

Curriculum Vitae

Dr. Souvik Basak

M. Pharm (J.U.), Ph. D (Nanyang Technological University, Singapore), F.I.C.

Associate Professor

Dr. B.C. Roy College of Pharmacy and Allied Health Sciences

Durgapur, West Bengal, India

(Affiliated to: Maulana Abul Kalam University of Technology, WB, India)



1. Work Experience

Position	Nature of Job (Teaching/Research)	Discipline	Organization	Year
Associate Professor	Teaching & Research	Bioscience and Pharmacy	Dr. B.C. Roy College of Pharmacy and Allied Health Sciences Durgapur, West Bengal, India	May 2018-till date
Research consultant	Research	Bioscience and Pharmacy	Innoscience Research Sdn. Bhd, Malaysia	June 2019-till date
Research consultant	Research/ Technology transfer	Bioscience and Pharmacy	SHRM Biotechnologies Pvt. Ltd. (ISO 9001:2015 certified company), Kolkata	May 2019-till date
Assistant Professor	Teaching & Research	Bioscience and Pharmacy	Dr. B.C. Roy College of Pharmacy and Allied Health Sciences Durgapur, West Bengal, India	Aug 2013- Apr 2018
Research Assistant (Part Time)	Research	School of Chemical and Biomedical Engineering	Nanyang Technological University, Singapore	Dec 2012-Jul 2013

Laboratory Teaching Assistant	Teaching (laboratory)	School of Chemical and Biomedical Engineering	Nanyang Technological University, Singapore	July 2010- June 2011
Lecturer	Teaching & Research	Division of Pharmaceutical Chemistry	Dr. B.C. Roy College of Pharmacy and Allied Health Sciences Durgapur, West Bengal, India	July 2006- June 2008

Total work

experienceAcademic (Teaching):

10.0 years **Academic (Research):**

16.0 years

2. Sponsoredproject/Consultancies

Project	Granting Authority	Granted Amount	Duration
Targeting Mangiferin Loaded Succinyl Chitosan Loaded Assembly Nanoparticles against Atherosclerosis in rats	Innosience Research Sdn Bhd, Malaysia	888 USD	17 th Sept 2019 to 20 th July 2020 (finished), Paper under communication
Development of functionalized Graphene Oxide loaded Curcumin/Silymarin Nanoconjugate and its preclinical evaluation as hepatoprotective agent	Innosience Research Sdn Bhd, Malaysia	3000 USD	11 th Sept 2020 to 11 th Dec 2021 (Project interrupted and discontinued due to COVID-19 induced lockdown)
Development of Curcumin-loaded Microemulsion combined with Natural Bioenhancer for Efficient Anticancer Activity against Colon Cancer	Innosience Research Sdn Bhd, Malaysia	2200 USD	30 th March 2021 to 30 th March 2020 (Project interrupted and discontinued due to COVID-19 induced lockdown)

Modelling and Molecular dynamics simulation of novel ligand for restructuring mutant P53 into wild type: a special focus on breast cancer	Innoscience Research Sdn Bhd, Malaysia	1500 USD	22th Apr 2021 to 22 Feb 2022 (Finished and Paper published)
Effects of Oyster Extract on IL-1 β , PGD2 and GabaReceptor Expression in Rat with Insomnia	Innoscience Research Sdn Bhd, Malaysia	2200 USD	24 December 2021 to 22 July 2022 (Ongoing)
Influence of genetic factors in multiple regions of Asia on the pathogenesis of Kawasaki Disease- A meta analysis	Innoscience Research Sdn Bhd, Malaysia	1540 USD	30 Marl 2022 to 30 Mar 2023 (Ongoing)
Safety, Assessment and Outcome of cyanoacrylate ablation over other ablations for preventing sphenous vein reflux: a systematic review and meta analysis	Innoscience Research Sdn Bhd, Malaysia	1050 USD	26 May 2022 to 26 March 2023 (Ongoing)
Comparative Pharmacokinetics study of three meropenem formulations	Mission Hospital, Durgapur, WB, India	Honorarium basis	July 2015 to Sept 2015 (Finished and report submitted)
Applicability of cGMP regulations on oral liquid formulation	Techno Remedies, Kolkata, India	Rs. 10000/-	Aug 2014 to June 2015 (Finished and paper published)

3. Awards and Accolades

Name of the Award/ Honour	Nature of the Award/Honour	Awarding Authority	Year
Outstanding Paper Award (2 nd in Environmental Science Category)	Award in 5th Regional Science & Technology Congress, WB, India	Department of Science & Technology, WB	2023

I2OR award, I2OR is a Registered MSME with Ministry of MSME, Govt of India	International Distinguished Researcher Award 2021-22	I2OR, I2OR is a Registered MSME with Ministry of MSME, Govt of India (UDYAM-PB-20-0002405)	2022
Programme Co-Ordinator to organize 3-Days Entrepreneurship Awareness Camp under Science Popularization Scheme.	Rs. 50000/-	Department of Science & Technology, Biotechnology (DSTBT), West Bengal, India	2020
COVID-Hackathon	Best proposal award under special category to tackle COVID-19 pandemic	Anand Pharmacy College, Gujarat, Govt. of Gujarat and Institution's Innovation Council C/o Ministry of Human Resource and Development, Govt. of India	2020
Best Academician and Presenter Award	Best Academician and Presenter Award	Pharma Middle East Virtual Congress, Plenareno organized by Gisntabul, Pharmaledger and Operant Pharmacy Federation	2020

Research Under Literal Access (RULA) award	Outstanding contribution in Pharmaceutical Sciences and Research	IJRULA, Chennai in association with United Medical Council (UMC) and World Research Council (WRC)	2020
Shyambalaji Achuthan Award-2019 in 2 nd National Biomedical Research Competition	Significant contribution in Pharmacology	Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh, India	2019
Venus International Healthcare Award	Outstanding Researcher in Pharmaceutical Chemistry and Biotechnology	Venus International Foundation, Chennai, India	2018

4. List of publications

Full articles (Published/accepted): 39 (Annexure-I)

Book Chapter: 6

Conference proceedings: 4

Conference Abstracts: more than 50 (Annexure-II)

Citation indices **All** **Since 2018**

Citations 384 292

h-index 9 9

i10-index 9 8

5. Educational Qualification

<i>Exam passed</i>	<i>Institution/ University</i>	<i>Year of passing</i>	<i>Discipline</i>	<i>Percentage (%) of marks</i>
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Doctor of Philosophy (Ph. D)	School of Chemical and Biomedical Engineering, Nanyang Technological University (NTU), Singapore	2013	Molecular Biology and Biochemical Engineering	cGPA 4.0 out of 5) in coursework; Degree awarded in July, 2013
Master of Pharmacy (M. Pharm.)	Jadavpur University, Kolkata, India	2006	Pharmaceutical Chemistry (Major), Pharmacology & Pharmacognosy (Minor)	77.16 (1st Class)
Bachelor of Pharmacy (B. Pharm.)	Jadavpur University, Kolkata, India	2004	Pharmaceutical Technology	75.01 (1st Class with Distinction)
Higher Secondary (10+2 level) <i>(W.B.C.H.S.E)</i>	St. Xaviers' College, Kolkata, India	2000	Science (Physics, Chemistry, Mathematics, Biology)	81.50
Madhyamik (10 level) <i>(W.B.B.S.E)</i>	G.S.M.S. For Boys (Taki House), Kolkata, India	1998	General (Bengali, English, History, Geography, Physical Science, Life Science, Mathematics, Mechanics)	90.60 (Marks ranked within top 50 at State level)

6. Other academic achievements

- ❖ Qualified GATE examination in Pharmaceutical Technology at 2004 with percentile 97.61 and All India rank 202
- ❖ Qualified WBJEE in 2000 with a rank 2343
- ❖ Ranked within **TOP 50** in Madhyamik Pariksha (10 level), West Bengal 1998

7. Fellowships/ Scholarships obtained

- Won National Scholarship for performance at School Level (10 Level) and Higher Secondary (10+2) level
- Won UGC-postgraduate scholarship for 2 years for GATE qualification at 2004
- Won 4 years full time fellowship for Ph.D programme from Nanyang Technological University, Singapore

8. Ph.D project

Improving *E. coli* performance under stress by rewiring its global regulator cAMP Receptor Protein (CRP)

9. Student Guidance

B. Pharm: 24 (completed) **M. Pharm:** 12 (completed), **Ph.D:** 4 (Ongoing)

10. Professional membership

- Lifetime member of *Association of Pharmaceutical Teachers (APTI) in India*
- Selected as Fellow of Institution of Chemist (FIC), India

11. Other Awards and Honours

11.1. INVITED LECTURESHIP(Annexure-II)

11.2. Honours granted

- ❖ Delivered invited lecture on “**Impact of formulation design and analytical chemistry on exerting and determining drug-drug synergism: an insight into some newer perspectives**” on 23.11.2021 in Sikhsha ‘O’ Anusandhan University as part of weekly lecture (SOAWAL).
- ❖ Selected as **PhD Thesis evaluator** of Academy of Scientific and Industrial Research (AcSIR), CSIR-NEIST (2021)
- ❖ Conference paper award Won **SECOND BEST PAPER PRESENTATION AWARD** at both **Spirit 2017, BHU (IIT) in Pharmacology** category and at **International conference on Advancement of Pharmaceutical Technology and Regulatory Affairs, May 2017 (Jointly organized by Gupta College of Technological Sciences, WB and Indian Pharmaceutical Association)**.
- ❖ Won **SECOND and THIRD BEST PAPER PRESENTATION AWARD** for paper presentation at **Spirit 2017-18, BHU (IIT) in Pharmaceutical Chemistry** category
- ❖ Manuscript (**PLoS ONE**) got indexed in **GLOBAL MEDICAL DISCOVERY (ISSN:1929-8536)**
- ❖ Manuscript (**Asian Journal of Chemistry**) has been indexed in **TIB (LEIBNITZ ASSOCIATION), PORTAL OF GERMAN NATIONAL LIBRARY FOR SCIENCE AND TECHNOLOGY**
- ❖ **Have been selected as a TECHNICAL PROGRAMME COMMITTEE MEMBER and CONFERENCE PAPER REVIEWER in 2nd International conference on Biological Science and Technology (BST), 2017; China**
- ❖ “Project on Microbiological management of solid waste”- selected for presentation in **9th Inter University Engineering, Science & Technology Academic Meet 2018 & Innovative Model Competition for a Sustainable Society organised by FORUM OF SCIENTISTS, ENGINEERS & TECHNOLOGISTS (FOSET), WB**

12. Journal Review

Has been selected as **Reviewer** of the following journals

- ❖ Phytomedicine (IF 5.34, 2020)
- ❖ Analytical Methods (IF 2.073, 2019)

- ❖ BAOJ Nanotechnology (SCI,--)
- ❖ Biotechnology Letters (IF 1.977,2019)
- ❖ Chemosphere (Impact Factor 5.788,2019)
- ❖ Current Pharmaceutical Biotechnology (Impact Factor2.097)
- ❖ Drug Development and Translational Research (Impact Factor 2.664,2019)
- ❖ Drug Design Development and Therapy review (Impact factor 3.216,2019)
- ❖ Egyptian Journal of Chemistry (SCI,--)
- ❖ JSM Bioinformatics, Genomics and Proteomics (SciMedCentral)
- ❖ Microbial Cell Factory (Impact Factor 4.187,2019)
- ❖ SNPC Elsevier (Book,Elsevier)

13. Patent

- ❖ Granted: NATURAL DEGRADATION PRODUCTS OF PROMETHAZINE COMPOUND –Granted from Govt. of India; **Patent number 352905, Application number:-201611024795; Date of grant 03.12.2020; Validity:- 20years**
- ❖ Applied: Quadripolar Antiviral face mask-provisional Indian patent applied(TEMP/E-1/46395/2020-KOL)

14. BookChapter

- 1) Basak, S. “**Digitization of traditional knowledge**” In “**Natural Products & Drug Discovery: An Integrated Approach**” (Elsevier) Ed: Dr. S.C. Mondal, Dr V. Mandal, Prof Konishi (Japan) 2018,555-606
- 2) Mishra, P., Basak, S*. **Three Electron Bond, A New Paradigm in Organic Chemistry-AReview.2018;Chapter1,OrganicCompounds,OpenAccessEBook.**
- 3) Ghosh, I., Sahoo, U., Basak, S*. **Engineered protein and protein-polysaccharide cages for drug delivery and therapeutic applications** in the Book entitled “**TAILOR-MADE AND FUNCTIONALIZED BIOPOLYMER SYSTEMS (Elsevier)**” (Paperback ISBN: 9780128214374 eBook ISBN: 9780128214572), edited by Jagdish Singh, Hriday Bera and Buddhadev Layek. 2021, pg 421-464
- 4) Panda, P., Dey, M., Basak, S*. **Nanocochleates: A Novel Lipid-based Nanocarrier for Drug Delivery.** In: “**Design and Applications of Theranostic Nanomedicines**” (ISBN:978-0-323-89953-6). Edited by: Dr. Somasree Ray& Dr. Amit kr. Nayak(Elsevier) 2022, pg 143-173
- 5) Konar, S., Lahiri, D., Chattopadhyay, S., Vora, K., Basak, S*. “**Role of microorganism in degradation of hazardous solid waste**”In:“**Waste Management: Strategies, Challenges and Future Directions**”(ISBN: 978-1-68507-369-5) Editor: Dr.NandaGopalSahoo,NovaSciencePublishers,Inc.,USA. 2022, pg 497-524
- 6) Mishra, P., Basak, S., Mukherjee, A., Ghosh, B. “**Pyridines in Alzheimer’s disease therapy-recent trends and advancements**”In “**Recent Developments in the Synthesis and Applications of Pyridines**”, edited by **Dr.Parvesh Singh (Elsevier). 2023, pg 159-18.** Paperback ISBN: 9780323912211, eBook ISBN: 9780323914598)

15. CourseDesign

Designed and launched a training and certification course on “**Computer Aided Drug Design with QSAR and Bioinformatics**” with SHRM Biotechnologies (marketing partner) under the aegis of **Life Sciences Skill Sector Development Council (LSSSDC)**, an effort from **National Skill Development Corporation (NSDC)**, **Ministry of Skill Development and Entrepreneurship, Govt. of India**

16. Research Collaboration

Is in active Research Collaboration with **Nano Innovation centre** (PI: Dr. Nanda Gopal Sahoo, Associate Professor, Department of Chemistry), **Kumaun University, Nainital, India**

Active research fraternity with **Prof (Dr.) Achintya Saha**, Professor and Ex-HOD, Dept. of Chemical Technology, University of Calcutta, Rajabazar Science Campus, Kolkata

Active research fraternity with **Dr. Anindya Basu**, UGC-Assistant Professor, School of Pharmaceutical Sciences, Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal, (State Technological University of Madhya Pradesh, India)

Active research fraternity with **Dr. Balaram Ghosh**, Assistant Professor, Epigenetic Research Laboratory, Department of Pharmacy, Birla Institute of Technology and Science, Pilani, Hyderabad Campus, Jawahar Nagar, Hyderabad

17. Key Skills/Strengths

- QSAR, drug design, Bioinformatics
- Phytochemical isolation and phytochemistry
- Analytical method development based on HPLC, IR, NMR (^1H , ^{13}C)
- Molecular Biology, recombinant DNA technology, transcriptomics
- Enzymology
- Directed evolution, genetic engineering, microbial biotechnology, microbial bioprocessing, protein production and purification

18. Administrative experience

- Member of NBA Documentation Committee of Dr. B.C. Roy College of Pharmacy & Allied Health Sciences, Durgapur, WB, India
- Jt. Convenor (Publicity/ Publication) of BCRCPiCON-2019, International Conference organized by Dr. B.C. Roy College of Pharmacy & Allied Health Sciences, Durgapur, WB, India at 2019
- Member of **Institutional Animal Ethics Committee (IEAC)** under the guidance of **CPCSEA, India**
- Ex-Editor of the Journal **“Pharmawave”** (ISSN: 2249-3425, www.brcppharmawave.net) and launching chief of its journal.

19. Workshop attended

- Attended a 14 days hands on workshop on **“Computer aided drug design-a new arena for drug development”** in BIT Mesra at 2007
- Attended 3 days Continuing Education Programme (CEP) in 2019 jointly organized by Pharmacy Council of India (PCI) and Gupta College of Technological Sciences, Asansol, WB, India

20. Personal Details

Name: Souvik Basak

Sex: Male

Date of Birth:09.12.1981

Nationality:Indian

Languages spoken: English, Bengali,Hindi

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Certification

I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describes me, my qualifications and my experience.

Souvik Basak

ANNEXURE-I

List of Publications:

1. Full articles/ proceedings (Published/ Accepted/ Article in press)

1. Mitra, S., Chatterjee, S., Bose, S., Panda, S., Basak, S., Ghosh, N., Mandal., S.C., Singhmura, S., Halder, A.K. Finding structural requirements of structurally diverse α -glucosidase and α -amylase inhibitors through validated and predictive 2D-QSAR and 3D-QSAR analyses. **Journal of Molecular Graphics and Modelling (Impact factor 2.9, 2023)** 2024, 126, 1086-40
2. Chhetri, A., Roy, M., Mishra, P., Halder, A.K., **Basak, S.***, Gangopadhyay, A., Saha, A., Bhattacharya, P. Genetic algorithm-de novo, Molecular Dynamics and MMGBSA based modelling of a novel Benz-pyrazole based anticancer ligand to functionally revert mutant P53 into wild type P53. **Molecular Simulation (Impact factor 2.346, 2021)**2023 (DOI: <https://doi.org/10.1080/08927022.2023.2185079>)
3. Dhibar, M., Chakraborty, S., Basak, S., Pattanayak, P., Chatterjee, T., Ghosh, B., Raafat, M., Abourehab, M.A.S. Critical Analysis and Optimization of Stoichiometric Ratio of Drug-Coformer on Cocrystal Design: Molecular Docking, *In Vitro* and *In Vivo* Assessment. **Pharmaceuticals 2023 (Impact factor 5.215, 2021)**, 16, 284
4. Bhattacharya, P., Saha, A., **Basak, S***. Analytical method development for exploring pharmacokinetic profile of ursolic acid in rat tissues by high-performance thin-layer chromatography. **Journal of Planar Chromatography- Modern TLC2023**, <https://doi.org/10.1007/s00764-023-00228-1>(**Impact factor 1.08, 2021**)
5. Singhmura, S., Mukherjee, M., Pal, T., Ghosh, N., **Basak, S***. Development of a 2D-QSAR model against Aldose Reductase in diabetes and exploration of Aldose Reductase inhibitory activity of *Cuscuta reflexa*. **Chemija 33 (2) 2022, (Impact factor: 0.636, 2021)**.Retrieved from <http://opensubmissionsystem.com/index.php/chemija/article/view/118>
6. Chhetri, A., Roy, M., Gangopadhyay, A., Saha, A., Mishra, P., Halder, A.K., **Basak, S.*** Modelling and Molecular dynamics simulation of novel anticancer ligand for restructuring mutant P53 into wild type. **International Journal of Computational Biology and Drug Design (SCI)** 2022,15: 77-95 (**Impact factor: 0.413**).
7. Mishra, P., Biswas, S., Baur, S., **Basak, S***, Mukherjee, A., Basu, A. Development of pyrazole harbouring novel leads against β -Amyloid protein fibrillation by *in silico* drug design. **Journal of Computational Biophysics and Chemistry** 2022, 21: 541-553(**Impact factor: 2.440, 2021**),
8. Chattopadhyay, M., **Basak, S.**, Barua, A., Gupta, M., Das, D., Karmakar, T., Bagchi, G.K. Neuropharmacological Alterations by a rice contaminant *Stenotrophomonas maltophilia*: a detailed biomolecular and mechanistic landscape. **Applied Biochemistry and Biotechnology**2022,194:1955-1980(**Impact factor: 3.094, 2021**)
9. Das, A., **Basak, S.***, Shah, S.K., Chakraborty, S., Dhibar, M. Microwave: An Ecologically Innovative, Green Extraction Technology (*Invited Commentary*). **Current Analytical Chemistry** 2021 (**Impact factor 2.374, 2021**), *Article in Press*
10. Wang, Y., Karmakar, T., Ghosh, N., **Basak, S.***, Sahoo, N.G. Targeting mangiferin

loaded N-succinyl chitosan-alginate grafted nanoparticles against atherosclerosis – A case study against diabetes mediated hyperlipidemia in rat. **Food Chemistry** 2021, 370: 131376 (**Impact factor: 9.231, 2021**)

11. Punetha, V.D., Dhali, S., Rana, A., Karki, N., Tiwari, H., Negi, P.B., **Basak, S.***, Sahoo, N.G. Recent Advancements in Green Synthesis of Nanoparticles for improvement of bioactivities: a Review. **Current Pharmaceutical Biotechnology** 2022;23(7):904-919(**Impact Factor: 2.829, 2021**)

12. Mishra, P., **Basak, S.***, Mukherjee, A., Basu, A. Design and study of *in silico* binding dynamics of certain isoxazole bearing leads against A β -42 and BACE-1 loop in protein fibrillation. **Letters in Drug Design and Discovery** 2022, 19: 192-213(**Impact Factor: 1.099, 2021**)

13. Karki, N., Tiwari, H., Tewari, C., Rana, A., Pandey, N., **Basak, S.**, Sahoo, N.G*. Functionalized Graphene Oxide as a Vehicle for Targeted Drug Delivery and Bioimaging Applications. **Journal of Material Chemistry B** 2020, 8: 8116-8148 (**Impact Factor: 7.571, 2021**)

14. Dhibar, M., Chakraborty, S., **Basak, S.** Assessment of Effects of Solvents on Cocrystallization by Computational Simulation Approach. **Current Drug Delivery** 2021, 18:44-53 (**Impact Factor: 3.758,2021**)

15. Tiwari, H., Karki, N., Pal, M., **Basak, S.**, Verma, R.K., Bal, R., Kandpal, N.D., Bisht G, Sahoo NG. Functionalized graphene oxide as a nanocarrier for dual drug delivery applications: The synergistic effect of quercetin and gefitinib against ovarian cancer cells. **Colloids and Surfaces B: Biointerfaces** 2019, 178:452-459(**Impact Factor: 5.999,2021**)

16. Ghosh, A., Nandi, S., Roy, A., Singh, S., Singhmura, S., **Basak, S.*** Fabrication of Tween 80 Ligand Coated Cholesterol-Soya Lecithin Bilayered Nanoliposomes for Improved Release of Meropenem against Artificial Blood Brain Barrier. **International Journal of Pharmaceutical Sciences and Research** 2019, 10: 5471-5480 (**SCI, Impact Factor: NA, 2021**)

17. Dey, S., **Basak, S.***, De, A.,* Alam, S.P., Hossain, T., Saha, A., Karmakar, T., Ghosh, M. Simultaneous pharmacokinetics estimation of Nateglinide and Pioglitazone by RP-HPLC: Computational study to unlock the synergism. **Journal of Chromatographic Science** 2020, 58: 309-322 (**Impact Factor: 1.555,2021**)

18. Bhattacharya, P., Saha, A., **Basak, S.*** Discovery of nano-piperolactam A: A nonsteroidal contraceptive lead acting through down-regulation of interleukins. **Nanomedicine: Nanotechnology, Biology and Medicine** 2019, 18:347-358(**Impact Factor: 6.458,2021**)

19. Dey, S.; Shah, S.; Ghosh, M.; Karki, N.; **Basak, S.;*** Sahoo, N.G. A novel, quick column switching RP-HPLC guided metabolite profiling of Albendazole-Praziquantel in rat plasma: Designing new combination dosage regimen with higher therapeutic window. **Current Analytical Chemistry** 2018, 14: 604-614 (**Impact Factor: 2.374, 2021**)

20. **Basak, S.*** Scaling up asymmetric biocatalysis with cofactor regeneration by heterologous expression of a supra-active carbonyl reductase from *Candida glabrata*. **Journal of Scientific and Industrial Research (CSIR)** 2018, 77: 537-541 (**Impact Factor: 0.555, 2021**)

21. **Basak, S.;*** Ghosh, S.K., Punetha, V.D.; Aphale, A.N.; Sahoo, N.G.; Patra, P.K. An experimental modeling of trinomial bioengineering- *crp*, rDNA, and transporter engineering within single cell factory for maximizing two-phase bioreduction. **International Journal of Biological Macromolecules** 2017, 95: 818-825 (**Impact Factor: 8.025,2020**)

22. Amin, S.A., Bhattacharya, P., **Basak, S.,*** Gayen, S., Nandy, A., Saha, A. Pharmacoinformatics study of Piperolactam A from *Piper betle* root as new lead for non steroidal anti fertility drug development. **Computational Biology and Chemistry** 2017, 67:213-224 (**Impact Factor: 3.737,2021**)
23. **Basak, S.,** Mondal, S., Dey, S., Bhattacharya, P., Saha, A., Punetha, VD; Abbas,A;Sahoo, N.G. Fabrication of β -cyclodextrin mediated single bimolecular inclusion complex: characterization, molecular docking, *in vitro* release and bioavailability studies for Gefitinib and Simvastatin conjugate. **Journal of Pharmacy and Pharmacology** 2017, 69: 1304-1317 (**Impact Factor: 3.765,2021**)
24. **Basak, S.,***Sahoo N.G. Genome mining, *in silico* validation and phase selection of a novel aldo-ketoreductase from *Candida glabrata* for biotransformation. **Bioengineered (invited addendum)** 2017, 23: 1-10 (**Impact Factor: 3.269,2021**)
25. Bhattacharya, P., Mondal, S., **Basak, S.,** Das, P., Saha, A., Bera, T. *In vitro* susceptibilities of wild and drug resistant *Leishmania donovany* amastigotes to Piperolactam A loaded hydroxypropyl β -cyclodextrin loaded nanoparticles. **Acta tropica** 2016, 158: 97-106 (**Impact Factor: 3.222,2021**)
26. Pal, S., **Basak, S.,** Roy S., Dastidar, S.G. Experimental evaluation of practical viability of Good Manufacturing Practice (GMP) in preparation of oral liquid formulations in a small scale pharmaceutical industry. **European Journal of Pharmaceutical and Medical Research** 2016, 3:403-407
27. Pal, N.R., **Basak, S.,***Tripathy, S.K., Chakraborty, S., Majumdar, J. Demographic survey on women breast cancer patients in a specialty govt. Hospital at kolkata in india. **International Journal of Sciences and Applied Research** 2016, 3:1-11
28. **Basak, S.;** Punetha, V.D.; Bisht, G.; Sahoo, N.G.; Cho, J.W. Recent trends of polymer-protein conjugate application in biosynthesis- a review. **Polymer Reviews** 2015, 55: 163-198 (**Impact Factor: 13.282,2021**)
29. Gayen, S.; Jayabalan, N.; **Basak, S.** Nuclear Magnetic Resonance (NMR) Spectroscopy in proteinresearch.**JournalofPharmaceuticalScienceandTechnology**2015,4:32-33
30. Bhattacharyya, I.; **Basak, S.,** Maity, A., Ghosh, S.K. Isolation and characterization of acid and base degradation products in Atenolol and Hydrochlorothiazide and a validated selective stability-indicating HPLC–UV method for their quantification. **International Journal of Advances in Pharmaceutical Analysis** 2015, 5:36-41
31. Bose, P; Dey S; **Basak, S.;** Shah, S; De, A. Simultaneous RP-HPLC and UV Spectroscopic method development and validation for estimation of Ibandronate sodium in bulk and pharmaceutical dosage form. **Analytical and Bioanalytical Chemistry Research** 2015, 2: 99-112 (**SCI, Impact factor:NA**)
32. **Basak, S.;** Hefang, G., Jiang, R. Enhancing *E. coli* tolerance towards low pH stress *via* engineering its global regulator cAMP receptor protein (CRP) **Journal of Biotechnology** 2014, 173: 68-75 (**Impact Factor: 3.595,2021**)
33. **Basak, S.;** Song, H.; Jiang, R. Error-prone PCR of global transcription factor cyclic cAMP receptor protein of *E. coli* for enhanced organic solvent (toluene) tolerance. **Process Biochemistry** 2012, 47: 2152-2158 (**Impact Factor: 4.885,2021**)
34. **Basak, S.;** Jiang, R. Enhancing *E. coli* tolerance towards oxidative stress *via* engineering its global regulator cAMP receptor protein (CRP). **PLoS ONE** 2012, 7(12): e51179 (**Impact Factor: 3.752, 2021**). (This paper has been indexed and featured online by Global Medical

Discovery [ISSN 1929-8536])

35. Basak, S.; Mandal, S.; Chattopadhyay, M. Simultaneous spectrophotometric assay for estimation of norfloxacin and metronidazole in tablets. *Asian Journal of Chemistry* 2010, 22: 5971-5975 (Impact Factor: 0.535, 2021)(**This paper has been indexed in Getinfo, the portal for German National Library of Science and Technology**)

36. Rai, S.; **Basak, S.**; Mukherjee, K.; Saha, B.P.; Mukherjee, P.K. Oriental medicine *Mangifera indica*: a review. *Oriental Pharmacy and Experimental Medicine* (Now known as **Advances in Traditional Medicine, Springer**) 2007, 7:1-10

37. Shah, S., Dey, S., **Basak, S.**, Kant, K., Behera, P.C., Ghosh, M. A high-performance liquid chromatographic method for determination of praziquantel in rat plasma: Optimization and application to pharmacokinetic study. **Conference Proceedings, The 21st International Electronic Conference on Synthetic Organic Chemistry 2017** organized by Sciforum: MDPI, Basel, Switzerland

38. Mal, M., **Basak, S.**, Maity, K., Gantait, A., Rai, S., Wahile, A., Raja, S., Ahmed, N., Kumar, V., Sahoo, A., Mukherjee, K., Mukherjee, P.K. HPTLC analysis of turmeric (*Curcuma longa* Linn.) based formulations and food additives using curcumin as biomarker –Proceedings on International conference on Botanicals, DIA2005 (India)

39. **Basak, S.**, Bhunia B. Central composite design (CCD) as a tool for optimization in analytical chemistry. **Pharmawave**, 2012;5

40. Chawla, R., Sahoo U., **Basak, S.***Microwave assisted synthesis, characterization and antimicrobial activity of novel bipyrazole derivatives. **Pharmawave** 2017; 10: 40-47

**means corresponding author in the publications*

Conference proceedings (others):

1. Raja, S., Ahmed, N., Kumar, V., Maity, K., Gantait, A., Rai, S., Wahile, A., Mal, M., **Basak, S.**, Sahoo, A., Mukherjee, K., Mukherjee, P.K. Antioxidant and Free Radical Scavenging Activity of Aerial Parts of *Andrographis paniculata* Nees (Family- Acanthaceae) - Proceedings on International conference on Botanicals, DIA2005 (India)

2. Maity, K., Gantait, A., Rai, S., Wahile, A., Raja, S., Ahmed, N., Kumar, V., Sahoo, A., Mal, M., **Basak, S.**, Mukherjee, K., Mukherjee, P.K. Quercetin-phospholipid complex: a step forward towards of free radicals - Proceedings on International conference on Botanicals, DIA 2005 (India)

ANNEXURE-II

Conference publications (abstract):

>Recent

*(Apart from 7 abstract publications in BCRCPiCON-2019, a two days international conference on “Key Concerns and Considerations in Pharmaceutical Sciences and Technology: South-East Asian Perspective” organized by Dr. B.C. Roy College of Pharmacy & Allied Health Sciences, Durgapur, WB, India)

1. Konar, S, Das, M, Koley, S., Hor, A., **Basak, S.***, Chakraborty, S. Construction of a novel immobilized microbial cell factory for green management of plastic waste. 5th Regional Science & Technology Congress (Region 7), 2023 (**Awarded 2nd prize as outstanding paper in Environmental Science Category**)
2. Chhetri, A., Roy M., Gangopadhyay, A., Saha, A., **Basak, S***. Molecular modelling and design of a novel nitrogen containing mutant P53 inhibitor having potential to restore its beneficial wild type function. Webinar on Pharmaceutics and Drug Discovery, July 2020, Longdom Conferences Group, London, UK(**Invited**)
3. **Basak, S.**, Chattopadhyay, M., Bagchi G.K. Contaminated Rice, A Silent Psychopharmacological Killer?-A Bio-Molecular Landscape and Possible Solution. Int. Journal of Pharmaceutical Sciences and Medicine (IJPSM), Pharma Middle East Virtual Congress, Dec 2020, organized by Istanbul Consulting group(**Invited**)
4. **Basak, S***. Development of novel leads against Protein Fibrillation by *in silico* drug design. Journal of Chemical Biology & Pharmaceutical Chemistry, Euro Pharma July, 2020, London UK(**Invited**)
5. Basak, S. β -Cyclodextrin, A Magic Cavity for Fabrication of Biomolecules–Recent Advances in Complexation Dynamics and Exploitation of Its Macromolecular Interaction for Toxicological Calibration. ICEFN & SEM 2019(**Invited**)
6. **Basak, S.** Approaching polynomial biopolymer engineering-engineering enzyme, regulatory protein and cell membrane together as a new biosynthetic molecular scaffold. Second International Conference on Science and Engineering of Materials (ICSEM 2018), Jan 06-08, 2018 at Sharda University, Greater Noida, India(**Invited**).
7. Mishra, A., Ghosh, S., **Basak, S***. Isolation, extraction and characterization of piperolactam a from *Piper betle* as a non steroidal contraceptive lead. Spirit BHU2018

8. Ghosh, P., **Basak, S***. Molecular docking and virtual screening of natural products: Approaches for newer drug discovery. Spirit BHU2018
9. Ghosh, A., Nandi, S., **Basak, S***. Design and *in vitro* studies of cholesterol soya lecithin nanoliposomes against selected meningitis pathogen. Spirit BHU2017
10. Ghosh, A., Nandi S., **Basak, S***. Design and *in vitro* studies of cholesterol soya lecithin nanoliposomes against selected meningitis pathogen. 2017; International conference on advancement of pharmaceutical Technology and Regulatory affairs, jointly organized by GCTS, Asansol and IPA.
11. **Basak, S***. Fabrication of novel biocatalytic microdevice to achieve highest batch conversion in organic synthesis- a case study for ethyl-4-chloro-3-oxobutanoate. ICEFN 2016 (**Invited lecture**)
12. Chakraborty, B., Mondal, S., **Basak, S***. Fabrication of a single bimolecular inclusion complex with β -Cyclodextrin to improve efficacy of combination dosage form. ICEFN 2016-03-0
13. Samanta, R., Mondal, I., **Basak, S***. Synthesis of 5-amino Isocarbostyryl as a key intermediate of 5-(N-*p*-carboxy phenyl) amino Isoquinoline 1,3,4-trione: a novel caspase 3 inhibitor. ICEFN2016
14. Das, R., Chakraborty, B., Samanta, R., **Basak, S***. Real time degradation analysis of Promethazine hydrochloride for industrial competence and lead finding for new drug discovery. ICEFN2016
15. Saha, A., **Basak, S***. A green chemistry approach for synthesizing biocompatible nanoparticles. ICEFN2016
16. **Basak S***. Discovery of a non-toxic monomolecular nanomedicine as non steroidal anti-fertility agent from *Piper betle* Linn.- **Oral presentation** at Consortium for **Integrated Research on Molecular Medicine (CIRMM) 2016** organized by **Dept. Of Zoology, West Bengal State University, Barasat, WB, India**
17. Roy, A.; **Basak, S***. Nanorobotics- future of medicine. National seminar on drug delivery for control of viral menace, BCRCPAHS,2014
18. Saha, A., **Basak, S***. NIPAH VIRUS- a potential threat for BIOTERRORISM? National seminar on drug delivery for control of viral menace, BCRCPAHS,2014
19. Chakraborty, B. **Basak, S***. The mysteries of HANTAVIRUS infection. National seminar on drug delivery for control of viral menace, BCRCPAHS,2014
20. Chatterjee, S.; **Basak, S***. Basic pharmacophore mapping of a set of plant derived anti-inflammatory compounds through AutoDockVina. **ICEPPN 2013(Omics Group Conference), India.**
21. Kumar, N.; **Basak, S***. Newer drugs-transformation of small molecules to gene therapy. **SPIRIT 14** organized at **IITBHU**

>**Ph.D**

1. **Basak, S.;** Jiang, R. Directed evolution of cAMP receptor protein for improved cell toluene tolerance. **Biopharma Asia Convention 2012 (presented poster)**
2. Chong, H.; **Basak, S.;** Jiang, R. Engineering global regulator cAMP receptor protein for improved cell performance under stress. **ASM2012**
3. Zhang, H., Chong, H., **Basak, S.,** Huang, L., Jiang, R. Engineering global regulator cAMP receptor protein (CRP) of *E. coli* to improve strain performance under stress. **AIChE2012**
4. Zhang, H., Chong, H., **Basak, S.,** Huang, L., Jiang, R. Engineering global transcription factor cAMP receptor protein to improve strain performance under stress. **IBS2012**
5. Zhang, H., Chong, H., **Basak, S.,** Huang, L., Jiang, R. Engineering global transcription factor cAMP receptor protein (CRP) for improved cell performance under various stresses (1-butanol, ethanol, oxidative stress, organic solvent and osmotolerance). **FEMS2013**
6. Geng, H., Chong, H., **Basak, S.,** Zhang, H. Jiang, R. Engineering Global Transcription Factor cAMP Receptor Protein (CRP) for Improved Cell Performance Under Various Stress (1-butanol/isobutanol, ethanol, oxidative stress, organic solvents and osmotolerance). **International Conference on Natural Products and Health 2013, Singapore**

>M.Pharm (Best 4 publications)

1. HPTLC analysis of turmeric (*Curcuma longa* Linn.) based formulations and food additives using curcumin as biomarker – **DIA, 2005(USA)**
2. Exploring antioxidant potential of triphala – a well known phytomedicine from Ayurveda – **IPC, 2005- poster presented**
3. Evaluation of analgesic potential of Indian *Hypericum species* – **poster presented in ISCB, 2006 (CDRI, India)**
4. *In-vitro* evaluation of Indian *Hypericum species* for antidepressant potentials - **Fifth annual conference of ethnopharmacology, 2006**

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At PubMed: <https://pubmed.ncbi.nlm.nih.gov/?term=Souvik+Basak>

At LinkedIn: <https://www.linkedin.com/in/dr-souvik-basak-983883a/>

At ResearchGate: https://www.researchgate.net/profile/Souvik_Basak

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At Publons: <https://publons.com/researcher/1327254/souvik-basak/metrics/>

At OMICS: <https://biography.omicsonline.org/india/dr-b-c-roy-college-of-pharmacy-and-allied-health-sciences/souvik-basak-674316>

At BCRCP: <http://www.bcrep.ac.in/faculty.htm>

At Nano Innovation Laboratory, Kumaun:

http://www.ngsahooresearchgroup.in/custom_website/web/collaborators.jsp