

Faculty Portfolio

Dr. Kumar Venkatesan

Assistant Professor
Department of Pharm. Chemistry
College of Pharmacy
King Khalid University
Email: kumarve@kku.edu.sa
Phone: 00966505735246

Education:

Year of Graduation	Qualifications (Specializations if any)	University/College, Country
2008	Ph.D. (Pharmacy)	Jadavpur University, Kolkata, India
2004	M. Pharmacy (Pharmaceutical Chemistry)	Jadavpur University, Kolkata, India
2000	B. Pharmacy (Pharmaceutical Sciences)	The Tamil Nadu Dr. M G R Medical University, Chennai, India

Professional experience:

Year	Positions	University/College, Country
Dec 2014- Present	Assistant Professor	College of Pharmacy, King Khalid University, KSA
Apr 2013- Nov, 2014	Visiting Researcher	Hunter College, The City University of New York, New York, USA
Jun 2008- Sep 2011	Post-Doctoral Fellow	University of Liège, Belgium
Oct 2011- Mar 2013	Assistant Professor	The Erode College of Pharmacy, Erode, Tamil Nadu, India
Jun 2007- Jun 2008	Senior Research Fellow	Jadavpur University, Kolkata, India
Jun 2005- Jun 2006	Junior Research Fellow	Jadavpur University, Kolkata, India
Jun 2000 – Jun 2002	Lecturer	The Erode College of Pharmacy, Erode, Tamil Nadu, India

Community service activities

Year	Positions & Name of the Project	University/Company, Country
February 25-26, 2005	Organizing member of International Conference on Promotion and Development of Botanicals with International Coordination, Kolkata, West Bengal, India	Jadavpur University & Indian Institute of Chemical Biology Kolkata, India

Academic/research awards:

Year/Duration of Award	Name of the Award	University/Company, Country
2023	The Best Quality Practitioner Award	College of Pharmacy, King Khalid University, KSA
2021	The Best Faculty Award	College of Pharmacy, King Khalid University, KSA
2018 (Sem 392)	1st Prize- Student research group	College of Pharmacy, King Khalid University, KSA
2008	Postdoctoral Research Fellow	Walloon Region, Belgium
2007	Senior Research Fellow	DBT, Government of India, New Delhi, India
2007	Travel Award from IBRO 2007	7 th IBRO World Congress of Neuroscience, Melbourne, Australia
2007	International travel Award	DBT, Government of India, New Delhi, India
2006	Drug Information Association Travel Grant Award	Drug Information Association, 800 Enterprise Road, Horsham, PA
2002	Quality Improvement Programme (QIP) Fellow	All India Council for Technical Education (AICTE), New Delhi, India

Workshops/ Trainings:

Year	Title	University/Company, Country
2010	Laboratory animal sciences	Faculty of Medicine and Health Sciences University of Gent, Belgium, (2010-2011, FELASA Cat).
May 14 to May 23, 2008	Practical Summer Training in “ <i>Chromatography and Molecular Biology Techniques</i> ” – attended the 14 day Training	School of Biotechnology, Chemical & Biomedical Engineering, VIT University, Vellore, India
January 13, 2005	Pre-Conference Workshop on ‘ <i>Analytical Techniques in Pharmacology</i> ’	Department of Pharmacology, Institute of Post-Graduate Medical Education and Research XXXVII Annual Conference. Indian Pharmacological Society. Kolkata, India,

Research interests:

- Bioassay guided isolation and chemical characterization of the active compounds.
- Screening and evaluation of active compounds for neurodegenerative disease
- Physiological and pathological modulation of the electrical properties of excitable cells.
- Synaptic transmission in the brain.
- Application of electrophysiological and genetic approaches to understanding neuronal circuits and neurological disease.

Teaching experience:

- Pharmaceutical Organic Chemistry, at King Khalid University, 2015-2017 (Pharm. D. and B. Pharm)
- Medicinal Chemistry-1, at King Khalid University, 2015-2020 (Pharm. D. and B. Pharm)
- Medicinal Chemistry-2, at King Khalid University, 2015-2020 (B. Pharm)
- Medicinal Chemistry-3, at King Khalid University, 2019 (B. Pharm)
- Isolation and Identification of Natural Products at King Khalid University, KSA, 2015-2018
- Organic Chemistry and Chemistry of Synthetic Drugs at The Erode College of Pharmacy, Erode, Tamil Nadu, India, 2013-2016 (B. Pharm)

Professional membership:

Year	Name of the professional Body	Role
2008-Present	Life member of State Pharmacy Council, Tamilnadu, India	Life Member
2008-Present	Member in International Society of Ethno pharmacology, USA	Life Member
2008-Present	Member in International Brain Research Organization (IBRO), Paris France	Life Member
2008-2015	Journal of Ethnopharmacology	Reviewer
2008-2020	Evidence Based Complementary and Alternative Medicine (eCAM)	Reviewer
2008-2020	Pharmaceutical Biology	Reviewer

Research grants:

Year/Duration of Grant	Title of the Project	Awarding Body
2022(1 yr)	Discovery of novel acetylcholinesterase inhibitors as potential candidates for the treatment of alzheimers disease from medicinal plants of Saudi Arabia	DSR, King Khalid University
2022(1 yr)	“Mechanistic insight into the immunomodulatory and anti-viral potential of Bodinioside: Plant-derived immunostimulant from an endangered medicinal herb of Asir Region, Saudi Arabia	DSR, King Khalid University

2021(1 yr)	The effect of Geraniin on oral hypoglycemic drugs induced bone porosity in non-obese type 2 diabetic rats	DSR, King Khalid University
2017 (1 yr)	“Preparation, characterization and evaluation of anticancer activity of cucurbitacin loaded nanostructured lipid carriers with potential synergistic antimalignancy components in breast cancer” Project No. 460	DSR, King Khalid University

Publications:

- **K. Venkatesan**, S.M. Alshahrani, A.M. Alsubaiyel, M.H. Abduljabbar, M.E. Alosaimi, M. Grishina, S. Shirazian, Experimental - Theoretical approach for determination of Metformin solubility in supercritical carbon dioxide: Thermodynamic modeling, Case Stud. Therm. Eng. 41 (2023) 102649. <https://doi.org/10.1016/J.CSITE.2022.102649>.
- Y.I. Asiri, A. Alsayari, A. Bin Muhsinah, **K. Venkatesan**, M. Al-Ghorbani, Y.N. Mabkhot, Design, Synthesis, Docking Studies and Antimicrobial Activity of 5-Substituted 4-Phenyl-2-(Phenylamino) Thiophene-3-Carboxylic Acid Ethyl Esters, Polycyclic Aromatic Compounds., 43(2023), 1929–1940. <https://doi.org/10.1080/10406638.2022.2036775>.
- **K. Venkatesan**, Anti-amnesic and anti-cholinesterase activities of α -asarone against scopolamine-induced memory impairments in rats, Eur. Rev. Med. Pharmacol. Sci. 26 (2022) 6344–6350. https://doi.org/10.26355/EURREV_202209_29660.
- **K. Venkatesan**, N. Haider, M. Yusuf, A. Hussain, O. Afzal, S. Yasmin, A.S.A. Altamimi, Water/transcutol/lecithin/M-812 green cationic nanoemulsion to treat oxytetracycline contaminated aqueous bulk solution, J. Mol. Liq. 357 (2022) 119154. <https://doi.org/10.1016/J.MOLLIQ.2022.119154>
- S. Alshehri, M. Alqarni, N. Ibrahim Namazi, I.A. Naguib, **K. Venkatesan**, Y.O. Mosaad, M. Pishnamazi, A.M. Alsubaiyel, M.A. S Abourehab, A. Madinah Al Munawarah, S. Arabia, Design of predictive model to optimize the solubility of Oxaprozin as nonsteroidal anti-inflammatory drug, Sci. Reports 2022 121. 12 (2022) 1–10. <https://doi.org/10.1038/s41598-022-17350-5>.
- W.K. Abdelbasset, S.M. Elkhohli, K.A. Ismail, S. Alshehri, A. Alobaida, B. Huwaimel, A.D. Alatawi, A.M. Alsubaiyel, **K. Venkatesan**, M.A.S. Abourehab, Development a novel robust method to enhance the solubility of Oxaprozin as nonsteroidal anti-inflammatory drug based on machine-learning, Sci. Reports 2022 121. 12 (2022) 1–9. <https://doi.org/10.1038/s41598-022-17440-4>.

- Alsalhi, B. Huwaimel, A. Alobaida, M.S. Alzahrani, S. Alshehri, **K. Venkatesan**, H. Kotb, M.A.S. Abourehab, Theoretical investigations on the liquid-phase molecular separation in isolation and purification of pharmaceutical molecules from aqueous solutions via polymeric membranes, *Environ. Technol. Innov.* 28 (2022) 102925. <https://doi.org/10.1016/J.ETI.2022.102925>.
- A. Bin Muhsinah, A. Alsayari, Y.I. Asiri, **K. Venkatesan**, M. Al-Ghorbani, Y.N. Mabkhot, Synthesis and Biological Evaluation of Certain Tetrasubstituted Thiophene Derivatives, *Polycycl. Aromat. Compd.* (2021). <https://doi.org/10.1080/10406638.2021.1933104>.
- A. Alsayari, A. Bin Muhsinah, Y.I. Asiri, **K. Venkatesan**, Y.N. Mabkhot, Synthesis and Biological Screening of Thiophene Derivatives, *Polycycl. Aromat. Compd.* (2021). <https://doi.org/10.1080/10406638.2021.1988998>.
- K. Venkatesan, K. Chidambaram, P. Paulsamy, R. Ramaiah, A. Al-Qahtani, **K. Venkatesan**, E.M. Pappiya, S. Devidi, K. Krishnaraju, A Subset of Primary Polydipsia, “Dipsogneic Diabetes Insipidus”, in Apparently Healthy People Due to Excessive Water Intake: Not Enough Light to Illuminate the Dark Tunnel, *Healthc.* (Basel, Switzerland). 9 (2021). <https://doi.org/10.3390/HEALTHCARE9040406>.
- Y.I. Asiri, A. Bin Muhsinah, A. Alsayari, **K. Venkatesan**, M. Al-Ghorbani, Y.N. Mabkhot, Design, synthesis and antimicrobial activity of novel 2-aminothiophene containing cyclic and heterocyclic moieties, *Bioorg. Med. Chem. Lett.* 44 (2021). <https://doi.org/10.1016/J.BMCL.2021.128117>.
- M. Alfaifi, A. Alsayari, N. Gurusamy, J. Louis, S.E. Elbehairi, **K. Venkatesan**, S. Annadurai, Y.I. Asiri, A. Shati, K. Saleh, H. Alboushnak, H. Handoussa, A. Bin Muhsinah, A.A. Motaal, Analgesic, Anti-Inflammatory, Cytotoxic Activity Screening and UPLC-PDA-ESI-MS Metabolites Determination of Bioactive Fractions of *Kleinia pendula*, *Molecules*. 25 (2020). <https://doi.org/10.3390/MOLECULES25020418>.
- Y.I. Asiri, A. Bin Muhsinah, A. Alsayari, H.A. Ghabbour, Z.M. Almarhoon, F.A. Al-aizari, **K. Venkatesan**, S. Tasqeeruddin, S.S. Sulthana, Y.N. Mabkhot, Design, synthesis, X-ray analysis, and biological screening of new oxime and enamionone thiazoline-2-thione derivatives, *J. Mol. Struct.* 1223 (2020) 128977. <https://doi.org/10.1016/j.molstruc.2020.128977>.

- A. Bin Muhsinah, A. Alsayari, H. Algarni, S.M. Soliman, N.A. Kheder, H.A. Ghabbour, Y.I. Asiri, **K. Venkatesan**, Y.N. Mabkhot, Synthesis, X-ray analysis and computational studies of two novel thiophene derivatives, *J. Sulfur Chem.* 41 (2020) 517–529.
<https://doi.org/10.1080/17415993.2020.1769096>.

Conference attendance/presentations:

1. V. Kumar V, A.Philippe , M.Alice, D.Melissa , N. Isabelle, R. Bernard , S.Vincent . Altered GABAergic inhibitory tone in the CA1 region of SV2A-deficient mice. Belgian Society of Fundamental and Clinical Physiology and Pharmacology, Autumn Meeting, Antwerpen, Belgium, October 22, 2011,
2. V. Kumar V, A.Philippe , M.Alice, D.Melissa , N. Isabelle, R. Bernard , S.Vincent . Altered GABAergic inhibitory tone in the CA1 region of SV2A-deficient mice. Neuroscience 2010, SfN's 40th annual meeting, San Diego, CA, USA, 255.17, November 13 – 17, 2010.
3. V. Kumar, K. Mukherjee, Bikash. C. Pal, Peter J. Houghton, Pulok K. Mukherjee. Acetylcholinesterase inhibitor from *Clitoria ternatea*. The 55th Annual Meeting and International Congress of the Society for Medicinal Plant Research, Graz, Austria, September 2 – 6, 2007 .
4. V. Kumar, K. Mukherjee, Peter J. Houghton, Pulok K Mukherjee. Cognitive enhancing effect of standardized root extract of *Clitoria ternatea* L. on scopolamine induced amnesic rats. The British Pharmaceutical Congress, Manchester, UK, September 10 – 12, 2007.
5. V. Kumar, M .Mal, P. J. Houghton and P.K. Mukherjee. Effects of *Acorus calamus* L. and its constituent on anticholinesterase and cognitive enhancing in rats. International Brain Research Organization (IBRO), 7th World Congress of Neuroscience, Melbourne, Australia, July 12 th -17th, 2007.