<u>CV</u>

Name: Surajit Ghosh
Designation: Professor

Address: Department of Bioscience & Bioengineering

Indian Institute of Technology Jodhpur

NH 62, Surpura Bypass Road, Karwar, Rajasthan 342030

Phone: +91-291-280-1244 (Office)

Webpage: http://home.iitj.ac.in/~sghosh/index.php

Date of Birth: December 25, 1977

Email: sghosh@iitj.ac.in; sgiicb@gmail.com

Education:

1995-1998: BSc. (Chemistry), University of Calcutta, India. 1998-2000: MSc. (Chemistry), University of Calcutta, India.

2004-2008: Ph.D (Chemistry), Indian Institute of Technology Kanpur 2008-2010: Post-Doctoral Study (Cell Biology), European Molecular

Biology Laboratory, Heidelberg, Germany

Research Interest: Chemical Biology, Chemical Neuroscience, Drug Discovery, Biosensor

♣ Total Number of Publications: **135**

Patents Filed/Granted: 21

Book Chapters: 03

♣ Total Citation: **3331**

♣ Citation Index: h-index: **31**; i10-index: **84**

↓ Technologies / **Products Developed** / Licensed: **Three**

Master Thesis Awarded (9); PhD Awarded (12); PhD Thesis Submitted (3) PhD is in Progress (10); RA Completed/Supervised/Ongoing (6)

Professional Recognition:

- Dean International, Corporate and Alumni Relations (31st January 2022-onwards)
- Project Director, iHub Drishti (19.06.2023-06.09.2023)
- Associate Editor, Frontiers in Chemistry (Chemical Biology), 2022-Onwards
- Editorial Board Member, RSC Advances, 2022-Onwards
- Expert Member, Neuroscience, BRICS Meeting, May 25-26, 2021
- Board of Directors, JCKIF, a not for profit section 8 company (2021-till date)
- Board of Directors, iHub Drishti, section 8 company (2020-Onwards)
- Chairman, Steering Committee, Medical Technology Program, IIT Jodhpur (Sep 2021-Aug 2022)
- Board Member, IIT Jodhpur (Sep 2019- December 2022)

- Dean Research and Development, IIT Jodhpur (Sep 2019-Aug 2022, 14th Jun 2022-31st August 2022)
- Special Invitee as PAC Member in SERB (2020)
- Expert Member in DST-SERB Ramanujan Fellowship Committee (2019-2022)
- Council Member-International Chemical Biology Society (2017)
- Associate Editor, Royal Society of Chemistry Advances, UK (2015-2025)
- Member-Asian Chemical Biology Initiative (2018)
- Elected Fellow of West Bengal Academy of Science and Technology (2019)
- Elected Fellow of Royal Society of Chemistry, UK (2016)
- Founder Life Member & Joint Secretary-Chemical Biology Society of India
- *Life Member-Indian Peptide Society*
- Editorial Board Member-Frontiers in Chemistry (Chemical Biology)

Professional Experience/Appointments:

February 2023-Till date Dean-International, Corporate and Alumni relations

August 2019- December 2022 Board Member, IIT Jodhpur

September 2019-August 2022 Dean, Research and Development

Indian Institute of Technology Jodhpur

9th July 2019-till date: Professor, Indian Institute of Technology Jodhpur

March 2018 Visiting Scientist, ISIR, Osaka University, Japan

2015-2025 Associate Editor

Royal Society of Chemistry Advances, UK (RSC

Advances)

August-October 2012 Visiting Scientist in Rudolph Virchow Centre,

University of Wurzburg, Germany

April 2014-8th July: Principal Scientist, CSIR-IICB, Kolkata

Associate Professor, AcSIR

Visiting Scientist, London Cancer Research Institute,

UK

January 2011-2015: Scientist, Ramanujan Fellow at CSIR-IICB, Kolkata

2011-till date: Adjunct Faculty, National Institute of Pharmaceutical

Education & Research, Kolkata

2011-2014 and 2014-2019: Assistant Professor and Associate Professor, Academy of

Scientific & Innovative Research, Ghaziabad, Uttar

Pradesh 201002

July 2008-December 2010: Postdoctoral Fellow in Cell Biology and Biophysics Unit

European Molecular Biology Laboratory, Heidelberg,

Germany

Postdoctoral Advisor: Dr. Thomas Surrey

January 2001 – July 2004: Scientist, BIOCON, 20th KM, Hosur Road, Electronics

City, Bangalore, India.

Awards/Recognition:

2022-Onwards	Editorial Board Member, RSC Advances
	·
2020	SERB STAR Award
2020	CDRI Awards 2020 for Excellence in Drug Research
2019	Journal of American Chemical Society "Young Investigators Virtual Issue" Award
2019	Elected Fellow, West Bengal Academy of Science and Technology
2018	Asima Chatterjee Young Scientist Award
2017	Syamasri Gupta Memorial Young Scientist Award from Indian Society for Surface Science & Technology
2017	Travel Grant by International Chemical Biology Society for Invited Lecture at Shanghai, China
2017	Young Scientist Award by Indian Peptide Society
2016	Elected Fellow, The Royal Society of Chemistry, UK
2010	Ramanujan Fellowship (2011-2015)
2010	Travel grant by DBT/ Wellcome Trust for attending "EMBO Global Exchange & the Wellcome Trust/DBT India Alliance meeting" at Barcelona
2009-2012	Alexander Von Humboldt Fellowship
2008-2010	EMBL Postdoctoral Fellowship
2007	Travel and Stay Support by BASF Company for attending in International Symposium "BASF

Conference on Nanomaterials" in Singapore.

List of Publications and Patents

Detailed List of Publications (*: Corresponding author; #: Equal contribution):

Shubham Garg, Aniket Jana, Juhee Khan, Sanju Gupta, Rajsekhar Roy, Varsha Gupta 135. and Surajit Ghosh*

Logic "AND Gate Circuit" Based Mussel Inspired Polydopamine Nanocomposite as Bioactive Antioxidant for Management of Oxidative Stress and Neurogenesis in Traumatic Brain Injury

ACS Applied Materials & Interfaces, 2024 (Just Accepted)

(Impact Factor: 9.5)

134. Moumita Jash,# Satyajit Ghosh,# Rajsekhar Roy, Nabanita Mukherjee, Samya Sen and Surajit Ghosh*

Next Generation Antimitotic β-Carboline Derivatives Modulate Microtubule Dynamics and Downregulate NF-κB, ERK 1/2 and Phospho HSP 27

Life Sciences, 2024 (Just Accepted)

(Impact Factor: 6.1)

133. Prabir Kumar Gharai, Juhee Khan, Krishnangshu Pradhan, Rathnam Mallesh, Shubham Garg, Mohammad Umar Arshi, Surajit Barman and Surajit Ghosh*

Power of Dopamine: Multifunctional Compound Assisted Conversion of the Most Risk Factor into Therapeutics of Alzheimer's Disease

ACS Chemical Neuroscience, 2024, (Just Accepted)

(Impact Factor: 5.0)

132. Nabanita Mukherjee, Satyajit Ghosh, Rajsekhar Roy, Dipro Mukherjee, Samya Sen, Debasmita Nandi, Jayita Sarkar and Surajit Ghosh*

Extracellular Matrix mimicking Wound Microenvironment Responsive Amyloid-Heparin@TAAGNP Co-assembled Hydrogel-an Effective Conducting Antimicrobial Wound Healing Material

ACS Applied Materials & Interfaces, 2024, (Just Accepted)

(Impact Factor: 9.5)

Rathnam Mallesh, Juhee Khan, Prabir Kumar Gharai, Mohammad Umar Arshi, Shubham 131. Garg, Sanju Gupta and Surajit Ghosh*

Hydrophobic C-terminal Peptide Analog Aβ31-41 Protects the Neurons from Aβ-induced

ACS Chemical Neuroscience, 2024, (Just Accepted)

(Impact Factor: 5.0)

130. Samya Sen, # Surojit Ghosh, # Aniket Jana, # Moumita Jash, Satyajit Ghosh, Nabanita Mukherjee, Dipro Mukherjee, Jayita Sarkar and Surajit Ghosh *

Multi-Faceted Antimicrobial Efficacy of a Quinoline-Derived Bidentate Copper (II) Ligand Complex and Its Hydrogel Encapsulated Formulation in Methicillin-Resistant Staphylococcus aureus inhibition and Wound Management

ACS Applied Bio Materials, 2024, (Just Accepted)

(Impact Factor: 4.7)

- 129. Surojit Ghosh, Mohammad Umar Arshi, Satyajit Ghosh, Moumita Jash, Sudipta Bhattacharya, Nirmal Kumar Rana, Samya Sen, **Surajit Ghosh** *
 Discovery of Quinazoline and Quinoline Based Small Molecules as Utrophin Upregulators via AhR Antagonism for the Treatment of Duchenne Muscular Dystrophy *Journal of Medicinal Chemistry*, 2024 (Just Accepted)
 (Impact Factor: 7.3)
- 128. Surojit Ghosh, Samya Sen, Moumita Jash, Satyajit Ghosh, Aniket Jana, Rajsekhar Roy, Nabanita Mukherjee, Dipro Mukherjee, Jayita Sarkar and **Surajit Ghosh** * Synergistic Augmentation of Beta-Lactams: Exploring Quinoline-Derived Amphipathic Small Molecules as Antimicrobial Potentiators Against Methicillin-resistant Staphylococcus aureus"

ACS Infectious Diseases, *2024*, *10*, *4*, *1267-1285* (Impact Factor: 5.3)

127. Sanju Gupta, Juhee Khan, Surajit Ghosh*.

Molecular Mechanism of Cognitive Impairment Associated with Parkinson's Disease: A Stroke Perspective

Life Sciences, 2024, 337, 1223582023

(Impact Factor :6.1)

126. Varsha Gupta,# Prabir Kumar Gharai,# Chirantan Kar,# Shubham Garg, **Surajit Ghosh***. Ratiometric Fluorescent Probe Promotes Trans-differentiation of Human Mesenchymal Stem Cells to Neurons.

ACS Chemical Neuroscience Letter 2024, 15, 2, 222–2292

(Impact Factor: 5.0)

125. Nabanita Mukherjee, Debmalya Bhunia, Prabir Kumar Garai, Prasenjit Mondal, Surajit Barman, and **Surajit Ghosh.***

Designed Novel Nuclear Localizing Anticancer Peptide Targets p53 Negative Regulator MDM2 Protein

Journal of Peptide Science 2024, 30, e3535. (Impact Factor: 2.1)

124. Akhil A. Bhosle, Mainak Banerjee, Soumik Saha, Shubham Garg, **Surajit Ghosh** and Amrita Chatterjee*.

An NIR-emissive AIEgen with dual sensing ability: An azine-based chemodosimeter for discriminative ppb-level detection of hydrazine and bisulfite ions

Sensors and Actuators B: Chemical, Volume 397, 2023, 134661 (Impact Factor :8.40)

123. Samya Sen#, Ramkamal Samat#, Moumita Jash, Satyajit Ghosh, Rajsekhar Roy, Nabanita Mukherjee, Surojit Ghosh, Jayita Sarkar and **Surajit Ghosh.** *
Potential Broad-Spectrum Antimicrobial, Wound Healing and Disinfectant Cationic Peptide Crafted from Snake Venom

Journal of Medicinal Chemistry 2023, 66, 16, 11555–11572. (Impact Factor: 8.039) Work highlighted by leading national media outlets like NDTV, India Today, and Times of India (covered by more than 60 news portals nationally and internationally).

122. Tanaya Chatterjee, Gaurav Das, Barun Chatterjee, **Surajit Ghosh** and Pinak Chakrabarti. The Role of Protein-L-Isoaspartyl Methyltransferase (PIMT) in the Suppression of Toxicity of the Oligomeric Form of Aβ42, in Addition to the Inhibition of its Fibrillization"

ACS Chemical Neuroscience 2023, 14, 16, 2888–2901. (Impact Factor: 5.0)

121. Nabanita Mukherjee and **Surajit Ghosh.** *

Substance P Derived Extracellular Matrix Mimicking Peptide Hydrogel: A Cytocompatible Biomaterial Platform.

ChemBioChem: A European Journal of Chemical Biology 2023, 24, e202300286. (Impact Factor: 3.4)

120. Nabanita Mukherjee, Satyajit Ghosh, Jayita Sarkar, Rajsekhar Roy, Debasmita Nandi, and **Surajit Ghosh.***

Amyloid-Inspired Engineered Multidomain Amphiphilic Injectable Peptide Hydrogel-An Excellent Antibacterial, Angiogenic, and Biocompatible Wound Healing Material

ACS Applied Materials & Interfaces 2023, 15, 28, 33457-33479. (Impact Factor: 9.5)

119. Rathnam Mallesh, Juhee Khan, Prabir Kumar Gharai, Subhajit Ghosh, Shubham Garg, Mohammad Umar Arshi, and **Surajit Ghosh.***

High-Affinity Fluorescent Probes for Detection of Soluble and Insoluble $A\beta$ Deposits in Alzheimer's disease.

ACS Chemical Neurosciecne 2023, 14, 8, 1459-1473.

118. Rathnam Mallesh, Juhee Khan, Prabir Kumar Gharai, Varsha Gupta, Rajsekhar Roy, and Surajit Ghosh.*

Controlling Amyloid Beta $(A\beta)$ Peptide Aggregation and Toxicity by Protease Stable Ligands

ACS Bio & Med Chem Au. 2023, 3, 2, 158-173.

117. Prabir Kumar Gharai, Juhee Khan, Rathnam Mallesh, Shubham Garg, Abhijit Saha, Subhajit Ghosh and **Surajit Ghosh.***

Vanillin Benzothiazole Derivative Reduces Cellular ROS and Detects Amyloid Fibrillar Aggregates in Alzheimer's Brain

ACS Chemical Neuroscience, 2023, 14, 4, 773–786. (Impact Factor: 5.78)

116. Rajsekhar Roy, Juhee Khan, Krishnangshu Pradhan#, Prasunpriya Nayak, Ankan Sarkar, Subhadra Nandi, Surojit Ghosh, Heera Ram, and **Surajit Ghosh.***

Short Peptoid Evolved from Key Hydrophobic Stretch of Amyloid- β 42 Peptide Serve as Potent Therapeutic Lead of Alzheimer's Disease

ACS Chemical Neuroscience, 2023, 14, 2, 246–260. (Impact Factor: 5.78)

115. Varsha Gupta, Tanushree Mahata, Rajsekhar Roy, Prabir Kumar Gharai, Aniket Jana, Shubham Garg and **Surajit Ghosh.***

Discovery of Imidazole-based GSK3 β Inhibitors for Transdifferentiation of Human Mesenchymal Stem Cells to Neurons: A Potential Single-Molecule Neurotherapeutic Foresight

Frontiers in Molecular Neuroscience, 2022, p.678. (Impact Factor: 6.261)

114. Anindyasundar Adak, Gaurav Das, Varsha Gupta, Juhee Khan, Nabanita Mukherjee, Prasenjit Mondal, Rajsekhar Roy, Surajit Barman, Prabir Kumar Gharai, and Surajit Ghosh.*

Evolution of Potential Antimitotic Stapled Peptide from Multiple Helical Peptide Stretches of Tubulin Heterodimer Interface: Helix-Mimicking Stapled Peptide Tubulin Inhibitors

Journal of Medicinal Chemistry 2022, 65, 13866–13878. (Impact Factor: 8.039)

113. Akhil A. Bhosle, Mainak Banerjee, Varsha Gupta, **Surajit Ghosh,** Achikanath C Bhasikuttan and Amrita Chatterjee.

Mechanochemical synthesis of AIE-TICT-ESIPT active orange-emissive chemodosimeter for selective detection of hydrogen peroxide in aqueous media and living cells, and solid-phase quantitation using a smartphone

RSC New Journal of Chemistry 2022, 46, 18961-18972. (Impact Factor: 3.98)

112. Rathnam Mallesh, Juhee Khan, Krishnangsu Pradhan, Rajsekhar Roy, Nihar. R. Jana, Parasuraman Jaisankar, **Surajit Ghosh.***

Design and Development of Benzothiazole-based Fluorescent Probes for Selective Detection of A Aggregates in Alzheimer's Diseases.

ACS Chemical Neuroscience, 2022, 13, 2503–2516. (Impact Factor 5.78)

111. Shivanshu Mishra, Pharyanshu Kachhawa, Prasenjit Mondal, **Surajit Ghosh,** Chaturvedula Triupura, Nidhi Chaturvedi.

AIGaN/GaN HEMT based biosensor for detection of HER2 antigen spiked in human serum

IEEE Transitions on Electron Devices, 2022, 69, 4527-4533. (Impact Factor 2.9).

110. Nabanita Mukherjee, Satyajit Ghosh, Rajsekhar Roy, **Surajit Ghosh.***Self-Assembly antimitotic peptide vesicle designed from α,β tubulin heterodimer interface for anticancer drug delivery

Israel Journal of Chemistry, 2022, 62, e202200019, (Impact Factor 4.40).

109. Surajit Barman, Subhajit Ghosh, Rajsekhar Roy, Varsha Gupta, Satyajit Ghosh, **Surajit Ghosh.***

A Potent Estrogen Receptor and Microtubule Specific Purine-Benzothiazole-based Fluorescent Molecular Probe Induces Apoptotic Death of Breast Cancer Cells. *Nature Scientific Reports*, 2022, 12, 10772. (*Impact factor 4.37*)

108. Satyajit Ghosh, Surajit Ghosh*

Exosome: The Nano component Trinity as Potential Pathogenic Agent, Disease Biomarker and Neurotherapeutics.

Frontiers in Pharmacology, 2022, 13: 878058. (Mini Review) (Impact Factor 5.8)

107. Development of poly(vinylidene fluoride) graft random copolymer membrane for

antifouling and antimicrobial applications."

Mahuya Pakhira, Subhajit Ghosh, **Surajit Ghosh**, Dhruba P. Chatterjee, Arun K. Nandi. *Journal of Industrial and Engineering Chemistry*, *2022*, *112*, *171-181*. (Impact Factor: 6.06)

106. In Vitro and In Silico Determinants of HMG-CoA reductase inhibition potential of caffeic acid for therapeutic of hypercholesterolemia

Heera Ram, Chandra Kala, Karishma Sen, Anita Sakarwal, Jaykaran Charan, Paras Sharma, Rajsekhar Roy, **Surajit Ghosh.**

Journal of Applied Pharmaceutical Science, 12(1), 2022

105. Designed Hybrid Anticancer Nuclear Localized Peptide Inhibits Agressive Cancer Cell Proliferation

Prasanjit Mondal, Saswat Mohapatra, Debmalya Bhunia, Prabir Kumar Gharai, Nabanita Mukherjee, Varsha Gupta, Satyajit Ghosh, **Surajit Ghosh***.

RSC Medicinal Chemistry, 2022, 13, 196-201. (Impact Factor 3.47).

- 104. Soumi Sukla, Prasenjit Mondal, Subhajit Biswas,* **Surajit Ghosh.***A Rapid and Easy-to-Perform Method of Nucleic-Acid based Dengue Virus Diagnosis using Fluorescence-based Molecular Beacons *Biosensor*, 2021, 11(12), 479. (Impact Factor 5.743)
- 103. Batakrishna Jana, Surajit Barman, Rajsekhar Roy, Gaurav Das, Nabanita Mukherjee, Anindyasundar Adak, Surajit Ghosh*.
 Fluorine Substituted Proline Enhances Tubulin Binding Potential of a Tetrapeptide at GTP Binding Pocket Causing Inhibition of Microtubule Motility and Antimitotic Effect The Journal of Physical Chemistry B, 2021, 125, 31, 8768–8780. (Impact Factor 2.99)
- 102. Tanaya Chatterjee, Gaurav Das, Surajit Ghosh and Pinak Chakrabarti.
 Effect of Gold Nanoparticles on the Structure and Neuroprotective Function of Protein L-isoaspartyl methyltransferase (PIMT)
 Nature Scientific Reports 2021, 11, 14296. (Impact factor 4.37)
- 101. Saswat Mohapatra, Varsha Gupta, Prasenjit Mondal, Shreyam Chatterjee, Debmalya Bhunia, and Surajit Ghosh.*
 Small Molecule with Bridged Carbonyl and Tri-fluoro-aceto-phenone Groups Impedes Microtubule Dynamics and Subsequently Triggers Cancer Cell Apoptosis
 ChemMedChem 2021, 16, 2703-2714. (Impact factor 3.5)
- 100. Saswat Mohapatra, Gaurav Das, Varsha Gupta, Prasenjit Mondal, Masashi Nitani, Yutaka Ie, Shreyam Chatterjee, Yoshio Aso*, Surajit Ghosh.*
 Power of organic electron acceptor in modulation of intracellular mitochondrial ROS: Induces JNK and caspase dependent apoptosis of cancer cells"
 ACS Omega 2021, 11, 7815–7828. (Impact Factor: 4.13)

99. Jyothi Nair, Saswat Mohapatra, Manu Joseph, Santhi Maniganda, Varsha Gupta, **Surajit Ghosh**,* Kaustabh Maiti*.

Tracking the Foot-prints of Paclitaxel Delivery and Mechanistic Action via SERS Trajectory in Glioblastoma Cells"

ACS Biomater. Sci. Eng. 2020, 6, 9, 5254–5263 (Impact Factor: 4.74).

98. Gaurav Das, Surojit Ghosh, Shubham Garg, Satyajit Ghosh, Aniket Jana, Ramkamal Samat, Nabanita Mukherjee, Rajsekhar Roy, and **Surajit Ghosh.***Overview of Key Potential Therapeutic Strategies to Combat with the COVID-19 Battle. **RSC Advances 2020, 10, 28243-28266 (Review Article) (Impact Factor: 4.036)**

97. Nabanita Mukherjee, Anindyasundar Adak, and **Surajit Ghosh.***Recent Trends in the Development of Peptide and Protein-based Hydrogel Therapeutics for Healing of CNS Injury.

Soft Matter 2020, 16, 10046-10064 (Review Article) (Impact Factor: 4.046)

96. Krishnangsu Pradhan, Gaurav Das, Chirantan Kar, Nabanita Mukherjee, Juhee Khan, Tanushree Mahata, Surajit Barman, and Surajit Ghosh*
Rhodamine Based Metal Chelator: A Potent Inhibitor of Metal-Catalyzed Amyloid Toxicity.

ACS Omega 2020, 5, 30, 18958–18967. (Impact Factor: 4.13)

95. Satyajit Ghosh, Shubham Garg, and Surajit Ghosh.*

Cell-Derived Exosome Therapy: A Novel Approach to Treat Post Traumatic Brain Injury Mediated Neural Injury.

ACS Chem. Neurosci. 2020, 14, 2045–2047. (Viewpoint) (Impact Factor: 4.48)

94. Nabanita Mukherjee and Surajit Ghosh*

Myelin Associated Inhibitory Proteins as a Therapeutic Target for Healing of CNS injury. ACS Chem. Neurosci., 2020, 12, 1699–1700. (Viewpoint) (Impact Factor: 4.48)

93. Gaurav Das, Nabanita Mukherjee, Surajit Ghosh*

Neurological Insights of COVID-19 Pandemic.

ACS Chem. Neurosci. 2020. 11, 9, 1206-1209. (Viewpoint) (Impact Factor: 4.48)

Highlighted in major news media (More than 60 news agencies) such as Times of India, Hindustan Times, The Print, Zee News, ABP News, Rajasthan News, etc. and DST, Government of India. ICMR Inducted Loss of Smell and Taste as Symptom of COVID 19.

Citation: 180

92. Rajsekhar Roy, Krishnangsu Pradhan, Juhee Khan, Gaurav Das, Nabanita Mukherjee, Durba Das, and **Surajit Ghosh.***

Human Serum Albumin Inspired Glycopeptide-Based Multifunctional Inhibitor of Amyloid-β Toxicity.

ACS OMEGA. 2020, 30, 18628-18641. (Impact Factor: 3.51)

91. Anindyasundar Adak, Gaurav Das, Juhee Khan, Nabanita Mukherjee, Varsha Gupta, Rathnam Mallesh, **Surajit Ghosh***

Extracellular Matrix Mimicking (ECM) Neuroprotective Injectable Sulfo-functionalized Peptide Hydrogel for Repairing Brain Injury.

ACS Biomater. Sci. Eng. 2020, 6, 4, 2287–2296. Highlighted in Cover Page. (Impact Factor: 4.511).

90. Nabanita Mukherjee, Subhadra Nandi, Shubham Garg, Satyajit Ghosh, Surojit Ghosh, Ramkamal Samat, **Surajit Ghosh.***

Targeting Chondroitin Sulfate Proteoglycans: An Emerging Therapeutic Strategy to Treat CNS Injury.

ACS Chemical Neurosci. 2020, 11, 231-232. (Viewpoint) (Impact Factor: 4.48) Highlighted in Cover Page.

89. Pinaki Bhattacharjee, Sourav Chatterjee, Anushree Achari, Abhijit Saha, Debkumar Nandi, Chiranjit Acharya, Kasturi Chatterjee, **Surajit Ghosh,** Snehasikta Swarnakar, Parasuraman Jaisankar.*

A bis-indole/carbazole based C5-curcuminoid fluorescent probe with large Stokes shift for selective detection of biothiols and application to live cell imaging

Analyst (Cambridge, UK), 2020, 145, 1184 – 1189. (Impact Factor: 3.978)

88. Nabanita Mukherjee, Subhadra Nandi, Satyajit Ghosh, Shubham Garg, **Surajit Ghosh.***3D Microfluidic Platform with Neural Organoids: Model System for Unraveling Synapse.

ACS Chem Neurosci. 2020, 11, 101-102. (Viewpoint) (Impact Factor: 4.48)

87. Tanaya Chatterjee*, Gaurav Das, Barun K. Chatterjee, Jesmita Dhar, **Surajit Ghosh** and Pinak Chakrabarti.*

"The role of isoaspartate in fibrillation and its prevention by Protein-L-isoaspartyl" **BBA-General Subjects**, 2020,1864 (3):129500. (Impact Factor: 3.68)

86. Apabrita Ayan Das, Devasmita Chakravarty, Debmalya Bhunia, **Surajit Ghosh,** Prakash C. Mandal, Khawer N. Siddiqui and Arun Bandyopadhyay.*

Elevated level of circulatory sTLT1 induces inflammation through SYK/MEK/ERK signalling in coronary artery disease"

Clinical Science (Lond), 2019, 133, 2283-2299. (Impact Factor: 5.2) Highlighted in Cover Page.

85. Prasenjit Mondal, Rajdeep Chowdhury, Somen Nandi, Md Asif Amin, Kankan Bhattacharyya* **Surajit Ghosh.***

Probing Deviation of Adhered Membrane Dynamics between Reconstituted Liposome and Cellular System.

Chemistry-An Asian Journal, 2019, 14, 4616-4624. (Impact Factor: 3.692) (Invited)

- 84. Gaurav Das, Varsha Gupta, Juhee Khan, Deepshikha Mukherjee and **Surajit Ghosh.***Generation of Neurospheres from Mixed Primary Hippocampal and Cortical Neurons Isolated from E14-E16 Sprague Dawley Rat Embryo" Journal of Visualized Experiments. **JoVE**, 2019, 150. Doi: 10.3791/59800. (Impact Factor 1.325)
- 83. Prasenjit Mondal, Juhee Khan, Varsha Gupta and **Surajit Ghosh.***In silico Approach for Designing Potent Neuroprotective Hexapeptide. **ACS Chem Neurosci. 2019, 10, 6, 3018-3030.** (**Impact Factor: 4.48**)
- 82. Surajit Barman, Gaurav Das, Varsha Gupta, Prasenjit Mondal, Krishnangsu Pradhan, Batakrishna Jana, Debmalya Bhunia, Juhee Khan, Deepshikha Mukherjee and **Surajit Ghosh.***

Dual Arm Nanocapsule Targets Neuropilin-1 Receptor and Microtubule: A Potential Nanomedicine Platform.

Mol. Pharmaceutics 2019, 16, 2522-2531. (Impact Factor 4.556)

81. Saswat Mohapatra, Gaurav Das, Chirantan Kar, Masashi Nitani, Yutaka Ie, Yoshio Aso and Surajit Ghosh.*

Mitochondria Targeted New Blue Light Emitting Fluorescent Molecular Probe.

ACS Omega 2019, 4, 59361-9366. (Impact Factor: 2.87)

- 80. Anindyasundar Adak, Subhajit Ghosh, Varsha Gupta and Surajit Ghosh.*
 Biocompatible Lipopeptide-Based Antibacterial Hydrogel.
 Biomacromolecules, 2019, 20, 5, 1889-1898. (Impact Factor: 6.092)
- 79. Prasenjit Mondal, Gaurav Das, Juhee Khan, Krishnangsu Pradhan, Rathnam Mallesh, Abhijit Saha, Batakrishna Jana and **Surajit Ghosh.***Potential Neuroprotective Peptide Emerged from Dual Neurotherapeutic Targets: A Fusion Approach for the Development of anti-Alzheimer's Lead.
 - ACS Chem Neurosci. 2019, 10, 2609-2620. (Impact Factor: 4.48)
- 78. Surajit Barman, Gaurav Das, Prasenjit Mondal, Krishnangsu Pradhan, Batakrishna Jana, Debmalya Bhunia, Abhijit Saha, Chirantan Kar, and **Surajit Ghosh.***Tripodal Molecular Propeller Perturbs Microtubule Dynamics: Indole acts as a Blade and Plays Crucial Role in Anticancer Activity.

Chem. Commun., 2019, 55, 2356-2359. (Impact Factor: 6.5)

77. Gaurav Das and Surajit Ghosh.*

"Why Microtubule should be Considered as one of the Supplementary Target for Designing Neuro-therapeutics?"

ACS Chem Neurosci. 2019, 10, 1118-1120. (Impact Factor: 4.48) (Viewpoint).

76. Tanushree Mahata, Prasenjit Mondal, Debmalya Bhunia, Somen Nandi, Prashant Kurkute, Kankan Bhattacharyya* and **Surajit Ghosh.***

Self-assembly of Antimitotic Peptide at Membranes: Computational and Experimental Investigation.

ACS OMEGA 2019, 4, 1, 745-754. (Impact Factor: 2.87)

75. Surajit Barman, Gaurav Das, Prasenjit Mondal, Krishnangsu Pradhan, Debmalya Bhunia, Juhee Khan, Chirantan Kar, and **Surajit Ghosh.***

Power of Tyrosine Assembly in Microtubule Stabilization and Neuroprotection Fuelled by Phenol Appendages.

ACS Chem Neurosci. 2019, 10, 1506-1516. (Impact Factor: 4.48)

74. Gaurav Das, Varsha Gupta and Surajit Ghosh.*

Glial-Neuron Transformation by "Chemical Cocktail".

ACS Chem Neurosci. 2019, 10, 42-43. (Impact Factor: 4.48)

73. Krishnangsu Pradhan, Gaurav Das, Juhee Khan, Varsha Gupta, Surajit Barman, Anindyasundar Adak, and **Surajit Ghosh.***

Neuro-Regenerative Choline Functionalized Injectable Graphene Oxide Hydrogel Repairs Focal Brain Injury.

ACS Chem Neurosci. 2019, 10, 1535-1543. (Impact Factor: 4.48)

72. Krishnangsu Pradhan, Gaurav Das, Varsha Gupta, Prasenjit Mondal, Surajit Barman, Juhee Khan, and **Surajit Ghosh.***

Discovery of Neuro-regenerative Peptoid from Amphibian Neuropeptide Inhibits $A\beta$ Toxicity and Crossed Blood-Brain Barrier.

ACS Chem Neurosci. 2019, 10, 3, 1355-1368. Highlighted in Cover Page. (Impact Factor: 4.48)

71. Juhee Khan, Gaurav Das, Varsha Gupta, Saswat Mohapatra, Subhajit Ghosh, and **Surajit** Ghosh.*

Neurosphere Development from Hippocampal and Cortical Embryonic Mixed Primary Neuron Culture: A Potential Platform for Screening Neuro-Chemical Modulator.

ACS Chem Neurosci. 2018, 9, 11, 2870-2878. Highlighted in Cover Page. (Impact Factor: 4.48)

70. Debmalya Bhunia, Krishnangsu Pradhan, Gaurav Das, Subhajit Ghosh, Prasenjit Mondal, Surajit Ghosh.*

Matrix metalloproteinase targeted peptide vesicles for delivering anticancer drugs.

Chem. Commun., 2018, 54, 9309 - 9312. (Impact Factor: 6.5).

69. Krishnangsu Pradhan, Gaurav Das, Prasenjit Mondal, Juhee Khan, Surajit Barman, Surajit Ghosh.*

Genesis of Neuroprotective Peptoid from A β 30-34 Inhibits A β Aggregation and AChE Activity.

ACS Chem Neurosci. 2018, 9, 12, 2929-2940. (Impact Factor: 4.48)

68. Prasenjit Mondal, Varsha Gupta, Gaurav Das, Krishnangsu Pradhan, Juhee Khan, Prabir Kumar Gharai and **Surajit Ghosh.***

Peptide-based Acetylcholinesterase Inhibitor Crosses Blood-Brain Barrier and Promotes Neuroprotection.

ACS Chem Neurosci. 2018, 9, 2838-2848. (Article) (Impact Factor: 4.48)

- Somen Nandi S, Surajit Ghosh,* Kankan Bhattacharyya.*
 Live Cell Microscopy: A Physical Chemistry Approach.
 J Phys Chem B. 2018, 122, 3023-3036. (Feature Article) (Impact Factor: 3.2).
- Debmalya Bhunia, Prasenjit Mondal, Gaurav Das, Abhijit Saha, Pallabi Sengupta, Jagannath Jana, Saswat Mohapatra, Subhrangsu Chatterjee, and **Surajit Ghosh.***Spatial Position Regulates Power of Tryptophan: Discovery of Major Groove Specific Nuclear Localizing Cell Penetrating Tetrapeptide.

 J Am Chem Soc., 2018, 140, 1697-1714. (Article)
 Selected for JACS Young Investigators Virtual Issue, 2019 by Prof. Peter J. Stang (Editor-in Chief, JACS). (Impact Factor: 14.67).
- 65. Prasenjit Mondal, Gaurav Das, Juhee Khan, Krishnangsu Pradhan, and **Surajit Ghosh*** Crafting of Neuroprotective Octapeptide from Taxol-Binding Pocket of β-Tubulin. **ACS Chem. Neurosci., 2018, 9, 615-625. (Impact Factor: 4.48**)
- 64. Batakrishna Jana, Prasenjit Mondal, Abhijit Saha, Anindyasundar Adak, Gaurav Das, Saswat Mohapatra, Prashant Kurkute, and **Surajit Ghosh.***Designed Tetrapeptide Interacts with Tubulin and Microtubule. **Langmuir, 2018,** 34, 1123-1132. (**Impact Factor-3.83**)
- 63. Gaurav Das, Shyamtanu Chattoraj, Somen Nandi, Prasenjit Mondal, Abhijit Saha, Kankan Bhattacharyya* and Surajit Ghosh.*
 Probing the conformational dynamics of photosystem I in unconfined and confined spaces.

Phys Chem Chem Phys. 2017, 20, 449-455. (Impact Factor-4.123).

62. Nibedita Nandi, Kousik Gayen, Sandip Ghosh, Debmalya Bhunia, Steven Kirkham, Sukanta Kumar Sen, **Surajit Ghosh**, Ian W. Hamley, and Arindam Banerjee*. Amphiphilic Peptide-based Supramolecular, Non-Cytotoxic Stimuli-responsive Hydrogels with Antibacterial Activity.

Biomacromolecules, 2017, 18, 621-3629. (Impact Factor: 5.24)

61. Parag Savla, Gaurav Das, Prasenjit Mondal, Rahul Laxman Gajbhiye, Parasuraman Jaisankar, **Surajit Ghosh.***

Methanolic Extract of Papaya Leaves Shows Neuroprotective Effect.

Chemistry SELECT, 2017, 2, 9454-9457.

60. Hilal Ahmad Pal, Saswat Mohapatra, Varsha Gupta, **Surajit Ghosh** and Sandeep Verma.*

Self-assembling soft structures for intracellular NO release and promotion of neurite outgrowth.

Chem Sci. 2017, 8, 6171-6175. (Impact Factor: 8.668)

A Amin, S Nandi, P Mondal, T Mahata, Surajit Ghosh*, and K Bhattacharyya.*
 Physical Chemistry in a Single Live Cell: Confocal Microscopy.
 Phys Chem Chem Phys., (Perspective) 2017, 19, 12620-12627. (Impact Factor: 4.4)

58. A Adak, G Das, S Barman, S Mohapatra, D Bhunia, **Surajit Ghosh***Biodegradable Neuro-Compatible Peptide Hydrogel Promotes Neurite Outgrowth, Shows Significant Neuroprotection, and Delivers Anti-Alzheimer Drug. **ACS Appl Mater Interfaces. 2017,** 9, 5067- 5076. (**Impact Factor - 8.456**)

57. A Saha, S Mohapatra, G Das, B Jana, S Ghosh, D Bhunia, **Surajit Ghosh***Cancer cell specific delivery of Photosystem I through integrin targeted liposome shows significant anticancer activity.

ACS Appl. Mater. Interfaces, 2017, 9, 1, 176-188. (Impact Factor - 8.456)

56. D Bhunia, A Saha, A Adak, G Das, **Surajit Ghosh.***A dual functional liposome specifically targets melanoma cells through integrin and ephrin receptors.

RSC Adv., 2016, 6, 113487-113491. (IF- 3.289)

55. S Ghosh, S Mohapatra, A Thomas, D Bhunia, A Saha, G Das, B Jana, **Surajit Ghosh*** Apoferritin-nanocage delivers combination of microtubule and nucleus targeting anticancer drugs.

ACS Appl. Mater. Interfaces, 2016, 8, 30824–30832. (Impact Factor: 8.456)

54. S Chakraborty, G Das, Surajit Ghosh, D Mal*

Regioselective synthesis of naphthoquinone/naphthoquinol-carbohydrate hybrids by [4 + 2] anionic annulations and studies on their cytotoxicity.

Org. Biomol. Chem., 2016, 14, 10636-10647. (Impact Factor: 3.559)

53. S Nandi, P Mondal, R Chowdhury, A Saha, **Surajit Ghosh,*** K Bhattacharyya* Amyloid Beta Peptide inside a Reconstituted Cell-like Liposomal System: Aggregation, FRET, Fluorescence Oscillations and Solvation Dynamics. **Phys Chem Chem Phys., 2016,** 18, 30444-30451. (**Impact Factor: 4.449**)

52. S Mohapatra, A Saha, P Mondal, B Jana, S Ghosh, A Biswas, Surajit Ghosh*

Synergistic anticancer effect of peptide-docetaxel nano-assembly targeted to tubulin: Towards development of dual warhead containing nanomedicine.

Adv Healthcare Mater., 2017, 6, 1600718. (Impact Factor: 5.76). Highlighted in Cover Page and Highlighted in Advance Science.

51. D Bhunia, S Mohapatra, P Kurkute, S Ghosh, B Jana, P Mondal, A Saha, G Das, **Surajit** Ghosh*

Novel Tubulin-targeted Cell Penetrating Antimitotic Octapeptide. Chem. Commun., 2016, 52, 12657-12660. (Impact Factor: 6.567)

50. S Mohapatra, S Nandi, R Chowdhury, G Das, **Surajit Ghosh***, K Bhattacharyya*. Spectral Mapping of 3D Multi-cellular Tumor Spheroid: Time-resolved Confocal Microscopy.

Phys Chem Chem Phys., 2016,18,18381 - 18390. (Impact Factor: 4.449)

49. C Ghosh, D Bhunia, S Ghosh, B Jana, **Surajit Ghosh,*** K Bhattacharyya.* Fluorescence Probing of Fluctuating Microtubule using a Covalent Fluorescent Probe: Effect of Taxol.

Chemistry SELECT, 2016, 1, 1841-1847. (Impact Factor: 1.716)

B Jana, S Mohapatra, P Mondal, S Barman, K Pradhan, A Saha, Surajit Ghosh*
 α-Cyclodextrin Interacts Close to Vinblastine Site of Tubulin and Delivers Curcumin Preferentially to the Tubulin Surface of Cancer Cell.
 ACS Appl. Mater. Interfaces, 2016, 8, 13793–13803. (Impact Factor: 8.456)

47. A Adak, S Mohapatra, PMondal, B Jana and **Surajit Ghosh.***Design of novel microtubule targeted peptide vesicle for delivering different anticancer drugs

Chem.Commun., 2016, 52, 7549-7552. Highlighted in Cover Page. (Impact Factor: 6.83)

46. K Basu, A Baral, S Basak, A Dehsorkhi, J Nanda, D Bhunia, **Surajit Ghosh,** V Castelletto, I W Hamley, A Banerjee*
Peptide based hydrogels for cancer drug release: Modulation of stiffness, drug release and proteolytic stability of hydrogels by incorporating D-amino acid residue(s).

Chem.Commun. 2016, 52, 5045-5048. (Impact Factor: 6.83)

45. J B. Nair, M M Joseph, S Mohapatra, M. Safeera, **Surajit Ghosh,*** T. T. Sreelekha,* K K Maiti*.

A Dual-Targeting Octaguanidine—Doxorubicin Conjugate Transporter for Inducing Caspase-Mediated Apoptosis on Folate-Expressing Cancer Cells.

ChemMedChem. 2016, 11. (Impact Factor: 2.968)

S Chattoraj, M A Amin, S Mohapatra, Surajit Ghosh,* K Bhattacharyya*
 Cancer Cell Imaging by In Situ Generated Gold Nano-clusters.
 ChemPhysChem, 2016, 17, 61-68. Highlighted in Cover-page. (Impact Factor: 3.41)

43. S Chattoraj, M A Amin, B Jana, S Mohapatra, **Surajit Ghosh,*** K Bhattacharyya*

Selective Killing of Breast Cancer Cells by Doxorubicin Loaded Fluorescent Gold Nano-Cluster: Confocal Microscopy and FRET.

ChemPhysChem, 2016, 17, 253-9. (Impact Factor: 3.41)

42. A Saha, S Mohapatra, P Kurkute, B Jana, J Sarkar, P Mondal, **Surajit Ghosh***Targeted delivery of novel peptide-docetaxel conjugate to MCF-7 cell through Neuropilin-1 receptor: Reduced toxicity and enhanced efficacy of docetaxel. **RSC Adv., 2015,5, 92596-92601. (Impact Factor: 3.84)**

41. D Bhunia, R Chowdhury, K Bhattacharyya,* Surajit Ghosh*

Fluorescence Fluctuation of Antigen-Antibody Complex: Circular Dichroism, FCS and smFRET of Enhanced GFP and its Antibody.

Phys Chem Chem Phys., 2015, 17, 25250-25259. (Impact Factor: 4.49)

40. A Biswas, P Kurkute, S Saleem, B Jana, S Mohapatra, P Mondal, A Adak, S Ghosh, A Saha, D Bhunia, S C Biswas and Surajit Ghosh*.
Novel Hexapeptide Interacts with Tubulin and Microtubules, Inhibits Aβ Fibrillation, and Shows Significant Neuroprotection.

ACS Chem. Neurosci., 2015, 6, 1309-1316. Highlighted in Cover-page. (Impact Factor: 4.36)

39. B Jana, J Sarkar, P Mondal, S Barman, S Mohapatra, D Bhunia, K Pradhan, A Saha, A Adak, S Ghosh, **Surajit Ghosh***

A short GC rich DNA derived from microbial origin targets tubulin/microtubule and induces apoptotic death of cancer cell.

Chem. Commun. 2015, 51, 12024-12027 (Impact Factor: 6.83)

38. P Mondal, S Chattoraj, R Chowdhury, D Bhunia, **Surajit Ghosh,*** K Bhattacharyya* Direct Observation of Growth and Shrinkage of Microtubules by Single Molecule Förster Resonance Energy Transfer.

Phsical Chemistry Chemical Phsyics, 2015, 17, 6687. (Impact Factor: 4.198)

37. A Saha, S Mohapatra, P Kurkute, B Jana and **Surajit Ghosh***Interaction of Aβ peptide with tubulin causes inhibition of tubulin polymerization and apoptotic death of MCF-7 cells.

Chem.Commun., 2015, 51, 2249-2252. Highlighted in Cover Page. (Impact Factor: 6.71)

36. J B Nair, S Mohapatra, Surajit Ghosh*, K K Maiti*
Novel Lysosome Targeted Molecular Transporter Built On Guanidinium-Poly-(propylene imine) Hybrid Dendron For Efficient Delivery of Doxorubicin Into Cancer Cells.
Chem. Commun., 2015, 51, 2403-2406. (Impact Factor: 6.71)

35. S Roy, A Baral, R Bhattacharjee, B Jana, A Datta, Surajit Ghosh, A Banerjee*

Emission Tuning of Fluorescent Gold Clusters from Blue to NIR, Structural Analysis of the Blue Emitting Au7 Cluster and Cell-Imaging by the NIR Gold Cluster.

Nanoscale, 2015, 7, 1912-1920. (Impact Factor: 6.73)

34. B Jana, A Biswas, S Mohapatra, A Saha, **Surajit Ghosh***Single functionalized graphene oxide reconstitutes kinesin mediated intracellular cargo transport, delivers multiple cytoskeleton proteins and therapeutic molecule into the cell.

Chem. Commun. 2014, 50, 11595-11598. (Impact Factor: 6.71)

33. A Ghosh, R K Kar, J Jana, A Saha, B Jana, J Krishnamoorthy, D Kumar, **Surajit Ghosh,*** S Chatterjee,* A Bhunia.*

Indolicidin Targets Duplex DNA: Structural and Mechanistic Insight through a Combination of Spectroscopy and Microscopy.

ChemMedChem. 2014, 9, 2052-2058. (Impact Factor: 3.046)

32. R Chowdhury, A Saha, A K Mandal, B Jana, **Surajit Ghosh**,* K Bhattacharyya.* Excited State Proton Transfer in the Lysosome of Live Lung Cells: Normal and Cancer Cell.

J. Phys. Chem. B, 2015, 119, 2149-2156. (Impact Factor: 3.37)

31. S Khanna, B Jana, A Saha, P Kurkute, Surajit Ghosh,* S Verma.*

Targeting Cytotoxicity and Tubulin Polymerization by Metal-Carbene Complexes on a Purine Tautomer Platform.

Dalton Transactions, 2014, 43, 9838-9842. (Impact Factor: 4.097)

30. R Chowdhury, B Jana, A Saha, Surajit Ghosh,* K Bhattacharyya.*

Confocal Microscopy of Cytoplasmic Lipid Droplets in a Live Cancer Cell: Number, Polarity, Diffusion and Solvation Dynamics.

MedChemComm., 2014, 5, 536-539. (Impact Factor: 2.626)

29. A Biswas, P Kurkute, B Jana, A Laskar, Surajit Ghosh.*

Amyloid inhibitor octapeptide forms amyloid type fibrous aggregate and affect in microtubule motility.

Chem. Commun., 2014, 50, 2604-2607. (Impact Factor: 6.73)

28. A Baral, S Roy, A Dehsorkhi, I W Hamley, S Mohapatra, **Surajit Ghosh,** A Banerjee.* Assembly of an Injectable Non-Cytotoxic Peptide-based Hydrogelator for Sustained Release of Drugs.

Langmuir, 2014, 30, 929-936. (Impact Factor: 4.314)

27. A Biswas, A Saha, D Ghosh, B Jana, Surajit Ghosh.*

Co- and distinct existence of Tris-NTA and biotin functionalities on individual and adjacent micropatterned surfaces generated by photo-destruction.

Soft Matter, 2014, 10, 2341-2345. Highlighted in Cover Page. (Impact Factor: 4.1)

26. I Chakraborty, A Saha, Surajit Ghosh.*

Fabrication of Biotin functionalised SiO₂ EM grid for studying biotin tagged biomolecules.

Special IJCA issue: 'Complex Chemical Systems' 2013, 52A, 1026-1030. (Impact Factor: 0.628)

25. B Jana, G Mondal, A Biswas, I Chakraborty, A Saha, P Kurkute, **Surajit Ghosh.***Dual functionalised graphene oxide serves as a carrier for delivering oligo-histidine and biotin tagged biomolecules into cell.

Macromol. Biosci. 2013, 13, 1478-1484. (Impact Factor: 3.6)

J Jana, R K Kar, A Ghosh, A Biswas, Surajit Ghosh,* A Bhunia* and S Chatterjee.*
 Human Cathelicidin Peptide LL37 Binds Telomeric G-Quadruplex.
 Mol. Biosyst. 2013, 9, 1833-1836. (Impact Factor: 3.183)

23. Saha, Abhijit; Mondal, Goutam; Sato, Takeshi; Ghosh, Surajit
In vitro reconstitution of a cellular like environment using liposome for Aβ peptide aggregation, its propagation, peptide-lipid interaction and drug screening

Peptide Science, 2013, 50th, 109-110.

22. B Jana, G Mondal, A Biswas, I Chakraborty, **Surajit Ghosh.***Functionalised TiO2 nanoparticles deliver oligo-histidine and avidin tagged biomolecules

RSC Adv., 2013, 3, 8215-8219. (Impact Factor: 3.7)

simultaneously into the cell.

21. A Saha, G Mondal, A Biswas, I Chakraborty, B Jana, **Surajit Ghosh.*** *In vitro* reconstitution of a cellular like environment using liposome for amyloid beta peptide aggregation and its propagation.

Chem. Commun., 2013, 49, 6119-6121. Highlighted in Cover Page. (Impact Factor: 6.71)

A Saha, I Chakraborty, C Kraft, S Bhushan, Surajit Ghosh.*
 Microtubule nucleation from a functionalised SiO2 EM grid.
 RSC Adv., 2013, 3, 7688-7691. (Impact Factor: 3.7)

19. A Biswas, A Saha, B Jana, P Kurkute, G Mondal and Surajit Ghosh.*

Facile generation of biotin micropatterned surface by photo destruction serves as a novel platform for microtubule organisation and DNA hybridisation.

ChemBioChem, 2013, 14, 689-694. (Impact Factor: 3.06)

18. **Surajit Ghosh**, L Adler-Abramovich, E Gazit,* S Verma.* Spacer driven morphological twist in Phe-Phe dipeptide conjugates.

Tetrahedron, 2013, 69 2004-2009. (Impact Factor: 2.8)

17. **Surajit Ghosh**, C Hentrich, T Surrey.*

Micropattern-Controlled Local Microtubule Nucleation, Transport, and Mesoscale Organization.

ACS Chem. Biol., 2013, 8, 673-678. (Impact Factor: 5.356)

16. V Chandrasekhar,* L Nagarajan, S Hossain, K Gopal, **Surajit Ghosh,** S Verma. Multicomponent Assembly of Anionic and Neutral Decanuclear Copper(II) Phosphonate Cages.

Inorg. Chem. 2012, 51, 5605-5616. (Impact Factor: 4.79)

15. S Mondal, **Surajit Ghosh**, S Verma.*

Bottom-up Synthesis of Ferrocenylated Soft Spherical Structures: Ultrastructural Characterization and Electroresponsitivity.

Tet. Lett. 2010, 51, 856-859. (Impact Factor:2.39)

14. Maniraj Bhagawati, Surajit Ghosh, Thomas Surrey, Jacob Piehler.

Functional protein micropatterning for guided transport by molecular motors

Abstracts of Papers, 239th ACS National Meeting, San Francisco, CA, United States, March 21-25, 2010 (2010), COLL-251.

13. M Bhagawati, **Surajit Ghosh**, A Reichel, K Froehner, T Surrey, J Piehler.*

Organization of motor proteins into functional micropatterns fabricated by a photo-induced Fenton reaction.

Angew. Chem. Int. Ed. 2009, 48, 9188-9191. Accepted as Hot Paper. (Impact Factor: 11.829)

12. V Chandrasekhar,* L Nagarajan, R Clérac, **Surajit Ghosh**, T Senapati, S Verma.

Barrel- and Crown-Shaped Dodecanuclear Copper(II) Cages Built from Phosphonate, Pyrazole, and Hydroxide Ligands.

Inorg. Chem. 2008, 47, 5347-5354. (Impact Factor: 4.79)

11. **Surajit Ghosh**, S Verma.*

Solvent mediated morphological transformation of peptide-based soft structures. **Tetrahedron 2008, 64, 1250-1256. (Impact Factor: 2.8)**

10. V Chandrasekhar,* R Azhakar, T Senapati, P. Thilagar, **Surajit Ghosh**, S Verma, R Boomishankar, A Steiner, P Kögerler.

Synthesis, structure, magnetism and nuclease activity of tetranuclear copper(II) phosphonates containing ancillary 2,2 -bipyridine or 1,10-phenanthroline ligands.

Dalton Transaction, 2008, 1150-1160. (Impact Factor: 4.097)

09. V Chandrasekhar,* L Nagarajan, R Clérac, Surajit Ghosh, S Verma.

A Distorted Cubic Tetranuclear Copper(II) Phosphonate Cage with a Double-Four-Ring-Type Core.

Inorg. Chem. 2008, 47, 1067-1073. (Impact Factor: 4.79)

08. **Surajit Ghosh**, A Mukherjee, P J. Sadler.* S Verma.*

Periodic Iron Nanomineralization in Human Serum Transferrin Fibrils.

Angew. Chem. Int. Ed. 2008, 47, 2217-2221. (Accepted as Very Important Paper, Inside Cover Page, Highlighted by: Nature India; C & E News; Angew. Chem., EurekAlert). (Impact Factor: 10.87)

07. **Surajit Ghosh**, S Verma.*

Templated growth of hybrid structures at peptide-peptide interface.

Chem. Eur. J. 2008, 14, 1415-1419. (Impact Factor: 5.696)

06. Surajit Ghosh, P Singh, S Verma.*

Morphological Consequences of Metal ion-Peptide Vesicle Interaction.

Tetrahedron, 2008, 64, 1250-1256. (Impact Factor: 2.79)

05. S Verma,* K. B. Joshi, Surajit Ghosh.

Peptide-based soft materials as potential drug delivery vehicles.

Curr. Med. Chem. 2007, 3, 605-611 (Review Article). (Impact Factor: 4.2)

04. **Surajit Ghosh,** S K Singh, Sandeep Verma.*

Self-assembly and potassium ion triggered disruption of peptide-based soft structures.

Chem. Commun. 2007, 22, 2296-2298. (Impact Factor: 5.1)

03. **Surajit Ghosh**, S Verma.*

Phased Fiber Growth in a Peptide Conjugate: Aggregation and Disaggregation Studies.

J. Phys. Chem. B, 2007, 111, 3750-3757. (Impact Factor: 4.5)

02. Surajit Ghosh, Sandeep Verma.*

Metalated peptide fibers derived from a natural metal-binding peptide motif.

Tet. Lett. 2007, 48, 2189-2192. (Impact Factor: 2.7)

01. **Surajit Ghosh**, M Reches, E Gazit,* S Verma.*

Bioinspired design of nanocages by self-assembling triskelion peptide elements.

Angew. Chem. Int. Ed. 2007, 46, 2002-2004 (Accepted as Inside Cover Page). (Impact Factor: 10.03)

Book Chapters- Authorship/Editorship of Text Books: Three

1. Title of Book Chapter: Facile Method of Tubulin Purification from Goat Brain for Reconstitution of Microtubule Associated Intracellular Function.

Authors: Satyajit Ghosh, Shubham Garg, Nabanita Mukherjee, and Surajit Ghosh

Publisher: Springer-Verlag New York Inc. Publication Date: 17th March 2022

2. Title of Book Chapter: **Brain on a Chip**

Authors: Subhadra Nandi, Satyajit Ghosh, Shubham Garg, Ankan Sarkar and Surajit Ghosh

Publisher: Springer-Verlag New York Inc

Publication Date: 12th July 2022

3. Title of Book Chapter: Organ on a Chip for Multianalyte Monitoring

Authors: Shubham Garg, Arijit Bera, Rajsekhar Roy, Satyajit Ghosh and Surajit Ghosh

Publisher: Elsevier

Publication Date: Accepted for Publication 2024

Patents

Indian Patents:

- 1. Antibacterial Hydrogel as Biocompatible Wound Healing Material and its Process of Manufacture. Ghosh, Surajit, Mukherjee Nabanita, Ghosh Satyajit, Roy Rajesekhar. Indian Pat. Appl. (2022), IN 202211032081.
- 2. AN EASY-TO-USE DIAGNOSTIC SYSTEM FOR RAPID DENGUE VIRUS DETECTION USING FLUORESCENCE-BASED MOLECULAR. Biswas Subhajit, **Ghosh Surajit**, Soumi Sukla, Prasenjit Mondal. **Indian Pat. Appl.** (2020), IN 202011019066.
- 3. Nonapeptide of formula I, pharmaceutical compositions and methods for preparation thereof. Ghosh, Surajit; Mondal, Prasenjit; Das, Gaurav; Khan, Juhee; Pradhan, Krishnangsu. Indian Pat. Appl. (2018), IN 201811020565.
- 4. Peptoid of formula I, pharmaceutical compositions and method for preparation thereof. By Ghosh, Surajit; Pradhan, Krishnangsu; Das, Gaurav; Mondal, Prasenjit; Barman, Surajit; Ghosh, Subhajit. Indian Pat. Appl. (2018), IN 201811016874.
- 5. A LDV peptide liposomal formulation of Photosystem-1 for treatment of cancer. By Ghosh, Surajit; Saha, Abhijit; Ghosh, Subhajit; Mohapatra, Saswat; Jana, Batakrishna; Bhunia, Debmalya. Indian Pat. Appl. (2018), IN 201611034058 A 20180406. Granted
- 6. SP1V3_1: A CATIONIC SYNTHETIC PEPTIDE WITH BROAD-SPECTRUM ANTIBACTERIAL ACTIVITY. By Ghosh Surajit, Samat Ramkamal, Sen Samya, Jash Moumita. Indian Pat. Appl. (2022), IN 202211052566.
- 7. AN ENGINEERED MULTI-DOMAIN PEPTIDE BASED ANTIBACTERIAL BIOMATERIAL AND ITS PROCESS OF MANUFACTURE. By Ghosh Surajit, Mukherjee Nabanita, Ghosh Satyajit, Roy Rajsekhar. Indian Pat. Appl. (2022), IN 202211032081.
- 8. MMP-9 RESPONSIVE GROWTH FACTOR RELEASING NEUROPROTECTIVE HYDROGEL. By **Ghosh Surajit**, Mukherjee Nabanita, Ghosh Satyajit, Roy Rajsekhar, Nandi Debasmita, Jana Aniket, Gupta Sanju, **Indian Pat. Appl.** (2022), **IN** 202311014414.
- 9. BIOACTIVE ANTIOXIDATIVE NEUROPROTECTIVE NANOPARTICLES FOR COMBATING ROS LEVELS AND NEURON REGENERATION IN TRAUMATIC BRAIN INJURY. By Ghosh

- Surajit, Garg Shubham, Jana Aniket, Gupta Sanju, Umar Arshi Mohammad, Roy Rajsekhar. Indian Pat. Appl. (2022), IN 202311054293.
- **10.** A SELF-ASSEMBLING ANIONIC PEPTIDE-BASED BIOCOMPATIBLE, ANTIBACTERIAL, HYDROGEL PLATFORM WITH VISION BASED WOUND HEALING PREDICTABILITY. By **Ghosh Surajit**, Chaudhury Santanu. Mukherjee Nabanita, Pareek Vishakha, Sen Samya, Bairagi Manas Kumar, **Indian Pat. Appl.** (2023), **IN** 202311068152.
- 11. QUINOLINE-DERIVED SMALL MOLECULES SG-B-22 AND SG-B-52 AS BETA-LACTAM ADJUVANTS. By Ghosh Surajit, Ghosh Surojit; Sen Samya, Jash Moumita, Roy Rajsekhar, Jana Aniket, Ghosh Satyajit, Mukherjee Nabanita, Sarkar Jayita. Indian Pat. Appl. (2023), IN 202311054071.
- **12.** PEPTIDE FUNCTIONALIZED CELL DERIVED ENGINEERED EXOSOME AS NEUROTHERAPEUTICS. By **Ghosh Surajit**, Ghosh Satyajit, Roy Rajsekhar, Mukherjee Nabanita, Jash Moumita, Ghosh Surojit, Jana Aniket. **Indian Pat. Appl. (2023), IN 202311086650.**
- 13. DEVELOPMENT OF NOVEL UTROPHIN UPREGULATORS FOR THE TREATMENT OF DUCHENNE MUSCULAR DYSTROPHY. By Ghosh Surajit, Ghosh Surojit, Umar Arshi Mohammad, Ghosh Satyajit, Rana Nirmal, Bhattacharya Sudipta. Indian Pat. Appl. (2023), IN 202311028857.
- **14.** Composition of various small molecules for the treatment of Duchene Muscular Dystrophy. By **Ghosh Surajit**, Rana Nirmal Kumar, Bhattacharyya, Shastry Arun, Jain Anshul, Yadav Vinay Kumar, Ghosh Surojit. **Indian Patent Application (2024), IN 202411000547.**
- **15.** Novel nuclear localizing peptides for homeostatic control of memory consolidation. Ghosh Surajit, Roy Rajsekhar, Ghosh Satyajit, Jash Moumita. **Indian Pat. Appl. (2024), IN 202411035886.**
- 16. Short Cell Penetrating Peptide Conjugated Antisense Oligonucleotides: A Potential therapeutic tool for the smart delivery of oligonucleotides for the treatment of Duchenne Muscular Dystrophy. Ghosh Surajit, Ghosh Surojit, Shastry Arun, Arshi, Mohammad Unar, Ghosh Satyajit, Jash Moumita, Mukherjee Nabanita, Jana Aniket. Indian Pat. Appl. (2024), IN 202411032223.

International Patents:

- **17.** RAPID DENGUE VIRUS DETECTION SYSTEM. Biswas Subhajit, **Ghosh Surajit**, Soumi Sukla, Prasenjit Mondal. **PCT Application No. (2021) PCT/IN2021/050432**. Granted.
- 18. Pharmaceutical compositions comprising nonapeptide. Ghosh, Surajit; Mondal, Prasenjit; Das, Gaurav; Khan, Juhee; Pradhan, Krishnangsu. PCT Int. Appl. (2019), WO 2019229771 A2 20191205.
- 19. Prepn. of peptoid pharmaceutical compns. for treatment of Alzheimer's disease. Ghosh, Surajit; Pradhan, Krishnangsu; Das, Gaurav; Mondal, Prasenjit; Barman, Surajit; Ghosh, Subhajit. PCT Int. Appl. (2019), WO 2019211878 A1 20191107.
- **20.** A LDV peptide liposomal formulation of Photosystem-1 for treatment of cancer. By **Ghosh**, **Surajit**; Saha, Abhijit; Ghosh, Subhajit; Mohapatra, Saswat; Jana, Batakrishna; Bhunia, Debmalya. **PCT Int. Appl. (2018), WO 2018065993 A1 20180412.**
- 21. Hexapeptide for neuroprotection against a beta toxicity. By Ghosh, Surajit; Biswas, Atanu; Jana,

Batakrishna; Mohapatra, Saswat; Biswas, Subhas Chandra; Saleem, Suraiya; Mondal, Prasenjit; Adak, Anindyasundar; Ghosh, Subhajit; Saha, Abhijit; et al. **U.S. Pat. Appl. Publ. (2017), US 20170253631 A1 20170907. Granted.**