



**Dr. K. PREMKUMAR, Ph.D., D.Sc., MNASc., FIABMS, FNABS.**  
**Professor of Biomedical Science**

**Contact**

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**Academic Qualifications:**

<b>D.Sc.</b> Biomedical Science (2024)	Alagappa University, Karaikudi	
<b>Ph.D.</b> Genetics (2002)	Department of Genetics, Dr. ALM PG Institute of Basic Medical Sciences	University of Madras
<b>M.Sc.</b> Bio-Medical Genetics (1996)	Department of Genetics, Dr. ALM PG Institute of Basic Medical Sciences	University of Madras
<b>B.Sc.</b> Zoology (1994)	RKM Vivekananda College, Mylapore, Chennai	University of Madras

**Teaching & Research Experience:**

2019 - Till Date	Professor	Department of Biomedical Science, Bharathidasan University (BDU), Tiruchirappalli, Tamil Nadu,
2019 – 2023	Professor & Head	University (BDU), Tiruchirappalli, Tamil Nadu,
2016 - 2017	UGC RAMAN PDF	Michigan Centre for Translational Pathology, University of Michigan, Ann Arbor, MI. USA
2016 - 2019	Associate Professor	Department of Biomedical Science, BDU,
2006 - 2016	Assistant Professor	Department of Biomedical Science, BDU,
2005 - 2006	Research Associate	Centre for Pharmacogenetics, University of Pittsburgh, Pittsburgh, PA, USA
2004 - 2005	Post-Doctoral Researcher	Department of Radiation Oncology, UCDCMC, University of California, Davis. USA
2002 - 2004	Post-Doctoral Researcher	Department of Internal Medicine, UCDCMC USA

## Areas of Research

The main focus of my laboratory is on Cancer Biology, Genomic Instability and Nanotheranostics, particularly in delineating the Cellular and Genetic basis of Cancer and Developing Nanomaterials for enhanced Cancer Diagnosis and Therapy

## Research Supervision / Guidance

Program of Study		Completed	Ongoing
Research	Ph.D.	11	2
	M.Phil.	-	-
Project	PG	25	-
	UG / Others	-	-

## Additional Responsibilities

23.12.2022 – 21.02.2024	Director, Naan Mudhalvan Operational Cell - Bharathidasan University
29.07.2022 - 28.07.2023	Member, University UGC-CARE Verification Committee.
23.06.2022 – 22.12.2023	Nodal Officer Student's Grievance Cell – Bharathidasan University
02.08.2021 - 31.07.2023	Director (i/c) Students Affairs - Bharathidasan University
25.01.2022 - 24.01.2025	Member of Executive Committee – Institute of Entrepreneurship and Career Development - Bharathidasan University
29.11.2021 – 28.12.2021	Coordinator UGC sponsored 8th annual Faculty Development program, BDU, Tiruchirappalli-24
21.02.2023 - 20.02.2024	University Representative – Jamal Mohammed College, Trichy
03.03.2022 - 02.03.2024	University Representative-Academic Council – Rajah Serfoji Govt College,
20.03.2022 – 19.03.2024	University Representative – Srinivasan College of Arts & Science
24.12.2019 – 23.12.2023	University Representative - BOS Biochemistry - Holy Cross College

## Publications Overview

International		National		Others
Journals	Conferences	Journals	Conferences	Books / Chapters / Monographs / Manuals
85	-	-	-	04

**Cumulative Impact Factor (as per JCR) :** 316  
**h-index :** 35  
**i10 index :** 63  
**Total Citations :** 5091

## Funded Research Projects

### Completed Projects

S. No	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1	DST-SERB	2019	2022	An Integrated Genomic Approach to Delineate Molecular Links Underlying Hypoxia Mediated Epithelial Menseschymal Transition in Cancer Metastasis	40.68
1	ICMR	2014	2017	Investigation on the molecular links between survival and longevity: Tipping the Balance Between Stress and Stability	21.95
2	DST	2013	2017	Interplay between defective DNA damage signaling and hypoxic microenvironment: Towards the concept of chemoresistance and genomic instability	44.26
3	DBT	2010	2013	Investigation on the Mechanism, Efficacy and Genotoxic Risk of Gold Nanoparticles: Application in Photothermal Mediated Anticancer Therapy	87.89
4	UGC	2010	2013	Role of COX-2 in genomic instability: Possible implications on the early stages of carcinogenesis.	7.79
5	DST	2009	2012	Investigations on the Mechanism and Regulation of Site Specific DNA Cleavage in MLL BCR: Possible Contribution to Oncogenic Translocations.	19.93

## Distinctive Achievements / Awards

- Nominated Member of the National Academy of Sciences (NASI) (2019)
- Nominated Fellow of the National Academy of Biological Sciences (NABS) (2018)
- Nominated Fellow of the Indian Association of Biomedical Scientists (IABMS) (2018)
- Executive Council member of Indian Society of Human Genetics (ISHG) (2023 - Present)
- Executive Council Indian Association of Biomedical Scientists (2018 - 2023)
- Prof. Sundaram Subramaniam Memorial Oration Award – IABMS (2024)
- ICMR Prize for Biomedical Research by the Indian Council for Medical Research (2017)
- UGC Raman Fellowship for Post-Doctoral Research in USA (2016)
- INSA-Visiting Scientist Fellowship by Indian National Science Academy (2014)
- DST Young Scientist Award. (2009)

## Events organized in leading roles

Number of Seminars / Conferences / Workshops / Events organized: 08

1. Two Day National Hands-on Training on Mammalian Cell Culture Techniques for Anti-Cancer Studies” on 28<sup>th</sup> -29<sup>th</sup> Mar 2022 at Bharathidasan University, Trichy.
2. Prevention and Current Scenario of Novel Corona Virus on 13<sup>th</sup> March 2020 at BDU
3. Awareness on Corona Virus on 10<sup>th</sup> February 2020 at BDU
4. One day National Seminar on “Recent Advances in Medical Research (RAMR 2017)” on 7<sup>th</sup> Mar, 2018 at Bharathidasan University, Trichy.
5. One day Seminar on “Recent Advances in Medical Research (RAMR-2015)” on 7<sup>th</sup> Dec, 2015 at Bharathidasan University, Trichy.
6. Free Dental Checkup in association with Vasan Dental Care Trichy on 23<sup>rd</sup> August 2013 at Bharathidasan University
7. One day Seminar on “Recent Trends in Hospital Management (RTHM 2012)” on 6<sup>th</sup> Mar 2012 at Indian Medical Association Hall, Trichy
8. “International Conference on Medical Genetics and Genomics (ICMG-2011)” on 12-14<sup>th</sup> Dec,2011 at Bharathidasan University, Trichy.

## Events Participated: 32

### Conferences / Seminars / Workshops:

1. 45 Annual Conference of the Indian Association of Biomedical Scientists, hosted by AJ Institute of Medical Sciences and Research Centre, Mangaluru, Nov. 6<sup>th</sup>-9<sup>th</sup> 2024.
2. 48th Annual Meeting and International Conference of the Indian Society of Human Genetics (ISHG)- January 21-24, 2024 | Ahmedabad
3. International Conference on “Current concepts on the role of Indian medicine and phytoceuticals in the maintenance of health”, organized by the Indian Association of Biomedical Scientists (IABMS) at Mangalore University, Mangalore (2018)
4. Workshop on “Techniques in Clinical Hematology and Biochemistry”, Organized by Bharathidasan University, Trichy (2018)
5. One day National Seminar on “Emerging Trends in Cancer and Stem Cell Biology”, Organized by Bharathidasan University, Trichy (2018)

6. National Conference on Impact of Climate Change on Public Health (ICCPH 2018), Organized by Bharathidasan University, Trichy (2018)
7. UGC-Sponsored Two Day Workshop for Academic Administrators on “Institutional Assessment and Accreditation”, Organized by Bharathidasan University (2018)
8. National Seminar on “Emerging Trends in Cancer and Stem Cell Biology, Organized by Bharathidasan University, Trichy (2018)
9. Orientation Workshop on Swayam, Organized by Bharathidasan University, (2018)
10. International Conference on Biosciences and Bioinformatics, Organized by Bharathiar University, Coimbatore India (2017)
11. 38th Annual Conference of Indian Association of Biomedical Scientists, Organized by Dept of Physiology, Saveetha Medical India (2017)
12. National Seminar on “Frontiers in Biosciences (FIB-2016) Organized by Depart of Microbiology and Biotechnology, Jamal Mohammed College, Trichy. (2016)
13. 36th Annual Conference of Indian Association of Biomedical Scientists, Organized by Dept of Biotechnology, Pondicherry University, Pondicherry India (2015)
14. RTLS-2015”, National Seminar on “Recent Trends in Life Sciences” Organized by Jamal Mohamed College, Trichy, India. (2015)
15. Symposium on Human Cytogenetics& Genetic Toxicology, organized by Manipal University, Manipal, India (2014)
16. ISHG-2012 International Conference on Genes, Genetics & Genomics: Today & Tomorrow- Human Concerns, Panjab University, Chandigarh, India (2012)
17. NANOCON 012- IInd International Conference on Nanotechnology – Innovative Materials, Processes, Products and Applications“ Organized by Bharati Vidyapeeth University Pune, India (2012)
18. 5th Annual Conference on Genetic and Molecular Diagnosis in Modern Medicine Organized by SRM University, Chennai, India. (2012)
19. Current Scenario and Emerging trends in hepatocellular diseases organized by Pondicherry University, Puducherry. (2012)
20. “International Conference on Human Genetics”-Manipal University, Manipal. (2011)
21. Recent Advances in molecular biology techniques organized by Dept. of Marine Biotechnology, Bharathidasan University. (2011)
22. International Conference on Radiation Biology-Nanotech, Imaging and Stem Cell Research in Rad Oncology” Sri Ramachandra University, Chennai. (2010)
23. 50 Years of Down syndrome – Cytogenetics, Clinical Management and New Research organized by the centre for human Genetics, Banglore, India. (2010)
24. Anti-mutagenic Effects of Saffron (*Crocus sativus*L.) Against Antineoplastic Drugs Induced Chromosome Aberrations in Mouse Bone-marrow Cells - EMSI XXXII Annual Meet held at PSG College of Arts and Science, Coimbatore (2007)
25. Indo-Australian Conference on Human Variations and Pharmacogenomics Organized by Manipal, Life Sciences Centre, Manipal University. (2007)
26. Effects of Iron and Ascorbic Acid supplementation on Oxidative Stress and Genotoxicity in Mice- Federation of American Societies for Experimental Biology Annual Meeting, held at San Diego, California. USA. (2003)

27. Effects of Saffron (*Crocus sativus* L.) on lipid peroxidation and antioxidant status in Swiss albino mice treated with chemical genotoxins - "International Conference on Natural Antioxidants and Free Radicals in human health and radiation biology (NFHR-2001)", Bhaba Atomic Research Centre, Mumbai, India (2001)
28. Modulatory effects of spirulina fusiformis on chemically induced genotoxicity and oxidative stress in swiss albino mice - XXVI Annual Conference of Environmental Mutagen Society of India (EMSI), - Jawaharlal Nehru University, New Delhi (2001)
29. Antigenotoxicity of spirulina in swiss albino mice - XXV Annual Conference of Environmental Mutagen Society of India (EMSI) - MSSRF, Chennai. (2000)
30. Interaction of Garlic, Curcumin and Saffron in modulating cyclophosphamide induced genotoxicity in mice - XIV Annual Conference of EMSI, Bhaba Atomic Research Centre (BARC) Mumbai. (1999)
31. Evaluation of Antigenotoxic effects of saffron in mice: at the DAE Symposium on Recent Advances in the Genetic Epidemiology and Population Monitoring, University of Madras. India. (1998)
32. Induction of micronucleus by saffron in Swiss albino mice - XXIII Annual Conference of Environmental Mutagen Society of India (EMSI), University of Mysore, India. (1998)

### **Training Programmes Participated**

1. Metabolomics Workshop organized by Michigan Regional Compressive Metabolomics Research Center 8-11<sup>th</sup> May, 2017, Michigan Ann Arbor, USA
2. TEQIP II Faculty Development Program organized by Anna University-BIT Campus Tiruchirappalli, Tamil Nadu, India during 4<sup>th</sup> – 17<sup>th</sup> May, 2015.
3. UGC Sponsored Refresher course in Nanoscience (Interdisciplinary) organized by Academic Staff College, University of Madras, Chennai, Tamil Nadu, India during Nov 19 – Dec 9, 2013, "A" Grade.
4. UGC sponsored refresher course in life science (Impact of Biology on Human Welfare) organized by Academic Staff College, University of Madras, Chennai, Tamil Nadu, India during Feb 4 – 24, 2010. "A" Grade.
5. UGC sponsored orientation course organized by Academic Staff College, Bharathidasan University, Tiruchirappalli, Tamil Nadu, India during May 2 - 29, 2007 and obtained "A" Grade.

### **Overseas Exposure / Visits**

1. UGC Raman Fellowship for Post-Doctoral Research in Cancer Genetics at Michigan Center for Translational Pathology, University of Michigan, (2016-2017)
2. Research Associate, Center for Pharmacogenetics, Dept of Pharmaceutical Sciences, Univ. of Pittsburgh, Pittsburgh, PA15261, USA. (2005-2006)
3. Post Doctoral Researcher, Dept of Radiation Oncology, UC Davis Medical Center (UCDMC), University of California, Davis. USA. (2004-2005)
4. Post Doctoral Researcher, Division of Gastroenterology & Hepatology, Dept of Internal Medicine, UCDMC, University of California, Davis. USA (2002-2004)

## Membership in Professional Bodies

1. Life Member: Environmental Mutagen Society of India (EMSI)
2. Life Member: International Association for Biomedical Sciences (IABMS)
3. Life Member: Indian Society of Human Genetics (ISHG)
4. Life Member: Society for Mitochondrial Research and Medicine (SMRM)
5. Life Member: National Academy of Biological Sciences (NABS)

## Resource persons in various capacities : 45

Sl. No.	Name of the Programme	Organizer(s)	Title	Date
1	45th Annual Conference of IABMS	A.J. Institute of Medical Sciences & Research Centre, Manglore	Reactive oxygen Species (ROS) Modulate Tumor Stroma Interactions in the Tumor Micro Env.	08.11.24
2	Refresher Course in Life Sciences	UGC-MMTTC Bharathiar University (Online) Coimbatore	Genetics and Genotoxicity in Drug Discovery: Challenges and Opportunities	28.09.24
3	Special Lecture	Dept of Biotechnology, Rajagiri Dawood Batcha College of Arts & Science, Papanasam	From Detection to Cure Bridging Cancer Diagnosis and Cure	27.09.24
4	Inauguration of Bio-Glimpse Talk Series.	Srinivasan College of Arts and Science, Perambalur, Trichy	Cancer Nanomedicine: Benefits and Barriers	28.08.24
5	Two-Day International Conference on biorevolution- Pioneering Innovations in Life Science	PSGR Krishnammal College for Women, Coimbatore.	Targeted Therapies and Precision Oncology"	22.03.24
6	48th Annual Meeting and International Conference of the (ISHG 2024).	FRIGE Institute of Human Genetics, Ahmedabad & Indian Society of Human Genetics	Chairperson	23.01.24
7	45th Annual Conference of IABMS on 'Post COVID 19 Pandemic Era – Clinical and Translational Research	Indian Association for Biomedical Scientist and Department of Microbiology M.R. Government Arts College, Mannargudi - 614 001	"Art of Drafting Research Articles"	08.01.24
8	PG & Research Microbiology & BAF "V" Association	Dhanalakshmi Srinivasan College of Arts and Science college for women, Perambalur, Trichy	Microbiome: A New Emerging Hallmark of Cancer	15.09.23
9	Refresher Course in Life Sciences (ID) for Teachers	The Human Resource Development Centre of Bharathiar University	Genetic Toxicology Role of Nanomedicine in cancer	14.07.23
10	40th Annual Conference of IABMS	Chettinad Academy of Research and Education, Chennai	Genomic Instability and Cancer : Causes and Consequences	31.10.19

11	Refresher Course in Life Sciences	UGC-HRDC, Pondicherry University	Genomic instability in Cancer: Molecular Insights and Recent Advancements	10.12.18
12	Science Academies' Lecture Workshop on "Human Genomics and Genetic Diseases"	INSA & Saiva Bhanu Kshatriya College, Aruppukottai	Nanomedicine in Cancer Therapy	06.10.18
13	International Conference on Nanomaterials and their Applications	Dr. Umayal Ramanathan College for Women, Karaikudi	Nanomedicine	12.09.18
14	One day National Conference on Recent Trends in Remote Sensing Epidemiology and Nanotherapeutics in Disease Management	Sri G.V.G.Visalakshi College for Women, Udumalpet	Nanomedicine: Breaking the Barriers	22.02.18
15	National Symposium on Advances in Cancer Research	Karpagam Academy of Higher Education and Research, Coimbatore	Genomic Instability and Cancer: Molecular Insights and Recent Advancements	14.02.18
16	Refresher Course in Nanosciences (ID)	UGC HRDC, Bharathidasan University, Trichy.	Nanotherapeutics and Nanotoxicology: An Overview	02.01.18
17	Plenary Lecture on 38 <sup>th</sup> Annual Conference of Indian Association of Biomedical Scientists	IABMS, Saveetha Medical College, Chennai	Anticancer agents & Genotoxicity : Tipping the balance between Cellular Suicide and survival	24.11.17
18	Five day National level training program on Thesis Writing: From Copper Strip to Gold Bar	Department of English, Bharathidasan University, Trichy	Art of Drafting Research Articles	31.10.17
19	State-level seminar on 'Bioresource Technology for Bioenergy and Bioproducts'	Dept. of Microbiology, Biotechnology and Biochemistry, J.J. College of Arts and Science, Pudukottai	Marine Bioresource Potential Tools to Combat Cancer	09.03.16
20	Invited Lecture at Holy Cross College	Department of Botany, Holy Cross College, Trichy	Recent Advances and Emerging Trends in Nanotechnology	05.02.16
21	Biotechnology applications for today's world	Department of Zoology & microbiology, Thiagarajar College, Madurai.	Nanomedicine: An Emerging hope for Evading Old Obstacles	11.09.15
22	Three-day workshop on Research methodology	The research cell and medical education unit, Chennai Medical College Hospital and research centre, Trichy	Art of drafting Research articles	01.09.15
23	Refresher Course for Life Sciences (ID)	UGC Academic Staff College, Pondicherry University	Nanomedicine	09.03.15
24	Recent Trends in Life Science (RTLS-2015)	P.G and Research Department of Biotechnology, Jamal Mohamed College, Trichy	Influence of Tumor Microenvironment in Cancer Progression	25.02.15



25	The short-term course on biomedical science Applications of RNAi Technology	The Department of Biotechnology, Anna University-BIT campus, Tiruchirappalli	RNA Therapeutics and cancer Targetting: An overview on current status, challenges and progress	28.01.15
26	One day symposium on "Human Cytogenetics & Genetic Toxicology"	School of Life Sciences, Manipal University, Manipal	Genetic Toxicology and Nano Therapeutics	10.12.14
27	Invited Lecture	UGC Academic Staff College, Bharathidasan University	Genetic Basis of Inheritance and diseases	22.07.14
28	Advances in nanotechnology ; fabrication, processing and applications	Centre for nanoscience & nanotechnology, School of physics, Bharathidasan university, Trichy	Nanomedicine: A new hope for old obstacles	28.03.14
29	Workshop on Adv. in Nanotech: Fabrication, Processing & Appl.	Center for Nanoscience & Nanotech, Bharathidasan University, Trichy	Nanomedicine: A new hope for old obstacles	28.02.14
30	One day Student symposium on Cutting edges in Biotech	Avinashilingam University, Coimbatore	Biology of Cancer Basis, Diagnosis and Therapy	26.02.14
31	Medicinal Plant Research Prospects and Challenges	Srimad Andavan Arts and Science College	Basic Concepts in Genotoxicity Testing	13.02.14
32	Special Lecture	Periyar EVR College, Trichy	Recent Trends in Genetics	08.01.14
33	DST INSPIRE summer camp	Cauvery college for Women	Chromosomes: Genetic Keys	02.08.13
34	Invited Lecture	Central University of Kerala	Biomedical Genomics	20.11.12
35	National Conference Current Scenario and Emerging Trends in Hepatocellular Disease	Pondicherry University	Role of Apoptosis in Liver Diseases:	05.10.12
36	Applications of Nanomaterials	Lady Doak College, Madurai	Nanomaterials for Therapeutic Applications	12.09.12
37	Implementation of 2K11	Pavendar Bharathidasan College of Engineering and Technology	Human Chromosomes: Genetic Keys	28.03.12
38	National conference on aquatic biotoxin 2011	Marine biology, Annamalai University, Parangipettai	Marine natural products: potential tools to combat cancer	14.11.11
39	National workshop on Drug discovery and development	Department of Marine Biotechnology, Bharathidasan University, Tiruchirappalli	In vitro toxicology & alternatives to animal testing: benefits & barriers	03.11.11
40	Perspectives in Nanoscience and Nanobiotechnology	Karunya University	Nano Medicine: a new hope for old obstacles	10.11.10
41	Role of Genomics and Bioinformatics in Animal Health and Management: Seminar	Alagappa University	Genetic toxicology : Principles& Practice	26.03.09
42	Biotechnology – A Future Perspective	SRM University	Genomic Instability and Cancer	12.03.08

## Publications

1. Saraswathy SD, Mirunalini A, Karthikeyan K, Premkumar K. BH3 Mimetic Peptides: An Effective Strategy to Complement Anticancer Therapy. *Current Protein and Peptide Science*. 2023 Dec 1;24(10):853-64. doi: 10.2174/1389203724666230822100131. (impact factor: 1.9)
2. Muthumanickam S, Ramachandran B, Boomi P, Jeyakanthan J, Prabu HG, Jegatheswaran S, Premkumar K. Combination of bendamustine-azacitidine against Syk target of breast cancer: an in silico study. *J Biomol Struct Dyn*. 2023 Apr 26:1-13. doi:10.1080/07391102.2023.2203259. (Impact Factor: 5.235)
3. Shri Preethi M, Premkumar K, Asha Devi S. Molecular docking study on vitamin D supplements to understand their interaction with VDR-RXR $\alpha$  heterodimer and VDRE of TAGAP gene. *J Biomol Struct Dyn*. 2022 Aug 24:1-10. doi:10.1080/07391102.2022.2114939. (Impact Factor: 5.235)
4. Vanajothi R, Srikanth N, Vijayakumar R, Palanisamy M, Bhavaniramya S, Premkumar K. HPV-mediated Cervical Cancer: A Systematic Review on Immunological Basis, Molecular Biology, and Immune Evasion Mechanisms. *Curr Drug Targets*. 2022;23(8):782-801. doi:10.2174/1389450123666211221160632. (Impact Factor: 2.937)
5. Vanajothi R, Vedagiri H, Al-Ansari MM, Al-Humaid LA, Kumpati P. Pharmacophore based virtual screening, molecular docking and molecular dynamic simulation studies for finding ROS1 kinase inhibitors as potential drug molecules. *J Biomol Struct Dyn*. 2022 May;40 (8): 3385-3399. doi: 10.1080/07391102.2020.1847195. (Impact Factor: 5.235)
6. Siva G, Venkatesh S, Prem Kumar G, Muthukumar M, Senthil Kumar T, Premkumar K, Jayabalan N. Rapid bio-reduction of Trivalent aurum using in vitro Babchi leaf powder and its cytotoxicity against breast cancer MCF-7 cell lines. *Applied Nanoscience*. 2021 Jul 8:1-9. doi:10.1007/s13204-021-01958-6. (Impact Factor: 3.869)
7. Murugesan M, Premkumar K. Integrative miRNA-mRNA functional analysis identifies miR-182 as a potential prognostic biomarker in breast cancer. *Mol Omics*. 2021 Aug 9;17(4):533-543. doi: 10.1039/d0mo00160k. (Impact Factor: 4.212)
8. Selvam SI, Joicesky SM, Dashli AA, Vinothini A, Premkumar K. Assessment of anti bacterial, anti inflammation and wound healing activity in Wistar albino rats using green silver nanoparticles synthesized from *Tagetes erecta* leaves. *Journal of Applied and Natural Science*. 2021 Mar 14;13(1):343-51. doi: 10.31018/jans.v13i1.2519. (Impact Factor: 0.26)
9. Murugesan M, Premkumar K. Systemic Multi-Omics Analysis Reveals Amplified P4HA1 Gene Associated With Prognostic and Hypoxic Regulation in Breast Cancer. *Front Genet*. 2021 Feb 22; 12: 632626. doi: 10.3389/fgene.2021.632626. (Impact Factor: 4.772)
10. Sivakumar K, Parinamachivayam G, Krishnan MM, Ragavendran V, Stalin T, Premkumar K, Chakravarty S, Bharathi A. Reinforcement of 'imine-hydroxyl chelation pocket' by encapsulating into the  $\beta$ -CD cavity for the sterically protective detection of Al<sup>3+</sup>. *Journal of Molecular Liquids*. 2021 Feb 1;323:114949. doi: 10.1016/j.molliq.2020.114949. (Impact Factor: 6.633).
11. Sampath M, Pichaimani A, Kumpati P, Sengottuvelan B. The remarkable role of emulsifier and chitosan, dextran and PEG as capping agents in the enhanced delivery of curcumin by nanoparticles in breast cancer cells. *Int J Biol Macromol*. 2020 Nov 1;162:748-761. doi: 10.1016/j.ijbiomac.2020.06.188. (Impact Factor: 8.025)
12. Mehnath S, Arjama M, Rajan M, Premkumar K, Karthikeyan K, Jeyaraj M. Mineralization of bioactive marine sponge and electrophoretic deposition on Ti-6Al-4V implant for osteointegration. *Surface and Coatings Technology*. 2020 Jun 25; 392: 125727. doi:10.1016/j.surfcoat.2020.125727. (Impact Factor: 4.865).
13. Bhavaniramya S, Vanajothi R, Vishnupriya S, Premkumar K, Al-Aboody MS, Vijayakumar R, Baskaran D. Enzyme Immobilization on Nanomaterials for Biosensor and Biocatalyst in Food and Biomedical Industry. *Curr Pharm Des*. 2019;25(24):2661-2676. doi:10.2174/1381612825666190712181403. (Impact Factor: 3.31)

14. Vanajothi R, Hemamalini V, Jeyakanthan J, Premkumar K. Ligand-based pharmacophore mapping and virtual screening for identification of potential discoidin domain receptor 1 inhibitors. *J Biomol Struct Dyn*. 2020 Jun;38(9):2800-2808. doi:10.1080/07391102.2019.1640132. (Impact Factor: 5.235)
15. Boomi P, Poorani GP, Selvam S, Palanisamy S, Jegatheeswaran S, Anand K, Balakumar C, Premkumar K, Prabu HG. Green biosynthesis of gold nanoparticles using *Croton sparsiflorus* leaves extract and evaluation of UV protection, antibacterial and anticancer applications. *Applied Organometallic Chemistry*. 2020 May;34(5):e5574. <https://doi.org/10.1002/aoc.5574>. (Impact Factor: 4.072)
16. Jayapriya M, Premkumar K, Arulmozhi M, Karthikeyan K. One-step biological synthesis of cauliflower-like Ag/MgO nanocomposite with antibacterial, anticancer, and catalytic activity towards anthropogenic pollutants. *Res Chem Intermed*. 2020 Mar; 46:1771-88. doi: 10.1007/s11164-019-04062-1. (Impact Factor : 3.134)
17. Govindaraj P, Rani B, Sundaravadivel P, Vanniarajan A, Indumathi KP, Khan NA, Dhandapany PS, Rani DS, Tamang R, Bahl A, Narasimhan C, Rakshak D, Rathinavel A, Premkumar K, Khullar M, Thangaraj K. Mitochondrial genome variations in idiopathic dilated cardiomyopathy. *Mitochondrion*. 2019 Sep;48:51-59. doi:10.1016/j.mito.2019.03.003. (Impact Factor : 4.534)
18. Hemamalini V, Velayutham DPM, Lakshmanan L, Muthusamy K, Sivaramakrishnan S, Premkumar K. Inhibitory potential of Hydroxychavicol on Ehrlich ascites carcinoma model and in silico interaction on cancer targets. *Nat Prod Res*. 2020 Jun;34(11):1591-1596. doi: 10.1080/14786419.2018.1519819. (Impact Factor : 2.488)
19. Gnanakani PE, Santhanam P, Premkumar K, Kumar KE, Dhanaraju MD. Cytotoxic Efficacy of Nannochloropsis Extracts on Lung Carcinoma in Mice. *Indian Journal of Science and Technology*. 2019 Jun;12(21):1-2. doi: 10.17485/ijst/2019/v12i21/144520 (Impact Factor : 0.159)
20. Sasirekha R, Sheena TS, Sathiya Deepika M, Santhanam P, Townley HE, Jeganathan K, Dinesh Kumar S, Premkumar K. Surface engineered *Amphora subtropica* frustules using chitosan as a drug delivery platform for anticancer therapy. *Mater Sci Eng C*. 2019 Jan 1;94:56-64. doi: 10.1016/j.msec.2018.09.009. (Impact Factor : 8.457)
21. Gnanakani PE, Santhanam P, Premkumar K, Eswar Kumar K, Dhanaraju MD. Nannochloropsis Extract-Mediated Synthesis of Biogenic Silver Nanoparticles, Characterization and In Vitro Assessment of Antimicrobial, Antioxidant and Cytotoxic Activities. *Asian Pac J Cancer Prev*. 2019 Aug 1; 20(8): 2353-2364. doi:10.31557/APJCP.2019.20.8.2353. (Impact Factor : 2.06)
22. Mehra R, Vats P, Cao X, Su F, Lee ND, Lonigro R, Premkumar K, Trpkov K, McKenney JK, Dhanasekaran SM, Chinnaiyan AM. Somatic Bi-allelic Loss of TSC Genes in Eosinophilic Solid and Cystic Renal Cell Carcinoma. *Eur Urol*. 2018 Oct;74(4):483-486. doi: 10.1016/j.eururo.2018.06.007. (Impact Factor : 24.344)
23. Banu H, Renuka N, Faheem SM, Ismail R, Singh V, Saadatmand Z, Khan SS, Narayanan K, Raheem A, Premkumar K, Vasanthakumar G. Gold and Silver Nanoparticles Biomimetically Synthesized Using Date Palm Pollen Extract-Induce Apoptosis and Regulate p53 and Bcl-2 Expression in Human Breast Adenocarcinoma Cells. *Biol Trace Elem Res*. 2018 Nov;186(1):122-134. doi: 10.1007/s12011-018-1287-0. (Impact Factor : 4.081)
24. Murugesan M, Premkumar K. Hypoxia stimulates microenvironment in human embryonic stem cell through inflammatory signalling: An integrative analysis. *Biochem Biophys Res Commun*. 2018 Apr 6;498(3):437-444. doi: 10.1016/j.bbrc.2018.02.194. (Impact Factor : 3.322)
25. Ezhuthupurakkal PB, Ariraman S, Arumugam S, Subramaniyan N, Muthuvel SK, Kumpati P, Rajamani B, Chinnasamy T. Anticancer potential of ZnO nanoparticle-ferulic acid conjugate on Huh-7 and HepG2 cells and diethyl nitrosamine induced hepatocellular cancer on Wistar albino rat. *Nanomedicine*. 2018 Feb;14(2):415-428. doi:10.1016/j.nano.2017.11.003. (Impact Factor : 6.096)

26. Preedia Babu E, Subastri A, Suyavaran A, Premkumar K, Sujatha V, Aristatile B, Alshammari GM, Dharuman V, Thirunavukkarasu C. Size Dependent Uptake and Hemolytic Effect of Zinc Oxide Nanoparticles on Erythrocytes and Biomedical Potential of ZnO-Ferulic acid Conjugates. *Sci Rep.* 2017 Jun 23;7(1):4203. doi: 10.1038/s41598-017-04440-y. (Impact Factor : 4.997)
27. Maniyazagan M, Rameshwaran C, Mariadasse R, Jeyakanthan J, Premkumar K, Stalin T. Fluorescence Sensor for Hg<sup>2+</sup> and Fe<sup>3+</sup> ions using 3, 3'-Dihydroxybenzidine:  $\alpha$ -Cyclodextrin Supramolecular Complex: Characterization, in-silico and Cell Imaging Study. *Sensors and Actuators B: Chemical.* 2017 Apr 1;242:1227-38. <https://doi.org/10.1016/j.snb.2016.09.093>. (Impact Factor : 9.221)
28. Maniyazagan M, Mariadasse R, Jeyakanthan J, Lokanath NK, Naveen S, Premkumar K, Muthuraja P, Manisankar P, Stalin T. Rhodamine based "turn-on" molecular switch FRET-sensor for cadmium and sulfide ions and live cell imaging study. *Sensors and Actuators B: Chemical.* 2017 Jan 1;238:565-77. <https://doi.org/10.1016/j.snb.2016.07.102>. (Impact Factor : 9.221)
29. Mehra R, Vats P, Cieslik M, Cao X, Su F, Shukla S, Udager AM, Wang R, Pan J, Kasaian K, Lonigro R, Siddiqui J, Premkumar K, Palapattu G, Weizer A, Hafez KS, Wolf JS Jr, Sangoi AR, Trpkov K, Osunkoya AO, Zhou M, Giannico G, McKenney JK, Dhanasekaran SM, Chinnaiyan AM. Biallelic Alteration and Dysregulation of the Hippo Pathway in Mucinous Tubular and Spindle Cell Carcinoma of the Kidney. *Cancer Discov.* 2016 Nov;6(11):1258-1266. doi: 10.1158/2159-8290.CD-16-0267. (Impact Factor : 39.397)
30. Sridaran D, Ramamoorthi G, MahaboobKhan R, Kumpati P. Oxystressed tumor microenvironment potentiates epithelial to mesenchymal transition and alters cellular bioenergetics towards cancer progression. *Tumour Biol.* 2016 Oct;37(10):13307-13322. doi:10.1007/s13277-016-5224-6. (Impact Factor : 0.643)
31. Umadevi S, Premkumar K, Valarmathi S, Ayyasamy PM, Rajakumar S. Identification of novel genes related to diabetic retinopathy using protein-protein interaction network and gene ontologies. *Journal of Biological Systems.* 2016 Mar 15;24(01):117-27. doi.org/10.1142/S0218339016500066. (Impact Factor : 1.909)
32. Vignesh G, Sugumar K, Arunachalam S, Vignesh S, Arthur James R, Arun R, Premkumar K. Studies on the synthesis, characterization, human serum albumin binding and biological activity of single chain surfactant-cobalt(III) complexes. *Luminescence.* 2016 Mar;31(2):523-532. doi: 10.1002/bio.2991. (Impact Factor : 2.613)
33. Vignesh G, Pradeep I, Arunachalam S, Vignesh S, Arthur James R, Arun R, Premkumar K. Biological and protein-binding studies of newly synthesized polymer-cobalt(III) complexes. *Luminescence.* 2016 Mar;31(2):533-543. doi: 10.1002/bio.2992. (Impact Factor : 2.613)
34. Hariharan A, Begum TN, Ilyas MH, Jahangir HS, Kumpati P, Mathew S, et al. Synthesis of Plant Mediated gold Nanoparticles using Azima Tetracantha Lam. Leaves extract and Evaluation of their Antimicrobial Activities. *Pharmacognosy Journal.* 2016;8(5):507-512. doi:10.5530/pj.2016.5.17. (Impact Factor : 0.258)
35. Hari K, Kumpati P. Chitosan Tethered Colloidal Gold Nanospheres for Drug Delivery Applications. *J Nanosci Nanotechnol.* 2016 Jan;16(1):229-41. doi:10.1166/jnn.2016.10672. (Impact Factor : 1.134)
36. Dhivya S, Khandelwal N, Abraham SK, Premkumar K. Impact of Anthocyanidins on Mitoxantrone-Induced Cytotoxicity and Genotoxicity: An In Vitro and In Vivo Analysis. *Integr Cancer Ther.* 2016 Dec;15(4):525-534. doi: 10.1177/1534735416628344. (Impact Factor : 2.654)
37. Arun R, Dhivya S, Abraham SK, Premkumar K. Low-dose chemotherapeutic drugs induce reactive oxygen species and initiate apoptosis-mediated genomic instability. *Toxicol Res (Camb).* 2016 Jan 7;5(2):547-556. doi: 10.1039/c5tx00391a. (Impact Factor : 2.68)
38. Dhivya S, Premkumar K. Nomadic genetic elements contribute to oncogenic translocations: Implications in carcinogenesis. *Crit Rev Oncol Hematol.* 2016 Feb;98:81-93. doi:10.1016/j.critrevonc.2015.10.012. (Impact Factor : 6.625)

39. Banu H, Sethi DK, Edgar A, Sheriff A, Rayees N, Renuka N, Faheem SM, Premkumar K, Vasanthakumar G. Doxorubicin loaded polymeric gold nanoparticles targeted to human folate receptor upon laser photothermal therapy potentiates chemotherapy in breast cancer cell lines. *J Photochem Photobiol B*. 2015 Aug; 149: 116-28. doi:10.1016/j.jphotobiol.2015.05.008. (Impact Factor : 6.814)
40. Arunkumar P, Raju B, Vasantharaja R, Vijayaraghavan S, Preetham Kumar B, Jeganathan K, Premkumar K. Near infra-red laser mediated photothermal and antitumor efficacy of doxorubicin conjugated gold nanorods with reduced cardiotoxicity in swiss albino mice. *Nanomedicine*. 2015 Aug;11(6):1435-44. doi: 10.1016/j.nano.2015.03.012. (Impact Factor : 6.096)
41. Jeyaraj M, Renganathan A, Sathishkumar G, Ganapathi A, Premkumar K. Biogenic metal nanoformulations induce Bax/Bcl2 and caspase mediated mitochondrial dysfunction in human breast cancer cells (MCF 7). *RSC Advances*. 2015;5(3):2159-66. doi:10.1039/C4RA11686K. (Impact Factor : 4.036)
42. Govindaraj P, Khan NA, Rani B, Rani DS, Selvaraj P, Jyothi V, Bahl A, Narasimhan C, Rakshak D, Premkumar K, Khullar M. Response to Letter to the Editor" Mitochondrial haplogroups are associated with hypertrophic cardiomyopathy in the Indian population". *Mitochondrion*. 2015 Jan;20:103-4. doi: 10.1016/j.mito.2014.07.011.(Impact Factor : 4.534)
43. Kirubakaran P, Arunkumar P, Premkumar K, Muthusamy K. Sighting of tankyrase inhibitors by structure- and ligand-based screening and in vitro approach. *Mol Biosyst*. 2014 Oct;10(10):2699-712. doi: 10.1039/c4mb00309h. (Impact Factor : 4.212)
44. Chaubey G, Singh M, Crivellaro F, Tamang R, Nandan A, Singh K, Sharma VK, Pathak AK, Shah AM, Sharma V, Singh VK, Selvi Rani D, Rai N, Kushniarevich A, Ilumäe AM, Karmin M, Phillip A, Verma A, Prank E, Singh VK, Li B, Govindaraj P, Chaubey AK, Dubey PK, Reddy AG, Premkumar K, Vishnupriya S, Pande V, Parik J, Rootsi S, Endicott P, Metspalu M, Lahr MM, van Driem G, Villems R, Kivisild T, Singh L, Thangaraj K. Unravelling the distinct strains of Tharu ancestry. *Eur J Hum Genet*. 2014 Dec;22(12):1404-12. doi:10.1038/ejhg.2014.36. (Impact Factor : 5.31)
45. Banu H, Stanley B, Faheem SM, Seenivasan R, Premkumar K, Vasanthakumar G. Thermal chemosensitization of breast cancer cells to cyclophosphamide treatment using folate receptor targeted gold nanoparticles. *Plasmonics*. 2014 Dec;9:1341-9. doi:https://doi.org/10.1007/s11468-014-9747-7. (Impact Factor : 2.726)
46. Govindaraj P, Khan NA, Rani B, Rani DS, Selvaraj P, Jyothi V, Bahl A, Narasimhan C, Rakshak D, Premkumar K, Khullar M, Thangaraj K. Mitochondrial DNA variations associated with hypertrophic cardiomyopathy. *Mitochondrion*. 2014 May;16:65-72. doi:10.1016/j.mito.2013.10.006. (Impact Factor : 4.534)
47. Nehru S, Arunachalam S, Arun R, Premkumar K. Polymer-cobalt(III) complexes: structural analysis of metal chelates on DNA interaction and comparative cytotoxic activity. *J Biomol Struct Dyn*. 2014;32(11):1876-88. doi:10.1080/07391102.2013.836460. (Impact Factor : 5.235)
48. Pitchaimani A, Renganathan A, Cinthaikinian S, Premkumar K. Photochemotherapeutic effects of UV-C on acridine orange in human breast cancer cells: potential application in anticancer therapy. *RSC Advances*. 2014;4(42):22123-8. doi: 10.1039/C4RA01647E (Impact Factor : 4.036)
49. Rajaram K, Moushmi M, Velayutham Dass Prakash M, Kumpati P, Ganasaraswathi M, Sureshkumar P. Comparative bioactive studies between wild plant and callus culture of *Tephrosia tinctoria* pers. *Appl Biochem Biotechnol*. 2013 Dec;171(8):2105-20. doi:10.1007/s12010-01. (Impact Factor : 3.094)
50. Ramamurthy Ch, Sampath KS, Arunkumar P, Kumar MS, Sujatha V, Premkumar K, Thirunavukkarasu C. Green synthesis and characterization of selenium nanoparticles and its augmented cytotoxicity with doxorubicin on cancer cells. *Bioprocess Biosyst Eng*. 2013 Aug;36(8):1131-9. doi: 10.1007/s00449-012-0867-1. (Impact Factor : 3.434)
51. Jeyaraj M, Sathishkumar G, Sivanandhan G, MubarakAli D, Rajesh M, Arun R, Kapildev G, Manickavasagam M, Thajuddin N, Premkumar K, Ganapathi A. Biogenic silver nanoparticles for cancer treatment: an experimental report. *Colloids Surf B Biointerfaces*. 2013 Jun 1;106:86-92. doi: 10.1016/j.colsurfb.2013.01.027. (Impact Factor : 5.268)

52. Venkatesan R , Pichaimani A , Hari K , Balasubramanian PK , Kulandaivel J , Premkumar K. Doxorubicin conjugated gold nanorods: a sustained drug delivery carrier for improved anticancer therapy. *J Mater Chem B*. 2013 Feb 21;1(7):1010-1018. doi:10.1039/c2tb00078d. (Impact Factor : 7.571)
53. Hari K, Pichaimani A, Kumpati P. Acridine orange tethered chitosan reduced gold nanoparticles: a dual functional probe for combined photodynamic and photothermal therapy. *RSC Advances*. 2013;3(43):20471-9. doi:https://doi.org/10.1039/C3RA44224A (Impact Factor : 4.036)
54. Ramamurthy CH, Padma M, samadanam ID, Mareeswaran R, Suyavaran A, Kumar MS, Premkumar K, Thirunavukkarasu C. The extra cellular synthesis of gold and silver nanoparticles and their free radical scavenging and antibacterial properties. *Colloids Surf B Biointerfaces*. 2013 Feb 1;102:808-15. doi: 10.1016/j.colsurfb.2012.09.025. (Impact Factor : 5.268)
55. Arunkumar P, Thanalakshmi M, Kumar P, Premkumar K. Micrococcus luteus mediated dual mode synthesis of gold nanoparticles: involvement of extracellular  $\alpha$ -amylase and cell wall teichuronic acid. *Colloids Surf B Biointerfaces*. 2013 Mar 1;103:517-22. doi: 10.1016/j.colsurfb.2012.10.051. (Impact Factor : 5.268)
56. Arunkumar, P., Vedagiri, H. & Premkumar, K. Rapid bioreduction of trivalent aurum using banana stem powder and its cytotoxicity against MCF-7 and HEK-293 cell lines. *J Nanopart Res* 15, 1481 (2013). https://doi.org/10.1007/s11051-013-1481-0. (Impact Factor : 2.533)
57. Kumar P, Govindaraju M, Senthamilselvi S, Premkumar K. Photocatalytic degradation of methyl orange dye using silver (Ag) nanoparticles synthesized from *Ulva lactuca*. *Colloids Surf B Biointerfaces*. 2013 Mar 1;103:658-61. doi: 10.1016/j.colsurfb.2012.11.022. (Impact Factor : 5.268)
58. Jeyaraj M, Rajesh M, Arun R, MubarakAli D, Sathishkumar G, Sivanandhan G, Dev GK, Manickavasagam M, Premkumar K, Thajuddin N, Ganapathi A. An investigation on the cytotoxicity and caspase-mediated apoptotic effect of biologically synthesized silver nanoparticles using *Podophyllum hexandrum* on human cervical carcinoma cells. *Colloids Surf B Biointerfaces*. 2013 Feb 1;102:708-17. doi: 10.1016/j.colsurfb.2012.09.042. (Impact Factor : 5.268)
59. Ambika S, Arunachalam S, Arun R, Premkumar K. Synthesis, nucleic acid binding, anticancer and antimicrobial activities of polymer-copper (II) complexes containing intercalative phenanthroline ligand (DPQ). *RSC Advances*. 2013;3(37):16456-68. doi.org/10.1039/C3RA42512F. (Impact Factor : 4.036)
60. Dassprakash MV, Arun R, Abraham SK, Premkumar K. In vitro and in vivo evaluation of antioxidant and antigenotoxic potential of *Punica granatum* leaf extract. *Pharm Biol*. 2012 Dec;50(12):1523-30. doi: 10.3109/13880209.2012.689771. (Impact Factor : 3.503)
61. Kirubakaran P, Karthikeyan M, Singh KhD, Nagamani S, Premkumar K. In silico structural and functional analysis of the human TOPK protein by structure modeling and molecular dynamics studies. *J Mol Model*. 2013 Jan;19(1):407-19. doi: 10.1007/s00894-012-1566-1. (Impact Factor : 2.172)
62. Sathishkumar G, Gobinath C, Karpagam K, Hemamalini V, Premkumar K, Sivaramakrishnan S. Phyto-synthesis of silver nanoscale particles using *Morinda citrifolia* L. and its inhibitory activity against human pathogens. *Colloids Surf B Biointerfaces*. 2012 Jun 15;95:235-40. doi: 10.1016/j.colsurfb.2012.03.001. (Impact Factor : 5.268)
63. Arun R, Prakash MV, Abraham SK, Premkumar K. Role of *Syzygium cumini* seed extract in the chemoprevention of in vivo genomic damage and oxidative stress. *J Ethnopharmacol*. 2011 Mar 24;134(2):329-33. doi: 10.1016/j.jep.2010.12.014. (Impact Factor : 4.36)
64. Thirunavukkarasu C, Premkumar K, Sheriff AK, Sakthisekaran D. Sodium selenite enhances glutathione peroxidase activity and DNA strand breaks in hepatoma induced by N-nitrosodiethylamine and promoted by phenobarbital. *Mol Cell Biochem*. 2008 Mar;310(1-2):129-39. doi: 10.1007/s11010-007-9673-5. (Impact Factor : 3.842)
65. Premkumar K, Min K, Alkan Z, Hawkes WC, Ebeler S, Bowlus CL. The potentiating and protective effects of ascorbate on oxidative stress depend upon the concentration of dietary iron fed C3H mice. *J Nutr Biochem*. 2007 Apr;18(4):272-8. doi: 10.1016/j.jnutbio.2006.05.004. (Impact Factor : 6.117)

66. Premkumar K, Thirunavukkarasu C, Abraham SK, Santhiya ST, Ramesh A. Protective effect of saffron (*Crocus sativus* L.) aqueous extract against genetic damage induced by anti-tumor agents in mice. *Hum Exp Toxicol*. 2006 Feb;25(2):79-84. doi: 10.1191/0960327106ht589oa. (Impact Factor : 3.247)
67. Thirunavukkarasu C, Premkumar K, Jagadeeswaran R, Sakthisekaran D. The inhibitory effect of sodium selenite on N-nitrosodiethylamine-induced and phenobarbital promoted liver tumourigenesis in rats based on the modulation of polyamine levels. *Mol Cell Biochem*. 2005 Dec;280(1-2):165-72. doi: 10.1007/s11010-005-8907-7. (Impact Factor : 3.842)
68. Vaughan AT, Betti CJ, Villalobos MJ, Premkumar K, Cline E, Jiang Q, Diaz MO. Surviving apoptosis: a possible mechanism of benzene-induced leukemia. *Chem Biol Interact*. 2005 May 30;153-154:179-85. doi: 10.1016/j.cbi.2005.03.022. (Impact Factor : 5.168)
69. Premkumar K, Kavitha S, Santhiya ST, Ramesh AR, Suwanteerangkul J. Interactive effects of saffron with garlic and curcumin against cyclophosphamide induced genotoxicity in mice. *Asia Pac J Clin Nutr*. 2004;13(3):292-4. (Impact Factor : 1.322)
70. Premkumar K, Bowlus CL. Ascorbic acid does not increase the oxidative stress induced by dietary iron in C3H mice. *J Nutr*. 2004 Feb;134(2):435-8. doi: 10.1093/jn/134.2.435. (Impact Factor : 4.735)
71. Premkumar K, Abraham SK, Santhiya ST, Ramesh A. Protective effect of *Spirulina fusiformis* on chemical-induced genotoxicity in mice. *Fitoterapia*. 2004 Jan;75(1):24-31. doi: 10.1016/j.fitote.2003.07.008. (Impact Factor : 3.204)
72. Premkumar K, Abraham SK, Santhiya ST, Ramesh A. Inhibitory effects of aqueous crude extract of Saffron (*Crocus sativus* L.) on chemical-induced genotoxicity in mice. *Asia Pac J Clin Nutr*. 2003;12(4):474-6. PMID: 14672873. (Impact Factor : 1.322)
73. Premkumar K, Bowlus CL. Ascorbic acid reduces the frequency of iron induced micronuclei in bone marrow cells of mice. *Mutation Res*. 2003 Dec 9;542(1-2):99-103. doi: 10.1016/j.mrgentox.2003.09.002. (Impact Factor : 3.189)
74. Premkumar K, Abraham SK, Santhiya ST, Ramesh A. Protective effects of saffron (*Crocus sativus* Linn.) on genotoxins-induced oxidative stress in Swiss albino mice. *Phytother Res*. 2003 Jun;17(6):614-7. doi: 10.1002/ptr.1209. (Impact Factor : 6.388)
75. Premkumar K, Pachiappan A, Abraham SK, Santhiya ST, Gopinath PM, Ramesh A. Effect of *Spirulina fusiformis* on cyclophosphamide and mitomycin-C induced genotoxicity and oxidative stress in mice. *Fitoterapia*. 2001 Dec;72(8):906-11. doi: 10.1016/s0367-326x(01)00340-9. (Impact Factor : 3.204)
76. Premkumar K, Abraham SK, Santhiya ST, Gopinath PM, Ramesh A. Inhibition of genotoxicity by saffron (*Crocus sativus* L.) in mice. *Drug Chem Toxicol*. 2001 Nov;24(4):421-8. doi: 10.1081/dct-100106266. (Impact Factor : 2.597)

## BOOK CHAPTERS

1. Dhivya Sundaram, Hemamalini Vedagiri, Gowtham Kumar Subbaraj, **Premkumar Kumpati**. Repurposing of Drugs in Aging In Neuroprotective Effects of Phytochemicals in Brain Ageing. Springer Nature Singapore 2024.
2. Murugesan J, Balakrishnan A, **Kumpati P**, Vedagiri H. Cellular Functions of ER Chaperones in Regulating Protein Misfolding and Aggregation: An Emerging Therapeutic Approach for Preeclampsia. In **Preeclampsia**. Edited by Hassan Abduljabbar Intechopen; **2022**.
3. **Premkumar Kumpati**. Chapter 4 Bacterial Mutation Assay In **Preclinical Development Handbook: Toxicology Shayne Cox Gad (Editor) 2008** ISBN: 978- 0-470-24846-1.
4. **Kumpati Premkumar**, Arabandi Ramesh Anticancer, Antimutagenic and Antioxidant Potential of Saffron: An Overview of Current Awareness and Future Perspectives In **Functional Plant Science and Biotechnology ©2010** Global Science Books. Print ISSN: 1749-0472

5. M V Dass Prakash, S Sivakumar, **K Premkumar** Childhood Asthma: Antioxidant Diagnosis and Management *LAP Lambert Academic Publishing 10 August 2011*. ISBN-10 : 3845430966

### **Other Information**

1. Articles published in Newspapers / Magazines : **Nil**
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