Dr Somasree Ray
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Academic Qualification:

- Awarded PhD in the year 2009 from Jadavpur University
- Passed M.Pharm (Specialization **Pharmaceutics**) in 2001 from Jadavpur University
- Passed B.Pharm from Jadavpur University in 1999.
- Secured GATE -1999

Teaching Experience-

25 years teaching experience including,

15 years teaching Experience as professor in Gupta College of Technological Sciences, Asansol –1 from July 2010 and till continuing.

- 4 years teaching Experience as assistant professor in Gupta College of Technological Sciences, Asansol –1 from September 2006 to June 2010.

- 4 years teaching Experience as lecturer Sept 2002 to august 2006 in Gupta College of Technological Sciences, Asansol –1 from July 2010 and till continuing.

- 1.5 yrs teaching Experience in Himalayan Pharmacy Institute ,Rangpo, East sikkim

Patent Granted:

Aqueous based technique of preparation of novel sustained release hydrogel beads of gum ghatti ----Granted (Patent No. : 375027 / Application No. : 201831042389

Research funding :

Research fundind was received under RESEARCH PROMOTION SCHEME(Drug delivery system).
Duration of Project –Two years(March,2012- March 2014)
Cost-7.5 lakhs
Sponsoring Agency-A.I.C.T.E

Achievements-Preparation of interpenetrating network microsphreres for delivery of enzyme to the intestine using natural polymer

Award

Received Certificate of Appreciation from Maulana Abul Kalam Azad University of Technology

Research Publications

1. **Tenofovir Disoproxil Fumarate-Loaded Alginate-Karaya Gum Beads for Sustained Release** Arup Kumar Pal, Shalmoli Seth, Swarnadeep Banerjee, Piyali Dey ,Arindam Chatterjee ,Amit Kumar Nayak , Uttam Kumar Bhattacharyya, Somasree Ray. Jan 2026 **. Starch-Starke (impact factor 2.6)**

2..In utero gene therapy: Pioneering diagnostic and therapeutic technologies. Shalmoli Seth,Malini Sen, Souvik Banerjee, Ritamay Sau, Somasree Ray. 47(2026) 201527. **Human Gene** .(impact factor 0.9)

3. Mebeverine HCl-loaded sodium carboxymethyl gum ghatti-chitosan microparticles: In vitro-in vivo evaluations. Nancy Kahali ,Goutam Roy, Bibek Laha, Ritwika Mitra , Amit Kumar Nayak, Uttam Kumar Bhattacharyya, Somasree Ray. **J of Drug delivery Science and Technolgy .** volume 84, June 2023 **(impact factor 5)**

4. Tuned gum ghatti and pectin for green synthesis of novel wound dressing material: Engineering aspects and in vivo study

Dibya Sinha, Shalmoli Seth, Avik Das, Uttam Kumar Bhattacharyya, Kushal Ghosh, Aniket Nandi, Payal Banerjee, Somasree Ray**.** Journal of Drug Delivery Science and Technology **76 (2022) 103730 (impact factor 5)**

5.pH Sensitive Interpenetrating Network Bio Containers of Gum Ghatti for Sustained Release of Glipizide
Somasree Ray, Mohua Bera, Uttam Kumar Bhattacharyya, Samarpita Das, Shalmoli Seth, Pallab Kumar Pal and Abdul Aziz. **Current Drug Delivery**, 2019, 16, 849-861 **(impact factor 3.6**)

6.Polysorbate 80 coated crosslinked chitosan nanoparticles of ropinirole hydrochloride for brain targeting. Somasree Ray, Pratyusha Sinha, Bibek Laha, Sabyasachi Maiti,Uttam Kumar Bhattacharyya, Amit Kumar Nayak. **Journal of Drug Delivery Science and Technology** 48 (2018) 21–29. **(impact factor 5)**

7.Development of smart hydrogels of etherified gum ghatti forsustained oral delivery of ropinirole hydrochloride. Somasree Ray∗, Goutam Roy, Sabyasachi Maiti, Uttam Kumar Bhattacharyya,Ayantika Sil, Ritwika Mitra.. **International Journal of Biological Macromolecules** 103 (2017) 347–354. **(impact factor 8)**

8.Smart reticulated hydrogel of functionally decorated gellan copolymer for prolonged delivery of salbutamol sulphate to the gastro-luminal milieu.Maiti S, Ghosh S, Mondol R, Ray S, Sa B. **J Microencapsul**. 2012;29(8):747-58. .(ISSN NO-0265-2048) **(impact factor 3.14)**

9.Development and evaluation of xanthan gum-facilitated ethyl cellulose microsponges for controlled percutaneous delivery of diclofenac sodium.Maiti S, Kaity S, Ray S, Sa B. **Acta Pharm**. 2011 Sep 1;61(3):257-70. 1330-0075**(impact factor 3.04)**

10.Nanovesicular formulation of brimonidine tartrate for the management of glaucoma: in vitro and in vivo evaluation. Maiti S, Paul S, Mondol R, Ray S, Sa B.**AAPS PharmSciTech**. 2011 Jun;12(2):755-63. .(ISSN NO-1530-9932) **(impact factor 4.02)**

11. Al^{+3} ion cross-linked and acetalated gellan hydrogel network beads for prolonged release of glipizide. **carbohydrate polymer**.vol 85(1). 2011.164-172. sabyasachi Maiti, Somdipta Ranjit, Ranjit Mondol, Somasree Ray, Biswanath Sa**(impact factor 10.7)**

12.Novel interpenetrating network microspheres of xanthan gum-poly(vinyl alcohol) for the delivery of diclofenac sodium to the intestine--in vitro and in vivo evaluation.Ray S, Banerjee s, Maiti S, Laha B, Barik S, Sa B, Bhattacharyya UK. **Drug Delivery**. 2010 sep-oct;17(7):508-19. **(impact factor 6)**

13.Polyethyleneimine-treated xanthan beads for prolonged release of diltiazem: in vitro and in vivo evaluation.Ray S, Maiti S, Sa B.
Arch Pharm Res. 2010 apr;33(4):575-83. **(impact factor 4.94)**

14.Tailoring of locust bean gum and development of hydrogel beads for controlled oral delivery of glipizide.
Maiti S, Dey P, Banik A, Sa B, Ray S, Kaity S.
Drug Delivery, 2010; 17(5): 288–300. ISSN: 1071-7544**(impact factor 6)**

15.Controlled delivery of bovine serum albumin from carboxymethyl xanthan microparticles.
Maiti S, Ray S, Sa B. **Pharm Dev Technol**. 2009;14(2):165-72. (ISSN NO-1083-7450) **(impact factor 3.9)**

16.Investigation on processing variables for the preparation of fluconazole-loaded ethyl cellulose microspheres by modified multiple emulsion technique.

Maiti S, Dey P, Kaity S, Ray S, Maji S, Sa B

Aaps Pharmscitech. 2009;10(3):703-15. epub 2009 may 29.(ISSN NO-1530-9932) **(impact factor 4.2)**

17.Effect of formulation variables on entrapment efficiency and release characteristics of bovine serum albumin from carboxymethyl xanthan microparticles Sabyasachi Maiti, Somasree Ray, Biswanath Sa.

Polymers for advanced technologies. ***volume 19 issue 7,2008. 922 – 927.(ISSN NO-1099-1581)****.* **(impact factor 2.1)**

18**.**Adipic acid dihydrazide treated partially oxidized alginate beads for sustained oral delivery of flurbiprofen**.**

Maiti S, Singha K, Ray S, Dey P, Sa B.

Pharm Dev Technol. 2009;14(5):461-70. **(impact factor 1.86)**

19.Preliminary investigation on the development of diltiazem resin complex loaded carboxymethyl xanthan beads.

Ray S, Maiti S, Sa B.

Aaps Pharmscitech. 2008;9(1):295-301 **(impact factor 4.2)**

20.Carboxymethyl xanthan microparticles as a carrier for protein delivery.

Maiti S, Ray S, Mandal B, Sarkar S, Sa B.**J Microencapsul**. 2007 dec;24(8):743-56.(ISSN NO-0265-2048) **(impact factor 3.14)**

21. Release and skin permeation studies of naproxen from hydrophilic gels and effect of terpenes as enhancers on its skin permeation.

Ray S, Ghosal SK

Bolletino Chimico Farmaceutico.142-n-3-april 2003. (ISSN NO-0006-6648)

22.Polymeric nanocarriers: a promising research avenue for the delivery of antihiv drugs.

Ranjit Mondol, Sayon Paul, Somasree Ray, Sabyasachi Maiti

International Journal of Applied Pharmaceutics (ISSN NO-0975-7058)
vol 2 issue 2, 2010.

23.Influence of microenvironmental ph of alginate facilitated ethyl cellulose microspheres on entrapment efficiency and release characteristics of fluconazole

Sabyasachi Maiti, Paramita Dey, Biswanath Sa,Somasree Ray.

International journal of current pharmaceutical research.vol 2, issue 2, 2010 (ISSN NO-0975-7066)

24. Self-emulsification of poorly soluble and highly permeable drugs: an overview. Paramita Dey, Sabyasachi Maiti, Somasree Ray, Biswanath Sa, Kalyan Sen. **International journal of pharma recent research** vol 1, no. 1.