CURRICULUM VITAE OF DR. GOUTAM BRAHMACHARI
(As on 10.08.2022)

Laboratory of Natural Products & Organic Synthesis

Dr. Goutam Brahmachari, *M.Sc (1st Class 1st), PhD, FRSC*
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About: Goutam Brahmachari, after receiving his Ph.D.in 1997 at Visva-Bharati University (India), joined his alma mater the next year as a lecturer in organic chemistry and has been a full professor of organic chemistry since 2011. The research interests of his group include organic synthesis, green chemistry and medicinal chemistry of natural and natural product-inspired synthetic molecules. With more than 23 years of experience in teaching and research, he has produced over 225 scientific publications, including original research papers, review articles, books, and invited book chapters in organic synthesis, green chemistry, and natural products, and supervised 20 PhD students. He has already authored/edited 26 major reference books and 50 book chapters from internationally reputed leading scientific publishing houses. He is the *Founder Series Editor* of the Elsevier Book Series '*Natural Product Drug Discovery*'. Prof. Brahmachari is an elected Fellow of the Royal Society of Chemistry-2017 and a recipient of CRSI (Chemical Research Society of India) Bronze Medal-2021 (contributions to research in chemistry), INSA (Indian National Science Academy) Teachers Award-2019, Dr. Kalam Best Teaching Faculty Award-2017, and Academic Brilliance Award-2015 (Excellence in Research). Prof. Brahmachari was featured in the World Ranking of the Top 2% Scientists (Organic Chemistry Category published by Stanford University Scientists) in 2020 and 2021 and the AD Scientific Index 2022 World Ranking of Scientists -2022.

Personal websites	Chemistry Webpage	http://vbchem.ac.in/GoutamBrahamachari/
	ORCID ID	http://orcid.org/0000-0001-9925-6281
	Google Scholar	https://scholar.google.co.in/citations?hl=en&user=aj7NvGQAAAAJ&view_op=list_works
	ResearchGate	https://www.researchgate.net/profile/Goutam_Brahmachari2/publications
	Scopus	https://www.scopus.com/authid/detail.uri?authorId=6603056427
	LinkedIn	https://in.linkedin.com/in/goutam-brahmachari-9308b662
	VIDWAN	https://vidwan.inflibnet.ac.in/profile/152899
Research areas	Organic synthesis; synthetic methodology; Green chemistry; Natural Products; Medicinal chemistry	
Journal responsibilities	*Current Green Chemistry* (Co-Editor-in-Chief); *Tetrahedron Green Chemistry* (Advisory Editorial Board); *Current Organocatalysis* (Editorial Board); *Universal Journal of Green Chemistry* (Editorial Board), etc.	
Book Series Editorship	Elsevier Founder Editor – Book Series '*Natural Product Drug Discovery*' (https://www.elsevier.com/catalog/all/all/all/natural-product-drug-discovery)	
Link for a Full CV	https://vidwan.inflibnet.ac.in/profile/152899	

Awards & Recognition

(27) **Elected Fellow, Royal Society of Chemistry since 2017**; (26) **Featured in the AD Scientific Index 2022 World Ranking of Scientists -2022**; (25) **CRSI Bronze Medal-2021**; (24) **"Featured in World Ranking of Top 2% Scientists from India" in Organic Chemistry Section.– 2020 and 2021**; (23) **INSA (Indian National Science Academy) Teachers Award-2019**; (22) (21) **CAS Registry® Innovator-2020 by ACS**; (20) Reviewer Excellence Awardee-2019 by the Journal of Chemical Sciences; (19) Publons 1%Top Reviewer Award-2019; (18) **Dr. Kalam Best Teaching Award-2017**; (17) **Academic Brilliance Award-2015** (Award for Excellence in Research); (16) Publons 1%Top Reviewer Award-2018; (15) **Elsevier Book Founder Series Editor (Natural Product Drug Discovery)**; (14) Author and editor of more than 25 major research reference volumes; (13) Highly cited author (2014-15) for *ACS Sustainable Chemistry & Engineering*; (12) Guest-Editor for: *Current Organocatalysis* (one thematic issue); *Current Green Chemistry* (two thematic issues); (11) Session Chairing in Seminars/Conferences and Invited Talks delivered in several national and international symposia; (10) External Member in Board of Studies in other Universities; (9) Member, Editorial Advisory Board Member: *Current Catalysis*, *Current Organocatalysis*, *Current Green Chemistry; Rasayan Journal of Chemistry*; *Journal of Biochemistry and Molecular Biology Research; Journal of Scientific Research and Advances*; *Iranian Chemical Communication*; (8) Life-member of Scientific Organizations: Indian Association for the Cultivation of Science (IACS), Indian Science Congress Association (ISCA), and Chemical Research Society of India (CRSI); (7) Nominated to the Visitor's Award-2016 by the sponsoring University; (6) Who's Who in the World Listee (Marquis, USA); (5) UGC-New Delhi — Senior Research Fellow (1995-1998); (4) UGC-New Delhi — Junior Research Fellow (1993-1995); (3) National Scholarship and University Merit Scholarship; (2) Associate Editor – *Current Green Chemistry*; (1) Top 10% of Highly Cited Authors in Royal Society of Chemistry's General Chemistry Portfolio of Journals-2018.

A list of ten (10) selected research publications published in recent times

No.	Paper details	Remarks
1.	Indrajit Karmakar and **Goutam Brahmachari*** (2022), Electrochemical and mechanochemical synthesis of dihydrofuro[3,2-*c*]chromenones via intramolecular C_{sp3}–H cross-dehydrogenative oxygenation within warfarin frameworks: an efficient and straightforward dual approach. *Green Chemistry*, **24**, 2825-2838. (***Selected as a 2022 HOT Green Chemistry Article***)	Conceptualization of the problem, design and development of the strategy, monitoring, data analyses, and writing and editing of the manuscript
2.	**Goutam Brahmachari***, Mullicka Mandal and Indrajit Karmakar (2022), Facile and straightforward synthesis of racemic version of substituted 3-[3-(2-hydroxyphenyl)-3-oxo-1-arylpropyl]-4-hydroxy-coumarins: easy access to a series of biorelevant warfarin analogues. *Synthesis*, **54**, 451-464.	Conceptualization of the problem, design and development of the strategy, monitoring, data analyses, and writing and editing of the manuscript
3.	Mullicka Mandal and **Goutam Brahmachari*** (2022), Visible light-promoted intramolecular C-O bond formation via Csp3-H functionalization: a straightforward synthetic route to biorelevant dihydrofuro[3,2-*c*]chromenone derivatives. *The Journal of Organic Chemistry*, **87**, 4777-4787.	Conceptualization of the problem, design and development of the strategy, monitoring, data analyses, and writing and editing of the manuscript
4.	**Goutam Brahmachari***, Anindita Bhowmick and Indrajit Karmakar (2021), Visible light-driven and singlet oxygen-	Conceptualization of the problem, design and

	mediated photochemical cross-dehydrogenative C_3–H sulfenylation of 4-hydroxycoumarins with thiols using rose bengal as a photosensitizer. *The Journal of Organic Chemistry*, **86**, 9658-9669.	development of the strategy, monitoring, data analyses, and writing and editing of the manuscript
5.	Goutam Brahmachari*, Indrajit Karmakar and Pintu Karmakar (2021), Catalyst- and solvent-free C*sp2*–H functionalization of 4-hydroxycoumarins *via* C-3 dehydrogenative aza-coupling under ball-milling. *Green Chemistry*, **23**, 4762-4770.	Conceptualization of the problem, design and development of the strategy, monitoring, data analyses, and writing and editing of the manuscript
6.	**Goutam Brahmachari*** (2020). Catalyst- and additive-free decarboxylative C-4 phosphorylation of coumarin-3-carboxylic acids at ambient conditions. *Advanced Synthesis & Catalysis*, **362**, 5411-5421.	Single-authored
7.	**Goutam Brahmachari*** and Indrajit Karmakar (2020), Visible light-induced and singlet oxygen-mediated photochemical conversion of 4-hydroxy-alpha-benzopyrones to 2-hydroxy-3-oxo-2,3-dihydrobenzofuran-2-carboxamides/carboxylates using rose bengal as a photosensitizer. *The Journal of Organic Chemistry*, **85**, 8851-8864.	Conceptualization of the problem, design and development of the strategy, monitoring, data analyses, and writing and editing of the manuscript
8.	**Goutam Brahmachari***, Nayana Nayek, Indrajit Karmakar, Khondekar Nurjamal, Swapan K. Chandra, Anindita Bhowmick (2020). Series of functionalized 5-(2-arylimidazo[1,2-*a*]pyridin-3-yl)pyrimidine-2,4(1*H*,3*H*)-diones: a water-mediated three-component catalyst-free protocol revisited. *The Journal of Organic Chemistry*, **85**, 8405-8414.	Conceptualization of the problem, design and development of the strategy, monitoring, data analyses, and writing and editing of the manuscript
9.	**Goutam Brahmachari***, Mullicka Mandal, Indrajit Karmakar, Khondekar Nurjamal and Bhagirath Mandal (2019). Ultrasound-promoted expedient and green synthesis of diversely functionalized 6-amino-5-((4-hydroxy-2-oxo-2*H*-chromen-3-yl)(aryl)methyl) pyrimidine-2,4(1*H*,3*H*)-diones via one-pot multicomponent reaction under sulfamic acid catalysis at ambient conditions. *ACS Sustainable Chemistry & Engineering*, **7**, 6369-6380.	Conceptualization of the problem, design and development of the strategy, monitoring, data analyses, and writing and editing of the manuscript
10.	**Goutam Brahmachari***, Khondekar Nurjamal, Indrajit Karmakar, Sanchari Begam, Nayana Nayek,Bhagirath Mandal (2017). Development of a water-mediated and catalyst-free green protocol for easy access of a huge array of diverse and densely functionalized pyrido-[2,3-*d*:6,5-*d*']-dipyrimidines *via* one-pot multicomponent reaction under ambient conditions. *ACS Sustainable Chemistry & Engineering*, **5**, 9494-9505.	Conceptualization of the problem, design and development of the strategy, monitoring, data analyses, and writing and editing of the manuscript

Research Publications and Copyrighted Materials

Publication Summary

Original Research Articles: **134** Reviews/Reports/Journal Editorials: **30** Books: **26** Book Chapters: **49**	**Total: 239 (as of 10.08.2022)** **Conference Proceedings: 120** **Invited Talks: 30**

(a) Original Research Papers Published in Peer-Reviewed Journals

134. Piyanki Das, **Goutam Brahmachari**, Koustav Chatterjee, Tathagata Choudhuri (2022). Synthetic antioxidants from a natural source can overtake the oncogenic stress management system and activate the stress-sensitized death of KSHV-infected cancer cells. *International Journal of Molecular Medicine*, **50**: 117.

133. Abhishek Kumar Das, Uday Hossain, Sumit Ghosh, Sima Biswas, Mullicka Mandal, Bhagirath Mandal, **Goutam Brahmachari**, Angshuman Bagchi Parames C. Sil (2022). Amelioration of oxidative stress mediated inflammation and apoptosis in pancreatic islets by Lupeol in STZ-induced hyperglycaemic mice. *Life Sciences*, **305**, 120769.

132. T. Yadav*, A. K. Vishwkarma, **Goutam Brahmachari***, Indrajit Karmakar, P. Yadav, S. Kumar, C. Mahapatra, J. Chowdhury, R. Kumar, G. N. Pandey, P. K. Tripathi, A. Pathak (2022), Structural confirmation and spectroscopic signature of N-Allyl-2-hydroxy-5-methyl-3-oxo-2, 3-dihydrobenzofuran-2-carboxamide and its monohydrate cluster. *Journal of Molecular Structure*, 133566.

131. Nayana Nayek, Pintu Karmakar, Mullicka Mandal, Indrajit Karmakar, **Goutam Brahmachari*** (2022), Photochemical and electrochemical regioselective cross-dehydrogenative C(sp2)-H sulfenylation and selenylation of substituted benzo[*a*]phenazin-5-ols. *New Journal of Chemistry*, **46**, 13483-13497.

130. Indrajit Karmakar, **Goutam Brahmachari*** (2022), Electrochemical and mechanochemical synthesis of dihydrofuro[3,2-*c*]chromenones via intramolecular C_{sp3}–H cross-dehydrogenative oxygenation within warfarin frameworks: an efficient and straightforward dual approach. *Green Chemistry*, **24**, 2825-2838 (***Selected as a 2022 Hot Article in Green Chemistry***)

129. Mallicka Mandal, **Goutam Brahmachari*** (2022), Visible light-promoted intramolecular C-O bond formation via Csp3-H functionalization: a straightforward synthetic route to biorelevant dihydrofuro[3,2-c]chromenone derivatives. *The Journal of Organic Chemistry*, **87**, 4777-4787.

128. **Goutam Brahmachari**,* Indrajit Karmakar (2022), Visible light-driven and singlet oxygen-mediated synthesis of 2-hydroxyphenylated-α-ketoamides through decarboxylative amidation of 4-hydroxycoumarins. *Asian Journal of Organic Chemistry*, **11**, e202100800.

127. **Goutam Brahmachari**,* Mullicka Mandal, Indrajit Karmakar (2022), Facile and straightforward synthesis of racemic version of substituted 3-[3-(2-hydroxyphenyl)-3-oxo-1-arylpropyl]-4-hydroxycoumarins: easy access to a series of biorelevant warfarin analogues. *Synthesis*, **54**, 451-464.

126. Shampa Kundua, Subhasri Biswas, Soumyajyoti Ghosh, Indrajit Karmakar, **Goutam Brahmachari**, Sudipta Maitra, Prithidipa Sahoo (2022), A selective luminescent probe to monitor cellular ATP: potential application for in vivo imaging in zebrafish embryo. *Journal of Photochemistry and Photobiology A: Chemistry*, **428**, 113895.

125. Marcel Hrubša, Khondekar Nurjamal, Alejandro Carazo, Nayana Nayek, Jana Karlíčková, Lenka Applová, Indrajit Karmakar, Shamima Parvin, Jaka Fadraersada, Kateřina Macáková, Přemysl

Mladěnka*, **Goutam Brahmachari*** (2022). Screening of synthetic heterocyclic compounds as antiplatelet drugs. *Medicinal Chemistry*, **18**, 536-543.

124. Serafeim Alexopoulos, Anastasia Gkouskou, George Stravodimos, Anastasia S Tsagkarakou, Ioannis Tsialtas, Demetres Katounis, Anna-Maria G Psarra, Demetres Leonidas, **Goutam Brahmachari**, Joseph Hayes, Vasiliki Skamnaki (2022), The druggability of the ATP binding site of glycogen phosphorylase kinase probed by coumarin analogues. *Current Research in Chemical Biology*, **2**, 100022.

123. Mullicka Mandal, Indrajit Karmakar, Kuheli Chakrabarty, Gourab Kanti Das, **Goutam Brahmachari*** (2022), Metal-free sequential amidation and intramolecular C_{sp2}–H direct amination of coumarin-3-carboxylic acids under ambient conditions: scope and mechanistic insights, *ChemistrySelect*, **7**, e202103929.

122. **Goutam Brahmachari,*** Bhagirath Mandal, Mauricio Alcolea Palafox, Swapan Kumar Chandra, Carlos Ferrer, Pablo Arévalo, Indrajit Karmakar (2022), Studies on the molecular structure of pterocaronol: a new biologically relevant nor-triterpenoid from *Peltophorum pterocarpum* (Fabaceae). *Journal of Molecular Structure*, **1254**, 132390.

121. Taniris Cafiero Braga, Marina Magalhães Silva, Eduarda OO Nascimento, Edjan Carlos Dantas da Silva, Yuri de Freitas Rego, Mullicka Mandal, Zaqueu Alves de Souza, Ana Lúcia Tasca Góis Ruiz, João Ernesto de Carvalho, Felipe Terra Martins, Isis Martins Figueiredo, Thiago Mendonça de Aquino, Cleiton Moreira da Silva, Bhagirath Mandal, **Goutam Brahmachari**,* Josué Carinhanha Caldas Santos,* Ângelo de Fátima* (2022), Synthesis, anticancer activities and experimental-theoretical DNA interaction studies of 2-amino-4-phenyl-4*H*-benzo[*H*]chromene-3-carbonitrile. *European Journal of Medicinal Chemistry Reports*, **4**, 100030.

120. V. Sharma, I. Karmakar, **Goutam Brahmachari**, V. K. Gupta (2022), Synthesis, spectroscopic characterization, crystal structure, theoretical (DFT) studies and molecular docking analysis of biologically potent isopropyl 5-chloro-2-hydroxy-3-oxo-2,3-dihydrobenzofuran-2-carboxylate. *Molecular Crystals and Liquid Crystals*, DOI: 10.1080/15421406.2021.2024041.

119. **Goutam Brahmachari**,* Anindita Bhowmick, Indrajit Karmakar (2021), Visible light-driven and singlet oxygen-mediated photochemical cross-dehydrogenative C_3–H sulfenylation of 4‑hydroxycoumarins with thiols using rose bengal as a photosensitizer. *The Journal of Organic Chemistry*, **86**, 9658-9669.

118. **Goutam Brahmachari**,* Indrajit Karmakar, Pintu Karmakar (2021), Catalyst- and solvent-free C*sp2*–H functionalization of 4-hydroxycoumarins *via* C-3 dehydrogenative aza-coupling under ball-milling. *Green Chemistry*, **23**, 4762-4770.

117. **Goutam Brahmachari**,* S. Begam, I. Karmakar, V. K. Gupta (2021). Development of a straightforward and efficient protocol for the one-pot multicomponent synthesis of substituted *alpha*-aminoallylphosphonates under catalyst-free condition. *Phosphorus, Sulfur, Silicon and the Related Elements*, **196**, 769-779.

116. T. Yadav,* **Goutam Brahmachari**,* I. Karmakar, S. Saha, J. Chowdhury, A. Pathak, R. Kumar, R. Sharma, R. R. F. Bento, N.P. Yadav (2021). Spectroscopic investigation of electron-releasing functional groups substituted *N*-iso-butyl, *S*-2-nitro-1-phenylethyl dithiocarbamate – a DFT approach. *Polycyclic Aromatic Compounds*, published online, October 2021; https://doi.org/10.1080/10406638.2021.1993940

115. V. Sharma, A. Bhowmick, I. Karmakar, Crystal structure, **Goutam Brahmachari**, V. K. Gupta (2021). Crystal structure, Hirshfeld surface analysis and molecular docking studies of 3-(*sec*-butylthio)-4-hydroxy-2*H*-chromen-2-one. *Molecular Crystals and Liquid Crystals*, published online, October 2021; https://doi.org/10.1080/15421406.2021.1978720

114. V. Sharma, S. Begam, I. Karmakar, Crystal structure, **Goutam Brahmachari**, V. K. Gupta (2021). Hirshfeld surface analysis, and molecular docking studies of 3,3′-((4-(trifluoromethyl)phenyl) methylene)bis(1-methyl-1*H*-indole). *Molecular Crystals and Liquid Crystals*, **714**, 67-79.

113. M. Kundu, P. Sadhukhan, N. Ghosh, S. Ghosh, S. Chatterjee, J. Das, **Goutam Brahmachari**, Parames C. Sil (2021). In vivo therapeutic evaluation of a novel bis-lawsone derivative against tumor following delivery using mesoporous silica nanoparticle-based redox-responsive drug delivery system. *Materials Science & Engineering C*, **126**:112142.

112. T. Yadav,* **Goutam Brahmachari**,* I. Karmakar, P. Yadav, A.K. Prasad, A. Pathak, A. Agarwal, R. Kumar, V. Mukherjee, G.N. Pandey, R.R.F. Bento, N.P. Yadav (2021). Conformational and vibrational spectroscopic investigation of *N*-*n*-butyl, *S*-2-nitro-1-(*p*-tolyl) ethyl dithiocarbamate–a bio-relevant sulfur molecule. *Journal of Molecular Structure*, **1238**, 130450.

111. K. Mal, S. Ray, S. Maity, K. Nurjamal, P. Ghosh, **Goutam Brahmachari**, C. Mukhopadhyay (2021). Ultrasound-assisted expeditious catalyst-free green approach towards diastereoselective synthesis of spiro[indoline-3,2′pyrido[2,1-*b*][1,3]-oxazine]-3′,4′-dicarboxylate scaffolds. *ChemistrySelect*, **6**, 1263-1270.

110. T. Yadav,* **Goutam Brahmachari**,* I. Karmakar, P. Yadav, A. Agarwal, V. Mukherjee, B. P. Bag, S. Srivastav, A. Vats, A. K. Prasad, G. N. Pandey, A. Pathak, N. K. Dubey (2021). Structural confirmation of biorelevant molecule N-iso-butyl, S-2-nitro-1-phenylethyl dithiocarbamate in gas phase and effect of fluorination, *Chemical Physics Letters*, **762**, 138124.

109. **Goutam Brahmachari**,* N. Nayek, I. Karmakar, N. Khondekar, S.K. Chandra, A. Bhowmick, (2020). Series of functionalized 5-(2-arylimidazo[1,2-*a*]pyridin-3-yl)pyrimidine-2,4(1*H*,3*H*)-diones: a water-mediated three-component catalyst-free protocol revisited. *The Journal of Organic Chemistry*, **85**, 8405-8414.

108. **Goutam Brahmachari**,* Indrajit Karmakar (2020). Visible light-induced and singlet oxygen-mediated photochemical conversion of 4-hydroxy-alpha-benzopyrones to 2-hydroxy-3-oxo-2,3-dihydrobenzofuran-2-carboxamides/carboxylates using rose bengal as a photosensitizer. *The Journal of Organic Chemistry*, **85**, 8851-8864.

107. **Goutam Brahmachari*** (2020). Catalyst- and additive-free decarboxylative C-4 phosphorylation of coumarin-3-carboxylic acids at ambient conditions. *Advanced Synthesis & Catalysis*, **362**, 5411-5421.

106. K. K. Yadav, A. Kumar, A. Kumar, **Goutam Brahmachari**, N. Misra (2020). Diethyl (2-amino-3-cyano-4*h*-chromen-4-yl)phosphonate and its halogenated derivatives as effective drug: a theoretical and an experimental spectroscopic study. *Polycyclic Aromatic Compounds*, published online, DOI: 10.1080/10406638.2020.1832126

105. A. Sharma, K. Nurjamal, B. Banerjee, **Goutam Brahmachari**, V. K. Gupta (2020). Synthesis, characterization, and crystal structure of 5′-amino-4,4”-dichloro-2′-nitro-2′,3′-dihydro-[1,1′:3′,1”-terphenyl]-4′,4′,6′(1′*H*)-tricarbonitrile-one dimethyl sulfoxide. *Crystallography Reports*, **65**, 1208-1211.

104. Sharma, **Goutam Brahmachari**, V. K. Gupta (2020). X-Ray Crystal Structure Analysis of Novel 6-Amino-3-Phenyl-4-(Pyridin-4-yl)-2,4-Dihydropyrano[2,3-*c*]Pyrazole-5-Carbonitrile. *Crystallography Reports*, **65**, 1202-1207.

103. Sharma, I. Karmakar, **Goutam Brahmachari**, and Vivek K. Gupta (2020). Synthesis, characterization, and crystal structure of (*E*)-4-(2-(4-cyanobenzylidene)hydrazinyl)benzonitrile dimethyl sulfoxide hemisolvate. *Crystallography Reports*, **65**, 1191-1194.

102. Sharma, S. Begam, K. Nurjamal, **Goutam Brahmachari**, V. K. Gupta (2020). Synthesis, Characterization, and crystal structure of [3,3′:3′,3”-terindolin]-2′-one bis(dimethyl sulfoxide). *Crystallography Reports*, **65**, 1187-1190.

101. Sakshi Sharma, **Goutam Brahmachari**, V. K. Gupta (2020). Design, synthesis, characterization and crystallographic behaviors of some biologically important chromene-annulated spiro-oxindoles – a drive to introspect the comparative structural information. *Crystallography Reports*, **65**, 1179-1186.

100. Ratnesh Kumar, Abhishek Kumar, Ambrish Kumar Srivastava, **Goutam Brahmachari**, Neeraj Misra (2020). Spectroscopic and structural investigations on novel 6-amino-3-phenyl-4-(pyridin-4-yl)-2,4-dihydropyrano[2,3-*c*]pyrazole-5-carbonitrile by FT-IR, NMR, Docking, and DFT methods. *Polycyclic Aromatic Compounds*, published online, DOI: 10.1080/10406638.2020.1832125

99. T. Yadav*, **Goutam Brahmachari***, I. Karmakar, P. Yadav, A. Agarwal, V. Mukherjee, A. Pathak, N. K. Dubey (2020). Synthesis, structural and vibrational spectroscopic investigation of molecules: *N*-*n*-butyl, *S*-2-nitro-1-phenylethyl dithiocarbamate and *N*-*n*-butyl, *S*-2-nitro-1-(4-flurophenyl)ethyl dithiocarbamate. *Vibrational Spectroscopy*, **111**, 103151.

98. **Goutam Brahmachari**,***** Mullicka Mandal (2020). One-pot multicomponent synthesis of a new series of curcumin-derived 4*H*-pyrans under ambient conditions. *Journal of Heterocyclic Chemistry*, **57**, 744-750.

97. P. Mondal, S. Chatterjee, K. Nurjamal, S. Maity, A. Bhaumik, **Goutam Brahmachari**, P. Ghosh, C. Mukhopadhyay (2020). Nano-SiO_2@[DABCO $(CH_2CH_2CO_2H)]^+[Br]^-$ as an efficient and recyclable SCILL for water-mediated facile synthesis of thiol-substituted *N*-aryl-pentasubstituted pyrroles. *Catalysis Communications*, **139**, 105966.

96. R. Kumar, A. Kumar, A. K. Srivastava, **Goutam Brahmachari**, G. Tiwari, N. Misra (2020). Structural, spectroscopic analysis of two hexahydroacridine-1,8(2*H*,5*H*)-dione derivatives and identification of drug like properties: Experimental and computational study. *Materialstoday: Proceedings*, **29**, 1050-1054.

95. Sagar S. Bhayye, **Goutam Brahmachari**, Nayana Nayek, Sujata Roy, Kunal Roy (2020). Target Prioritization of Novel Substituted 5-aryl-2-oxo-/thioxo-2,3-dihydro-1*H*-benzo[6,7]chromeno[2,3-*d*]pyrimidine-4,6,11(5*H*)-triones as anti-cancer agents using in-silico approach. *Journal of Biomolecular Structure and Dynamics*, **38**, 1415-1424.

94. K. K. Yadav, A. Kumar, S. Begam, K. Nurjamal, A. Kumar, **Goutam Brahmachari**, N. Misra (2020). Spectroscopic (FTIR, UV-Vis and NMR), theoretical investigation and molecular docking of substituted 1,8-dioxodecahydroacridine derivatives. *Journal of the Serbian Chemical Society*, **85**, 53-66.

93. **Goutam Brahmachari***, Indrajit Karmakar (2019). *sp*2 C-H acetoxylation of diversely substituted (*E*)-1-(arylmethylene)-2-phenylhydrazines using $PhI(OAc)_2$ as acetoxy source at ambient conditions. *European Journal of Organic Chemistry*, **34**, 5925-5933.

92. K. Sinha, Chowdhury, S. Banerjee, S. Mandal, B. Mandal, M. S. Majhi, **Goutam Brahmachari**,***** J., Ghosh, P. C. Sil***** (2019), Lupeol alters viability of SK-RC-45 (Renal cell carcinoma cell line) by modulating its mitochondrial dynamics. *Heliyon*, **5**, e02107.

91. **Goutam Brahmachari***, Khondekar Nurjamal (2019), Ultrasound-assisted and trisodium citrate dihydrate-catalyzed green protocol for efficient and one-pot synthesis of substituted chromeno[3′,4′:5,6]pyrano[2,3-*d*]pyrimidines at ambient conditions. *Tetrahedron Letters*, **60**, 1904-1908.

90. **Goutam Brahmachari**,***** B. Mandal, M. Mandal, A. Mondal (2019), Sopherone A and B: two new biologically relevant dibenzo-α-pyrones from *Cassia sophera*. *Fitoterapia*, **136**, 104169 (doi: 10.1016/j.fitote.2019.05.008).

89. **Goutam Brahmachari***, Sanchari Begam (2019). Ceric ammonium nitrate (CAN): an efficient and eco-friendly catalyst for one-pot synthesis of diversely functionalized biscoumarins in aqueous medium under ambient conditions. *ChemistrySelect*, **4**, 5415-5420.

88. **Goutam Brahmachari**,***** Mullicka Mandal, Indrajit Karmakar, Khondekar Nurjamal, Bhagirath Mandal (2019). Ultrasound-promoted expedient and green synthesis of diversely functionalized 6-amino-5-((4-hydroxy-2-oxo-2*H*-chromen-3-yl)(aryl)methyl)pyrimidine-2,4(1*H*, 3*H*)-diones via one-pot multicomponent reaction under sulfamic acid catalysis at ambient conditions. *ACS Sustainable Chemistry & Engineering*, **7**, 6369-6380.

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20. **Organic Name Reactions: A Unified Approach**, (*with a foreword by Prof. S. Chandrasekaran*), Alpha Science International Ltd., Oxford, U.K., 2006 (ISBN: 1-84265-304-0); co-published by Narosa Publishing House Private Ltd., New Delhi, India, 2006 (ISBN: 81-7319-719-2), Reprints 2007, 2009, 2011, 2012, 2014, 2016, 2017, 2021.

19. **Organic Chemistry Through Solved Problems** (*with a foreword by Prof. Swapnadip Thakur*), Narosa Publishing House Private Ltd., New Delhi, India, 2007 (ISBN: 81-7319-816-0), Reprints 2009, 2011, 2012, 2014, 2017.

(II) Edited Books

18. **Biotechnology of Microbial Enzymes: Production, Biocatalysis and Industrial Applications,** Second Edition**,** Academic Press, London, Elsevier, 22022 (*in press*).

17. **Discovery and Development of Anti-Breast Cancer Agents from Natural Products (Natural Product Drug Discovery Series – Vol. 5)** (*with forewords by* Prof. Subrata Ghosh and Prof. Ramapati Tripathi), Elsevier, 2021. ISBN: 9780128212776

16. **Green Synthetic Approaches for Biologically Relevant Heterocycles – Volume 1**, (*with a foreword by Prof. Dr. Peter Licence*), 2nd edition, **Elsevier Inc**., Waltham, MA, USA, 2021 (ISBN: 978-0-12-820586-0)

15. **Green Synthetic Approaches for Biologically Relevant Heterocycles – Volume 2**, (*with a foreword by Prof. Dr. Vinod K. Singh*), 2nd edition, **Elsevier Inc**., Waltham, MA, USA, 2021 (ISBN: 978-0-12-820792-5)

14. **Discovery and Development of Anti-Inflammatory Agents from Natural Products (Natural Product Drug Discovery Series – Vol. 4)** (*with a foreword by* Prof. G. Mugesh, IISc, Bangalore), Elsevier, 2019. ISBN: 9780128169926

13. **Discovery and Development of Therapeutics from Natural Products Against Neglected Tropical Diseases (Natural Product Drug Discovery Series – Vol. 3)** (*with a foreword by Prof. Alan Fairlamb, University of Dundee, UK*), Elsevier, April, 2019. ISBN: 978-0-12-815723-7

12. **Discovery and Development of Neuroprotective Agents from Natural Products (Natural Product Drug Discovery Series – Vol. 2)** (*with a foreword by* Dr. Volkan Kisakürek, Zürich, Switzerland), Elsevier, 2017. ISBN: 9780128095935 (June, 2017)

    Book Review 1. (E. A. Abourashed, *Journal of Natural Products*, **2018**, *81*, 1917-1918) "….As health care providers continue to seek new and effective approaches for managing neurodegenerative diseases, Discovery and Development of Neuroprotective Agents from Natural Products attempts to narrow the drug discovery gap through its current and comprehensive coverage of the subject matter. The book provides a well-balanced content that spans major neurodegenerative diseases and potential therapeutic agents that may be obtained from natural sources and/or synthetic routes based on naturally occurring lead compounds…..The book should appeal to a broad audience with diverse backgrounds including chemistry, biology, pharmacy, and medicine. It can also be a valuable resource for researchers, academicians, and graduate students. In addition to enjoying the book's content, its readers will probably be able to identify viable research directions for the discovery and development of new and promising neuroprotective agents." Prof. Ehab A. Abourashed, Medical College of Wisconsin School of Pharmacy, Milwaukee, Wisconsin, United States.

    Book Review 2. (S. Chandrasekhar, *Current Science*, **2018**, *115*, 2164-2165) "This book discusses about recent developments in the area of neuroprotective natural products with respect to their isolation, characterization, and their pharmaceutical applications in the area of neurodegenerative diseases……..Overall the book gives a detailed insight into natural products as neuroprotective agents and is recommended for colleges/institutions and industries working in the areas of natural products isolation and/or in the exploration of compounds for their activity on the central nervous system." Prof. Srivari Chandrasekhar, CSIR-Indian Institute of Chemical Technology, Hyderabad, India.

11. **Discovery and Development of Antidiabetic Agents from Natural Products (Natural Product Drug Discovery Series – Vol. 1)** (*with forewords by Dr. David G. I. Kingston and Dr. Arnold L. Demain*), Elsevier, 2016. ISBN: 9780128094501

10. **Neuroprotective Natural Products: Clinical Aspects and Mode of Action**, Wiley-VCH Verlag GmbH & Co. KGaA, Weinheim, Germany, 2017 (ISBN: 978-3527341863).

9. **Cardioprotective Natural Products: Promises and Hopes**, (*with a foreword by Dr. Bradley K. McConnell, University of Houston, USA*), World Scientific Publishing Co., Singapore, November 2017 (ISBN: 978-981-3231-15-3)

8. **Biotechnology of Microbial Enzymes: Production, Biocatalysis and Industrial Applications** (ISSBN: 978-0-12-803725-6), **Academic Press**, London, Elsevier, 2016.

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5. **Chemistry and Pharmacology of Naturally Occurring Bioactive Compounds**, (*with a foreword by Prof. Raphael Mechoulam and Prof. Takuo Okuda*), **CRC Press/Taylor Francis Group**, LLC, USA, 2013 (ISBN: 978-1-4398-9167-4).

4. **Natural Bioactive Molecules: Impacts & Prospects**, (*with a foreword by Prof. Dr. Arnold Demain*), Alpha Science International Ltd., Oxford, U.K., 2013 (ISBN: 978-1-84265-780-5); co-published by Narosa Publishing House Private Ltd., New Delhi, India, 2013 (ISBN: 978-81-8487-235-4).

3. **Bioactive Natural Products: Opportunities and Challenges in Medicinal Chemistry**, (*with a foreword by Dr. David J. Newman*), World Scientific Publishing Co., Singapore, 2011 (ISBN: 978-981-4335-37-9).

2. **Natural Products: Chemistry, Biochemistry and Pharmacology**, (*with forewords by Prof. Jorg Heukelbach and Prof. Ricke Speare*), Alpha Science International Ltd., Oxford, U.K., 2009 (ISBN: 978-1-84265-450-7); co-published by Narosa Publishing House Private Ltd., New Delhi, India, 2009 (ISBN: 978-81-7319-886-1).

1. **Chemistry of Natural Products: Recent Trends and Developments**, (*with a foreword by Dr. Manksukh C. Wani*), Research Signpost, Trivandrum, Kerala, India 2006 (ISBN: 81-308-0140-X).