



Mr. Sougata Jana, M.Pharm
Assistant Professor

Mr. Sougata Jana is an M.Pharm (Pharmaceutics) from Biju Patnaik University of Technology (BPUT), Odisha, India. He is engaged in research for 9 years and that of teaching for 8 years. He qualified GATE examination in the year 2005. He received Gold Medal from West Bengal University of Technology (WBUT), Kolkata for standing first at UG level. IPA Bengal branch, Kolkata conferred him M.N Dev Memorial award for securing the highest marks in the state of West Bengal in the year 2005. He bragged “Best Poster Presentation Award” at 21st West Bengal State Science and Technology congress-2014, Burdwan, West Bengal. He published 24 research and review papers in different national and international peer reviewed journals. One book and seven book chapters are also in his credit. He is reviewer of various international journals of repute. He is a life member of Association of Pharmaceutical Teachers of India (APTI). He successfully guided 15 post graduate students for their research projects.

Area of Research:

He is working in the field of drug delivery science & technology including modification of synthetic and natural biopolymers, development of transdermal drug delivery systems, microparticles, nanoparticles, semisolids and interpenetrating network (IPN) system for controlled drug delivery.

Publication details:

1. Biosurfactant produced from *Actinomycetes nocardioopsis* A 17: Characterization and its biological evaluation
Samrat Chakraborty, Mandakini Ghosh, Srijita Chakraborty, **Sougata Jana**, Kalyan Kumar Sen, Chandrakant Kokare, Lixin Zhang.

International Journal of Biological Macromolecules, **2015**; (impact factor-**3.096**; ISSN-0141-8130)

2. Boswellia gum resin/chitosan polymer composites: Controlled delivery vehicles for aceclofenac, **Sougata Jana**, Bibek Laha, Sabyasachi Maiti
International Journal of Biological Macromolecules, **2015**; 77: 303-306 (impact factor-**3.096**; ISSN-0141-8130)
3. Novel alginate hydrogel core-shell systems for combination delivery of ranitidine HCl and aceclofenac, **Sougata Jana**, Abhijit Samanta, Amit Kumar Nayak, Kalyan Kumar Sen, Subrata Jana.
International Journal of Biological Macromolecules, **2015**; 74: 85-92 (impact factor-**3.096**; ISSN-0141-8130)
4. Pharmacokinetic evaluation of testosterone-loaded nanocapsules in rats, **Sougata Jana**, Anusuya Gangopadhaya, Benoy Brata Bhowmik, Amit Kumar Nayak and Arup Mukherjee
International Journal of Biological Macromolecules, **2015**;72: 28-30 (impact factor-**3.096**; ISSN-0141-8130)
5. In-vitro release of acyclovir loaded Eudragit RLPO@nanoparticles for sustained drug delivery: Arijit Gandhi, **Sougata Jana**, Kalyan Kumar Sen. *International Journal of Biological Macromolecules*, **2014**;67:478-482 (impact factor-**2.596**; ISSN-0141-8130)
6. Preparation and Characterization of Chitosan Based Polyelectrolyte Complex as a Carrier of Aceclofenac: **Sougata Jana** , Abhisek Banerjee, Arijit Gandhi. *Journal of PharmaSciTech*, **2014**; 3:68-71. (ISSN-2231-3788(print) ISSN-2321- 4376(Online) (IC Value - **4.12**)
7. Metoprolol tartrate Containing Glutaraldehyde Cross-linked Chitosan- Polyvinyl pyrrolidone Matrix Transdermal Patch: Preparation and Characterization: Arijit Gandhi, **Sougata Jana**, Abhijit Paul, Subrata Sheet, Rahul Nag, Kalyan Kumar Sen. *Journal of PharmaSciTech*, **2014**; 3:72-76. (ISSN-2231-3788(print) ISSN-2321- 4376(Online) (IC Value - **4.12**)
8. Development of topical gel containing aceclofenac-crospovidone solid dispersion by "Quality by Design (QbD)" approach: **Sougata Jana**, Syed Ansar Ali, Amit kumar Nayak Kalyan Kumar Sen, Sanat Kumar Basu. *Chemical Engineering Research and Design*, **2014**, (impact factor-**1.927**; ISSN-0263-8762)
9. *In-vitro* Aceclofenac Release from IPN Matrix Tablets Composed of Chitosan–Tamarind Seed Polysaccharide: **Sougata Jana**, Kalyan Kumar Sen and Sanat Kumar Basu. *International Journal of Biological Macromolecules*, **2014**;65:241-245 (impact factor-**2.596**; ISSN-0141-8130)

10. Carbopol gel containing chitosan-egg albumin nanoparticles for transdermal aceclofenac delivery: **Sougata Jana**, Sreejan Manna, Amit Kumar Nayak, Kalyan Kumar Sen, Sanat Kumar Basu. *Colloids and Surface B: Biointerface*, **2014**; 114: 36-44. (impact factor-**3.554**; ISSN-0927-7765)
11. Development of chitosan-based nanoparticles through inter-polymeric complexation for oral drug delivery: **Sougata Jana**, Nirmal Maji, Amit Kumar Nayak, Kalyan Kumar Sen, Sanat Kumar Basu. *Carbohydrate Polymers*, **2013**; 98: 870-876 (impact factor-**3.479**; ISSN 0144-8617)
12. Aceclofenac-loaded unsaturated esterified alginate/gellan gum microspheres: *In vitro* and *in vivo* assessment: **Sougata Jana**, Arindam Das, Amit kumar Nayak, Kalyan Kumar Sen, Sanat Kumar Basu. *International Journal of Biological Macromolecules*, **2013**; 57: 129-137. (impact factor-**2.596**; ISSN-0141-8130)
13. Aceclofenac-loaded chitosan-tamarind seed polysaccharide interpenetrating polymeric network microparticles: **Sougata Jana**, Abhimunya Saha, Amit Kumar Nayak, Kalyan Kumar Sen, Sanat Kumar Basu. *Colloids and Surface B: Biointerface*, **2013**; 105: 303-309. (impact factor-**3.554**; ISSN-0927-7765)
14. Preparation and characterization of maleic anhydride cross-linked chitosan-Polyvinyl alcohol hydrogel matrix transdermal patch: Parimal Maji, Arijit Gandhi, **Sougata Jana**, Nirmal Maji. *Journal of PharmaSci Tech*, **2013**; 2: 62-67. ISSN-2231-3788(print) ISSN-2321-4376(Online) (IC Value - **4.12**)
15. A solid Self-Emulsifying System for dissolution enhancement of etoricoxib: Amit Kumar Nayak, **Sougata Jana**. *Journal of PharmaSci Tech*, **2013**; 2: 62-67. ISSN-2231-3788(print) ISSN-2321-4376(Online) (IC Value - **4.12**)
16. Tailoring effect of Microsponge for targeted drug delivery: Arijit Gandhi , **Sougata Jana**, Kalyan Kumar Sen. *Journal of Scientific and Innovative research*, **2014**, 2(6), 1073-1083 (ISSN-2320-4818(Online) (IC Value - **4.35**)
17. Dendrimers: Synthesis, Properties, Biomedical and Drug Delivery Applications: **Sougata Jana**, Arijit Gandhi, Kalyan Kumar Sen, Sanat Kumar Basu. *American Journal of Pharm Tech Research*, **2012**; 2:32-55. (Global impact factor- **0.705**; IC value 6.55; ISSN: 2249-3387)

18. Gellan Gum and its Versatile Approaches in Drug Delivery System: Arindam Das, **Sougata Jana**, Nirmal Maji, Kalyan kumar Sen, Sanat Kumar Basu. *International Journal of Drug Formulation & Research*, **2011**; 2: 43-59. (ISSN-2229-5054)
19. Chitosan Derivatives and Their Application in Pharmaceutical Fields: **Sougata Jana**, Kalyan K Sen, Sanat K Basu. *International Journal of Pharmaceutical Research*, **2011**; 3: 2, 1-8. (ISSN-0975-2366)
20. Natural Polymers and their Application in Drug Delivery and Biomedical Field: **Sougata Jana**, Arijit Gandhi, Kalyan K Sen, Sanat K Basu. *Journal of PharmaSciTech*, **2011**; 1:16-27. (ISSN-2231-3788(print) ISSN-2321- 4376(Online) (IC Value - 4.12)
21. Development and Evaluation of Epichlorohydrin Cross-linked Mucoadhesive Patches of Tamarind Seed Polysaccharide for Buccal Application:**Sougata Jana**, Dibyendu Lakshman, Kalyan Kumar Sen, Sanat Kumar Basu. *International Journal of Pharmaceutical Sciences and Drug Research*, **2010**; 2: 193-198. (Universal impact factor- 1.0423; ISSN-0975-248X)
22. The fast emerging area of Nanobiotechnology: **Sougata Jana**, Arup Mukherjee. *Pharmawave, The Technical Journal of Pharmacy & Health*, **2007**; 1: 10-14. (ISSN NO-22493425)

Details of Book Published:

Book

Advance Pharmaceutical Analytical Techniques (Edition-I): Sujit Karmakar, Sougata Jana, Amitava Ghosh (ISBN-978-93-84097-13-4)

Book chapters

1. Marine Microorganisms and their Versatile Applications of Bioactive Compounds.(Chapter-22): **Sougata Jana**, Arijit Gandhi, Samrat Chakraborty, Kalyan K Sen, Sanat K Basu.

Book:-Marine Microbiology.Bioactive Compounds and Biotechnological Applications [Kim, Se-Kwon (Ed.)], Edition July **2013** , page 379-391 (ISBN 978-3-527-33327) - Wiley-VCH, Weinheim.

2. Biomedical application of chitin and chitosan derivatives. (Chapter-18): **Sougata Jana**, Arijit Gandhi, Kalyan K Sen, Sanat K Basu.

Book:- Chitin and Chitosan Derivatives: Advances in Drug Discovery and Developments, Se-kwon Kim (Editor). Publisher: CRC Press; (Taylor & Francis Group.), Edition (December 4, **2013**)

3. Vehicles for Colloidal Drug Delivery. Arijit Gandhi, **Sougata Jana**, Book:-Recent Developments in Biotechnology Vol. 8: Drug Delivery, (J.N. Govil) Publishing Director & Managing Editor STUDIUM PRESS LLC P.O. Box 722 200, Houston, TX 77072-USA, Contact Address in India: STUDIUM PRESS (INDIA) PVT. LTD, New Delhi – 110 002, INDIA Tel: 011-43240200;

Conference and Seminar attended:

1. National seminar on Pharmacovigilance & Clinical research, dated 15th March 2014, at Bengal school of Technology.
 - I. Solid Dispersion; an approaches to enhance the bioavailability of poorly water soluble drug (abstract no-P051) A. Basak, A. Gandhi, **S.Jana**
 - II. Recent advances of nanotechnology in targeted drug delivery (abstract no-P052); S. Bhowmik, A. Gandhi, **S.Jana**
 - III. Recent advances of interpenetrating polymer network (IPN) in controlled drug delivery ((abstract no-P053); P. Chakraborty, A. Gandhi, **S.Jana**
 - IV. Approaches of polymeric based nanoparticles for topical drug delivery ((abstract no-P059) S. Das, **S. Jana**
2. National Seminar on emerging thrust area of pharmaceuticals in the field of nanotechnology dated 7th March 2014 at BCDA college of pharmacy and technology,
 - I. Polymeric nano suspensions to target delivery of poorly water soluble drug (abstract no-BCDACPT/NS-001); S. Adhikary, A. Gandhi, **S.Jana**
 - II. Recent advances of nanoparticle based transdermal drug delivery (abstract no-BCDACPT/NS-004); S. Das, **S.Jana**
 - III. A review on nanotechnology based drug delivery in cancer (abstract no- BCDACPT/NS-033); S. Bhowmik, B. Laha, **S.Jana**
 - IV. Pharmaceutical and biomedical applications of a carbon based nanomaterial (abstract no-BCDACPT/NS-052); P. Chakraborty, A. Gandhi, **S.Jana**

- V. Preparation and evaluation of acyclovir loaded eudragit RLPO nanoparticles as sustained release carrier(abstract no- BCDACPT/NS-129); T.Sarkar, A.Gandhi, **S.Jana**, B. Laha, K.K. Sen
3. 21st west bengal science and technology congress-2014, dated 20th -21st February,2014 at Burdwan university, Novel chitosan based nanoparticles for transdermal drug delivery(abstract no-P -46); **S.Jana**
 4. AICTE sponsored National conference on complex diseases, novel therapeutics and delivery challenges, dated 23rd-24th January 2014 at Gupta college of Technological sciences, In vitro aceclofenac release from IPN matrix tablets composed of chitosan-tamarind seed polysaccharide (abstract no- GCTS-PO-33), **S. Jana**, A. Banerjee, A. Gandhi, K K Sen, S. K. Basu
 5. Fabrication and Evaluation of Alginate/Chitosan-PVA Hydrogel Matrix for Combined Drug Therapy (Abstract no: - IAPST/ABS/31), **S. Jana**, K. K. Sen, S. K. Basu, 2nd Pharm Tech IAPST International Conference, at Jadavpur University, dated 17-19th January, 2014
 6. A seminar on High-throughput and molecular targeted screening in anti cancer drug discovery, at Gupta college of Technological Sciences, dated 11th nov, 2013.
 7. A National seminar on Strategies to Combat diseases threatening the nation's Health, at Gupta college of Technological Sciences and collaboration with APTI Bengal branch, Dated-5th Sept, 2013
 - I. Recent advances of emulgel for topical delivery(PO-002)
 - II. A review on new direction in the treatment of Goucher disease(PO-003)
 - III. Clinical management of Crohn's Disease : A review(PO-006)
 8. Chitosan-egg albumin-PEG nanoparticles for oral drug delivery: Preparation and In-vitro characterization(Abstract no-15) **S. Jana**, N. Maji, S. Manna, K. K. Sen, S. K. Basu. Seminar on Emerging trends in protein and peptide pharmaceuticals at Netaji Subhas chandra Bose Institute of Pharmacy, dated 25th april 2013.
 9. Dissolution enhancement of Etoricoxib through a solid self –emulsifying system containing goat fat and tween 60 (PPCT-05): P.Majumder, A.K. Nayak, J. Malakar, **S. Jana**. AICTE Sponsored national conference on Biopolymers, Bioactive agents and delivery strategies at Gupta college of Technological Sciences, dated 7-8th April, 2012.
 10. Fabrication and kinetics study of chitosan-egg albumin nanoparticles (PPCT-20) : **S. Jana**, N. Maji, S. Manna, K. K. Sen, S. K. Basu.

11. Formulation and Evaluation of sustained Release celecoxib matrix tablets (PPCT-42): Syed Answer Ali, Harish. S.S, Rajarajan S, K. Ramesh, **S. Jana**.
12. Preparation and characterization of Alprazolam from Maleic anhydride cross-linked chitosan-PVA hydrogel matrix transdermal patch (PPCT-43): P. Maji, **S. Jana**, B. Laha, N. Maji, K.K. Sen, S.K. Basu.
13. Bioactive compounds from marine microorganisms and their Versatile applications in drug delivery (PMB-07): S. Santra, **S. Jana**, A. Gandhi, S. Chakraborty, K. K. Sen.
14. Preparation and characterization of amylase loaded gellan gum microsphere (PMB-12): A. Gandhi, **S. Jana**, S. Cakraborty, K. K. Sen. AICTE Sponsored National conference on Biopolymers, Bioactive agents and Delivery Strategies. Dated April 7-8, 2012 at Gupta college of Technological Sciences.
15. Seminar on Networking Drug discovery and Pharma Innovations, at BCPSR, dated 6th February 2012.
16. A seminar on Industry-Entrepreneurship development programme at Gupta College of Technological sciences, W.B, dated 8-10th September,2012.
17. National seminar on Recent Trends in drug Discovery and Drug Development, Dated Sept 24, 2011 at Gupta College of Technological sciences, W.B.
18. Preparation and evaluation of Topical Gel of Aceclofenac (ICP-144): S. A. Ali, **S. Jana**, K. K. Sen. International conference on Current status and Future perspective in Pharmaceutical sciences. Dated Nov 19-21, 2009 at PES college of Pharmacy. Bangalore, Karnataka.
19. 1st Pharmtech IAPST International conference on drug delivery and drug targeting Research, Dated Jan 19-20, 2008 at Jadavpur University, Kolkata,W.B.
20. In Vitro and In Vivo Evaluation of Testosterone Loded Alginate Nano Capsules(P-05): **S. Jana**, A. Gangopadhy, B. Bhoumik, A. Mukherjee. National Symposium on 21st century Research in Biochemistry and Bio Physics. Dated Feb 1-3, 2007 at University of Kalyani, W.B.
21. Symposium on Biopolymers in drug design and drug Delivery, Dated Nov 10-11, 2006 at University of Calcutta, W.B.
22. CDMU-IPA Traning Programme (Good Community Pharmacy Practice), Dated Sept 4-5,1999, at community Development Medicinal Unit, Calcutta