Nagar, Bareilly-243122	Rs. 3.0 Lacs + GST	Team Member
2	Hand Sanitizer Gel/Liquid	2019-2020	19.05.2020	Hapi Key 44/1/6, Phase-1, I.D.A., Jeedimetla, Hyderabad-500055	Rs. 3.0 Lacs + GST	Team Member
3	Hand Sanitizer Gel	2019-2020	21.04.2020	Rako Agrochem Pvt. Ltd. Khasra No. 1261, Goyla Industrial Area, Chinhat Deva Raod Lucknow-226019	Rs. 3.0 Lacs + GST	Team Member
4	Hand Sanitizer Gel/Liquid	2019-2020	15.06.2020	M/s. Asear Medicare, 68/2B, Wazir Hasan Road, Lucknow-226001	Rs. 3.0 Lacs + GST	Team Member
5	Hand Sanitizer Gel	2019-2020	27.04.2020	M/s. Innovative Concepts Ground floor, C-1215, Rajajipuram, P.O. Rajajipuram, Tah. Lucknow -226017	Rs. 3.0 Lacs + GST	Team Member
6	Hand Sanitizer Gel/Liquid	2019-2020	26.05.2020	Sai International Shop No. 11, Shanti Complex, Faizabd Road, Indira Nagar, Lucknow	Rs. 3.0 Lacs + GST	Team Member

### **Laboratory Team Members:**

- Guided 1 PhD, 4 Ph.D. students registered at present, 1 Project Assistant and guided 11 Master theses in the last three years.

### **Extracurricular Activities**

- Indian President's Award holder for National Scout and Guide Association of India
- Qualified Junior, Pre-senior U.N. Information Test conducted by United School Organization.

### **Language**

- Hindi (fluency: native)
- English (fluency: native)

### **Computer Proficiency**

- **Bioinformatics Software:** GROMAC for MD stimulation, GOLD, Scigress Explorer, Auto Dock, Chem-Bio-office, Pymole.
  - **Operating System:** Windows, Linux