

Faculty Profile



Name: **Abimanyu Sugumaran**

Designation: **Assistant Professor**

Department/ Centre: **Pharmaceutical Sciences**

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Educational Qualifications:

M. Pharm (Pharmaceutics), Bharathidasan Institute of Technology, Bharathidasan University, Tiruchirappalli, Tamil Nadu (2008);

Ph.D in Pharmaceutical Technology, Anna University, Chennai, Tamil Nadu (2015).

Areas of Interest:

Nanodispersion, Formulation Development, Drug Targeting, Nano Drug Delivery, Nano Biomaterials

Work Experience:

Name of the Organization	Designation	Period		Nature of Post (permanent/temporary/Ad-hoc/contractual etc.)
		From	To	
Tablets (India) Ltd, Chennai. Tamil Nadu	Officer R&D	05/05/2008	24/02/2009	Permanent
SRM College of Pharmacy, SRM Institute of Science and Technology, Kattankulathur. Tamil Nadu	Professor	06/01/2016	31/10/2022	Permanent
Assam University, Silchar, Assam	Assistant Professor	03/11/2022	Continuing	Permanent

Awards and Honors (if any):

Award Details	Awarding Agency	Year	Remark (if any)
Won First Prize in STAGE 1 – ‘IDEATION HACKATHON’	Ministry of Development of North East Region (MDoNER), Government of India	June 2024	-
Junior Research Fellow	DST, New Delhi	2009	-

Projects:

Project Title	Awarding Agency	Period	Amount Sanctioned	Ongoing/ Completed
“Formulation and characterization of a novel Unani phytosome loaded with <i>W. somnifera</i> and <i>C. spinosa</i> extracts, and evaluation of its invitro anti-viral activity against HPV causing cervical cancer”	Ministry of AYUSH, Govt. of India.	Apr 2026 – Mar 2029	Rs. 54,65,360/-	Ongoing (Co-PI)

Consultancy/International Collaboration: Nil

Details	Year	Remark (if any)

Publications in Peer-Reviewed Scopus Indexed Journals:

Authors	Title of the Paper	Name of the Journal	Journal details	ISSN
Madhusri R, Gouranga D, Amrita D, Smriti SR, Biplab D, Mayukh J, Abimanyu S*	Plant-based macronutrients and micronutrients in combating osteoporosis: research insights and molecular pathways.	RSC Advances (Royal Society of Chemistry; IF 6.1)	Jul 2026. DOI: https://doi.org/10.1039/d6ra02084d	2046-2069
Gouranga D, Abimanyu S* , Damodharan N	pH-responsive nanocapsules loaded with 5-fluorouracil-coated green-synthesized CuO–ZnO NPs for enhanced anticancer activity against HeLa cells	Medical Oncology (Springer; IF 4.7)	2025. 42(8); 1-23. DOI: https://doi.org/10.1007/s12032-025-02847-6	1357-0560
Gamal M, El-Reash YGA, Alotaibi AN, Venkateshwara n K, Manikandan K, Lateefa ALK, Fahad SA, Abimanyu S* .	Green chromatographic techniques: A way forward on detecting impurities in pharmaceuticals	Microchemical Journal (Elsevier; IF 5.2)	2025. 114341. DOI: https://doi.org/10.1016/j.microc.2025.114341	1095-9149
Gouranga D, Dipanjan G, Krithiga V, Gopal C, Abimanyu S* , Damodharan N.	Biogenic synthesis of copper oxide nanoparticles: comprehensive in vitro profiling for cervical cancer treatment and antibacterial strategies	New Journal of Chemistry (Royal Society of Chemistry; IF 2.6)	2024,48, 10697-10716. https://doi.org/10.1039/D4NJ01194E (Impact Factor 2.6).	1369-9261
Gouranga D, Santhosh Kumar C, Thirunavukkarasu P, Abimanyu S* , Damodharan N.	Biogenic synthesized CuO nanoparticles and 5-fluorouracil loaded anticancer gel for HeLa cervical cancer cells.	Discover Nano (Springer; IF 6.7)	2024. 19(1):217. DOI: https://doi.org/10.1186/s11671-024-04166-7 (Impact Factor: 6.7)	2731-9229

Gouranga D, Santosh kumar C, Abimanyu S* , Damodharan N.	Sustainable bioactivity enhancement of ZnO–Ag nanoparticles in antimicrobial, antibiofilm, lung cancer, and photocatalytic applications.	RSC Advances (Royal Society of Chemistry; IF 6.1)	2023. 13, 26663-26682. DOI: 10.1039/D3RA03736C (Paper)	2046-2069
Gouranga D, Sivakumar M, Abimanyu S*	Stimuli-responsive hybrid metal nanocomposite – A promising technology for effective anticancer therapy	International Journal of Pharmaceutics (Elsevier; IF 6)	2022 Aug 25;624:121966. doi: 10.1016/j.ijpharm.2022.121966	0378-5173

Contributed Book Chapters Published in Edited Books of Reputed Publishers:

Authors	Title of Chapter	Name of the Book	Book details	ISBN
Subir KS, Sayak D, Abimanyu S*	Exploring the Role of Bioprocessing in the Pharmaceutical Industry	Innovation & Future Trends in Bioprocess Technology	NIPA Books, New Delhi. Jan 2026.	978-93-72190-03-8
Gouranga D, Abimanyu S, Damodharan N	Implications of Zinc Oxide Nanoparticles for Cancer Therapy	Metallic Nanoparticles in Cancer Therapy	Taylor & Francis - CRC Press Sep 2025	9781003480211
Dipanjana G, Gouranga D, Arindam C, Abimanyu S, Gopal C, Sivakumar M.	Solid lipid nanoparticle-based drug delivery for pancreatic cancer	Recent Advances in Nanocarriers for Pancreatic Cancer Therapy	Academic Press. Elsevier 2024	978-0-443-19142-8
Gouranga D, Debabrata Ghosh D, Paramita P, Bachaspati J, Santhosh Kumar C, Abimanyu S*	Functionalized Magnetic Nanosystems for In-vivo Treatment of Diseases	Functionalized Magnetic Nanosystems for Diagnostic Tools and Devices, Current and Emerging Research	Elsevier Jan 2024	9780443190124
Gouranga D, Debabrata Ghosh D, Abimanyu S	Use of Nanocellulose Hydrogels for Ophthalmic Applications	Nanocellulose: A Biopolymer for Biomedical Applications.	Wiley Feb 2024	9781394172825

Peer-reviewed publications in Proceedings of National/ International Conference/Workshop/ Symposium:

Authors	Title of the Paper	Name of the Program and Organizer	Publisher Details	ISBN/IS SN
Subramanian N, Abimanyu S, Vinoth J, Chandrasekar P	Biodegradable Chitosan Magnetic Nanoparticle Carriers for Sub-Cellular Targeting Delivery of Artesunate for Efficient Treatment of Breast Cancer	8th International Conference on the Scientific and Clinical Applications of Magnetic Carriers, Rostock, Germany. 25-29 May 2010. Organizers: Urs O. Häfeli, Wolfgang Schütt, and Maciej Zborowski	AIP Conference Proceedings	1551-7616

Patents/ Policy Document:

Title of Patent	Patent No. & Granting Authority	Date of Award	International/ National
Method and composition for solubilization of hydrophobic compounds	Indian Patent No: 298063	26/06/2018	National

Details of the Ph.D degree awardee (Under the Supervision of the Faculty):

Name of the Scholar	Title of the Thesis	Year of Award	Remarks (If any)
Mr. Gouranga Dutta	Development a Novel Synthesis Method of Metal Nanoparticles for Cancer Targeted Drug Delivery and Other Applications	2025	Awarding University: SRM Institute of Science and Technology, Kattankulathur, Tamil Nadu
Mr. Chanduluru Hemanth Kumar	Sustainable Analytical Method Development Validation of Selective Cardiovascular Drugs by UV Spectrophotometry and AQBD Based LC Techniques for Tablets and in Spiked Human Plasma	2022	Awarding University: SRM Institute of Science and Technology, Kattankulathur, Tamil Nadu
Mrs. Kanaka Parvathi Kannaiah	Environmentally Benign Method Development and Validation of Creams and Ointments using UV Spectrophotometry and AQBD Based LC Methods	2022	Awarding University: SRM Institute of Science and Technology, Kattankulathur, Tamil Nadu