

# **CURRICULUM VITAE OF** **DR. MD. ZAKIR SULTAN**



**Present Position** : Principal Scientist  
Centre for Advanced Research in Sciences (CARS)  
University of Dhaka, Dhaka-1000, Bangladesh.

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## **FIELD OF SPECIALIZATION**

Natural Products Chemistry and Pharmaceutical Sciences

## **RESEARCH INTEREST**

1. Research on drug interactions, bioavailability study and so on.
2. Isolation and characterization of bioactive compounds from medicinal plants, microbes and marine resources.
3. Research on herbal drugs.

## **AWARD/FELLOWSHIPS/SCHOLARSHIPS**

1. TWAS-UNESCO Associate (2017).
2. Visiting Scientist (2017-2018) at the Department of Chemistry, Indian Institute of Technology Madras (IITM), Chennai 600 036, India.
3. Post Doctoral Fellow (May, 2010 - October, 2011) at the Center for Advanced Research in Sciences, University of Dhaka, Bangladesh.
4. PhD fellow (March, 2004- January, 2009) at the Natural Product Chemistry Lab., Department of Chemistry, Kongju National University, South Korea.
5. Received scholarships at various levels of school, college and university education.

## **ACADEMIC QUALIFICATION**

<b>Degree</b>	<b>University/Institute</b>	<b>Year</b>	<b>Result</b>
Ph.D.	Natural Product Chemistry Lab, Department of Chemistry, Kongju National University, South Korea.	2004-2009	Conferred (Feb, 2009)
M. Pharm (Thesis)	Department of Pharmacy, University of Rajshahi, Bangladesh.	1997 (Exam. held in 2002 due to session jam)	First Class (Fourth place)

B. Pharm (Hons.)	Department of Pharmacy, University of Rajshahi, Bangladesh.	1996(Exam. held in 1998 due to session jam)	First Class (Second place)
H. S.C. (Higher Secondary Certificate)	Sariakandi Degree College, Bogra, Bangladesh.	1993	First Division (Star)
S. S.C.(Secondary School Certificate)	Sariakandi Govt. High School, Bogra, Bangladesh.	1991	First Division

### **RESEARCH EXPERIENCE**

- [1] **May 6, 2010 – till date:** Doing research in Pharmaceutical Sciences (Isolation, Drug development, Drug-drug interaction, Bioavailability study, Method development and validation, Herbal drug development etc.) the Drug Research Laboratory, Center for Advanced Research in Sciences, University of Dhaka, Bangladesh.
- [2] **April 19, 2018 to June 19, 2018 and September 16, 2017 to October 25, 2017:** Visiting Scientist (doing research on synthesis of silver and gold clusters of drug molecules), Department of Chemistry, Indian Institute of Technology Madras, Chennai, India.
- [3] **2004-2009:** Five years research work in the field of Natural Product Chemistry (isolation and characterization of antimicrobial, anti-cancer and pest control agents from plants and microbes) at the Department of Chemistry, Kongju National University, Kongju, Korea.
- [4] **2000-2002:** Two years research experience on Pharmaceutical Microbiology at the Department of Pharmacy, University of Rajshahi, Bangladesh.

### **JOB EXPERIENCE**

- [1] **Principal Scientist (May 14, 2015 - till date):** Centre for Advanced Research in Sciences, University of Dhaka, Dhaka-1000, Bangladesh.
- [2] **Adjunct Faculty, Department of Pharmacy, State University of Bangladesh.**
- [3] **Senior Scientist (October 5, 2011 - May 13, 2015):** Centre for Advanced Research in Sciences, University of Dhaka, Dhaka-1000, Bangladesh.
- [4] **Post Doctoral Fellow (May 6, 2010 - October 4, 2011):** Centre for Advanced Research in Sciences, University of Dhaka, Dhaka-1000, Bangladesh.
- [5] **Assistant Professor and Head(March 10, 2010 - May 5, 2010):** Department of Pharmacy, Daffodil International University, Dhaka-1207, Bangladesh
- [6] **Senior Lecturer and Head (May 02, 2009 - March 09, 2010):** Department of Pharmacy, Daffodil International University, Dhaka-1207, Bangladesh.

### **MEMBER OF LEARNED/PROFESSIONAL BODIES**

- [1] Member, Asiatic Society Bangladesh (Membership No. 2445).
- [2] Life Member, Bangladesh Crystallographic Association (Membership No. 036).

- [3] Life Member, Network of Instrument Technical personnel and User scientists of Bangladesh (NITUB), (LM-136).
- [4] 'A'-grade Registered Pharmacist, Pharmacy Council, Bangladesh (Registration No. A-1939/1999).
- [5] Life Member, Bangladesh Chemical Society, (LM- 2038).
- [6] Member, Society for Ethnopharmacology, India, (SFE/18/I-1247).
- [7] Member, Sariakandi Public Library and Club, Sariakandi, Bogra, [2017-01/021(145)].

### **ADDITIONAL PROFESSIONAL RESPONSIBILITIES**

1. Associate Editor, Journal of Microbial Bioactives
2. May 16, 2009 – May 6, 2010: Member, Academic Council of Daffodil International University, Shukrabad, Dhaka.
3. 2009-2014: Member of Editorial Advisory Board, Journal of Scientific Research.
4. Reviewer of various scientific journals.

## ***PUBLICATIONS***

### **Books**

- [11] Md. Zakir Sultan. **Sopno Samuddur** (A book of poetry in Bengali language for children). Published by Grantha Kutir, Bangla Bazar in March, 2022.
- [10] Md. Zakir Sultan. **Jinner Galpo, Part -II** (A tale of Jinn in Bengali language for children, Part II). Published by Grantha Kutir, Bangla Bazar in March, 2021. ISBN: 978-984-21-0952-2.
- [9] Md. Zakir Sultan. **Jinner Galpo, Part -I** (A tale of Jinn in Bengali language for children, Part II). Published by Grantha Kutir, Bangla Bazar in February, 2020. ISBN: 978-984-21-0288-2.
- [8] Md. Zakir Sultan. **Baba-Mayer Chithi** (Letters of Parents in Bengali language). Published by Grantha Kutir, Bangla Bazar in February, 2020. ISBN: 978-984-34-3800-3.
- [7] Md. Zakir Sultan. **Khero Khatar Pata** (Autobiography in Bengali language). Published by Grantha Kutir, Bangla Bazar in February, 2019. ISBN: 978-984-34-5491-1.
- [6] Md. Zakir Sultan. **Chokken Ten** (Poetry book in Bengali language for children). Published by Grantha Kutir, Bangla Bazar in February, 2019. ISBN: 978-984-34-5490-4.
- [5] Md. Zakir Sultan. Poetry book in Bengali language: **Tomar Janno Poddolekha**. Published by Grantha Kutir, Bangla Bazar on 09 February, 2018. ISBN: 978-984-34-3801-0.
- [4] Md. Zakir Sultan and Umme Habiba Shammi. Poetry book in Bengali language for children: **Tomar Chhora, Jhikimiki Tara**. Published in May, 2014. ISBN: 978-984-33-6549-1.
- [3] Md. Zakir Sultan. "**Sariakandir Etibritto**". This book is a brief socioeconomic and cultural

history of a region of Bangladesh and was written in Bengali language. Published in January 2004, Pages 162, Library of Congress (USA) catalogue No. 2007342701. <http://lccn.loc.gov/2007342701>

- [2] Md. Zakir Sultan. *Bioactivity Guided Investigation of Compounds from Streptomyces sp.: Isolation of Bioactive Compounds from Microorganisms*. 116 pages; Publisher: VDM Verlag Dr. Müller, Germany; Publication date: July 21, 2010; Language: English; ISBN: 978-3639268010.
- [1] Md. Zakir Sultan and M. A. Rashid. *Experimental Organic, Medicinal and Natural Product Chemistry*. Published in February, 2014; Ashrafia Boighar, 36- Bangla Bazar, Dhaka-1100, Bangladesh; Pages-339. ISBN-978-984-33-6337-4. Language: English.

## RESEARCH ARTICLES

### 2021-2022↓

- [101] Adeeba Anjum, Md. Zakir Sultan, Mohammad Abdullah Al Mansur, Choudhuri M. Hasan and Mohammad A. Rashid. Assessment of antioxidant, antimicrobial, cytotoxicity and thrombolytic potential of *Erythrina fusca* Lour grown in Bangladesh. *Bangladesh Pharmaceutical Journal* 25(1):1-8, 2022. DOI: <https://doi.org/10.3329/bpj.v25i1.57834>
- [100] Adeeba Anjum, Md. Ruhul Kuddus, **Md. Zakir Sultan**, Abdullah Al Mansur, Choudhuri M. Hasan and Mohammad A. Rashid. Phytochemical and biological investigation of *Bridelia tomentosa* Blume growing in Bangladesh. *The Dhaka University Journal of Pharmaceutical Sciences*. 2021; 20(2): 213-218. DOI: <https://doi.org/10.3329/dujps.v20i2.57171>
- [99] Shuchismita Dey, **Md. Zakir Sultan** and Md. Abdus Salam. Nickel(II)-complex of ceftibuten dihydrate: synthesis, characterization and thermal study. *The Dhaka University Journal of Pharmaceutical Sciences*. 2021; 20(2): 219-225 DOI: <https://doi.org/10.3329/dujps.v20i2.57172>
- [98] Anjum A, **Sultan MZ**, Ferdosh S, Islam MK, Rashid MA, Nahar L, Sarker SD. Flavonoid, pterocarpan and steroid from *Erythrina fusca* Lour. growing in Bangladesh: isolation, and antimicrobial and free-radical scavenging activity. *Journal of Medicinal Plants* 2021; 20(79): 37-46. DOI: [10.52547/jmp.20.79.37](https://doi.org/10.52547/jmp.20.79.37)

### 2020-2021↓

- [97] Hossain MJ, **Md. Zakir Sultan**, Rashid MA, Kuddus MR. Interactions of linagliptin, rabeprazole sodium, and their formed complex with bovine serum albumin: computational docking and fluorescence spectroscopic methods. *Analytical Science Advances*, 2:480–494; 2021. doi.org/10.1002/ansa.202000153
- [96] Hossain I, Soliman MM, El-Naggar ME, **Md. Zakir Sultan**, Kechi A, Abdel Salam NR, Abu-Saied MA, Chowdhury M. Synthesis and characterization of graphene oxide–ammonium ferric sulfate composite for the removal of dyes from tannery wastewater, *Journal of Materials Research and Technology*, 12:1715-1727; 2021.

<https://doi.org/10.1016/j.jmrt.2021.03.097>.

- [95] Aktar F, **Md. Zakir Sultan** and Rashid MA. Chromium (III) complexes of metformin, dapagliflozin, vildagliptin and glimepiride potentiate antidiabetic activity in animal model. *International Journal of Current Research and Review* 13(05): 64-69; 2021. <http://dx.doi.org/10.31782/IJCRR.2021.13506>
- [94] Hossain MJ, Kuddus MR, Rashid MA and **Md. Zakir Sultan**. Understanding and dealing the SARS-CoV-2 infection: An updated concise review. *Bangladesh Pharmaceutical Journal* 24(1): 61-75; 2021 (Review article).
- [93] Dey S., **Md. Zakir Sultan** and Salam MA. Synthesis, characterization of ceftibuten-copper (ii) complex and prediction of its biological activity. *Asian Journal of Chemistry* 33(1): 190-194 (2021). <https://doi.org/10.14233/ajchem.2021.22982>
- [92] Aktar F, **Md. Zakir Sultan** and Rashid MA. Study of the effects of complexation of lead with metformin, glimepiride, vildagliptin and dapagliflozin in mice model. *Microbial Bioactives* 3(1): E125-E133 (2020). <https://doi.org/10.25163/microbbioacts.31210910822111120>
- [91] Hossain MJ, Rashid MA, **Md. Zakir Sultan**. Transition metal chelation augments the half-life of secnidazole: molecular docking and fluorescence spectroscopic approaches. *Drug Research* 70(12): 583-592, 2020. <https://doi.org/10.1055/a-1252-2322>
- [90] Hossain MJ, **Md. Zakir Sultan**, Rashid MA, Kuddus MR. Does rabeprazole sodium alleviate the anti-diabetic activity of linagliptin? Drug-drug interaction analysis by *in vitro* and *in vivo* methods. *Drug Research* 70(11): 519-527, 2020. <https://doi.org/10.1055/a-1233-3371>.
- [89] Hossain M.I., Deb A.K., **Md. Zakir Sultan**, Shaikh A.A., Chowdhury M., Sarker M.R. Synthesis and application of graphene oxide (GO) for removal of cationic dyes from tannery effluents. *Textile & Leather Review* 3(3):146-157, 2020. <https://doi.org/10.31881/TLR.2020.12>
- July, 2019- June, 2020↓**
- [88] M.J. Hossain, Md. Zakir Sultan, M.A. Rashid and M.R. Kuddus. *In vitro* interactions of secnidazole and its iron (ii), copper (ii) complexes with bovine serum albumin by fluorescence quenching method. *Bangladesh Pharmaceutical Journal* 23(1): 1-9, 2020.
- [87] F. Aktar, **Md. Zakir Sultan** and M.A. Rashid. *In vitro* complexation of olmesartan medoxomil with dapagliflozin, vildagliptin and metformin. *Dhaka University Journal of Pharmaceutical Sciences*, 18(2): 271-280, 2019.
- July, 2018- June, 2019↓**
- [86] F. Tahia, **Md. Zakir Sultan**, M.K. Islam and M. A. Rashid. Thermochemical properties and bioactivity of the metallic complexes of levofloxacin. *Asian Journal of Organic & Medicinal Chemistry* 4(2): 89-93, 2019.
- [85] A. Rahman, M.R. Haque, **Md. Zakir Sultan**, M.M. Rahman and Mohammad A. Rashid. Enantiomeric determination of carvedilol by a newly developed and validated chiral HPLC method. *Dhaka University Journal of Pharmaceutical Sciences*, 18(1): 61-68, 2019 (June) DOI: <https://doi.org/10.3329/dujps.v18i1.41432>
- [84] R. Begum, **Md. Zakir Sultan**, J.A. Chowdhury and M.S. Amran. *In vitro* pharmaceutical

- equivalence study of three brands of atenolol tablets available in Bangladesh. *Dhaka University Journal of Pharmaceutical Sciences*, 18(1): 43-48, 2019 (June). DOI: <https://doi.org/10.3329/dujps.v18i1.41426>
- [83] R. Sultana and **Md. Zakir Sultan**. Complexation of andrographolide, mirabegron and suvorexant and bioactivity study of the complexes. *Microbial Bioactives*, 2019, 2, 76-81. <https://doi.org/10.25163/microbbioacts.21010A0410130219>
- [82] Z. Sultana, R. Sultana, M. Rokonujjaman, H.A. Simol, **Md. Zakir Sultan** and M.A. Salam. Impact of gypsum and potash fertilizers on heavy metals and nutrients levels in some selected leafy vegetables and assessment of potential health risk. *Bangladesh Pharmaceutical Journal* 22(1): 56-67, 2019.
- [81] R. Sultana and Md. Zakir Sultan. *In vitro* effect of *Withania somnifera*, *Mucuna pruriens* and *Pausinystalia johimbe* on hepatic cytochrome P450 in rat. *Bangladesh Pharmaceutical Journal* 21(2): 118-122, 2018.
- [80] F. Yasmin, R. Sultana and **Md. Zakir Sultan**. Assessment of heavy metals and thermal properties of soil-rice-husk system collected from three districts of Bangladesh. *Dhaka University Journal of Biological Sciences* 27(2): 163-173, 2018.
- July, 2017- June, 2018↓**
- [79] G.N.N. Sultana and **Mohammad Zakir Sultan**. Mitochondrial DNA and methods for forensic identification. *Journal of Forensic Sciences & Criminal Investigation*. Volume - 9 Issue 1 - May 2018. DOI: 10.19080/JFSCI.2018.09.555755 (Review paper).
- [78] H.B. Shozib, S. Jahan, **M. Zakir Sultan**, S. Alam, S.C. Das, R.B. Amin, M. Hasan and M.A. Siddiquee. Nutritional properties of some BRRI HYV rice in Bangladesh. *Vitamins & Minerals*, 7:1, 2018. DOI: 10.4172/2376-1318.1000174.
- [77] A. Rahman, M.R. Haque, Md. Zakir Sultan, M.M. Rahman and M.A. Rashid. Enantiomeric determination of omeprazole and esomeprazole by a developed and validated chiral HPLC method and stability studies by microthermal analysis. *Dhaka Univ. J. Pharm. Sci.* 16(2): 221-233, 2017.
- [76] I.J. Bulbul, S. B. Fashiuddin, M.R. Haque, **Md. Zakir Sultan** and M.A. Rashid. Antinociceptive and anti-inflammatory activities of *Crotalaria pallid* Aiton (Fam: Fabaceae) Leaves. *Bangladesh Pharmaceutical Journal*, 20(2): 166-172, 2017.
- [75] M.F. Rahman, M.A. Salam, A. Rahman and **Md. Zakir Sultan**. Studies of interactions of valsartan, glimepiride and ciprofloxacin HCl by DSC and HPLC. *Bangladesh Pharmaceutical Journal*, 20(2): 195-200, 2017.
- [74] M.F. Rahman, N.J. Ara, B.P. Dey, **Mohammad Zakir Sultan**. Toxic effects of Coralene Red XF and Remazol Red RR textile dyes on liver and kidney in mice. *International Journal of Food Science and Biotechnology*, 2(4): 97-102, 2017.
- [73] M.F. Rahman, N.J. Ara, M.M. Uddin, **Mohammad Zakir Sultan**. Toxic effects of Levafix Blue CA and Levafix Amber CA reactive dyes on liver and kidney in mice. *International Journal of Nutrition and Food Sciences*, 6(5): 187-193, 2017.
- [72] M.F. Rahman, M.A. Rahman, **Md. Zakir Sultan** and M.A. Salam. Study of drug-drug interaction and simultaneous estimation of a new combinational drug by DSC and

HPLC. *International Journal of Drug Research and Technology*, 7 (4): 180-194, 2017.

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- [71] Deb A. K., Shaikh M. A. A., **Md. Zakir Sultan**, Rafi M. I. H. Application of Lac dye in shoe upper leather dyeing. *Revista De PielărieÎncălțăminte (Leather and Footwear Journal)* 17(2):97-106, 2017 (Romania).
- [70] Anjum A., **Md. Zakir Sultan**, Hasan C. M. and Rashid M.A. Antibacterial and cytotoxic constituents from *Bridelia verrucosa* Haines growing in Bangladesh. *Dhaka Univ. J. Pharm. Sci.* 16(1): 61-68, 2017.
- [69] Kayesh R., Jahan M. S., **Md. Zakir Sultan**. Development by response surface methodology and validation of a stability-indicating RP-HPLC method for simultaneous estimation of Azilsartan Medoxomil and Chlorthalidone in solid dosage form. *Chromatographia* (Springer). 80 (4): 593–603, 2017. DOI: 10.1007/s10337-017-3276-4.
- [68] Aich U., S. Chowdhury, S. Akand, S. Rahman, K. Chowdhury, Z. Sultan, and M. A. Bashar. Synchronization of coincidences between the life stages of *Pachliopta aristolochiae* and the phenological stages of its host plant *Aristolochia indiaca*. *Journal of Biodiversity, Conservation, Bioresource Management*. 2(2):61-68, 2016 (Dept of Zoology, University of Dhaka).
- [67] R. Kayesh, A. S. M. M. Sarker, Md. Zakir Sultan, and M. S. Jahan. A simple and improved HPLC-PDA method for simultaneous estimation of fexofenadine and pseudoephedrine in extended release tablets by response surface methodology. *Journal of Chemistry*. Volume 2017, Article ID 9395023, 10 pages. <https://doi.org/10.1155/2017/9395023>
- [66] A. Anjum, Md. Zakir Sultan, M. A. A. Sikder, C. M. Hasan, M. A. Al-Mansoor and M. A. Rashid. Bioactive steroid and triterpenoids from *Bridelia stipularis* (L) Blume. *Dhaka Univ. J. Pharm. Sci.* 15(2): 221-225, 2016.
- [65] K. N. Deepa, Md. Zakir Sultan, M.S. Amran and S. Kabir. *In vitro* analysis of the interaction between ketorolac tromethamine and bovine serum albumin using fluorescence spectroscopy. *Journal of Advances in Medical and Pharmaceutical Sciences*. 10(1): 1-8, 2016. DOI: 10.9734/JAMPS/2016/29006
- [64] T.U. Amin, M. R. Islam, **Md. Zakir Sultan**, S. Sultana, M. S. Islam and A. Hasnat. Study of interaction of dextromethorphan hydrobromide with deoxyribonucleic acid by fluorescence quenching. *Bangladesh Pharmaceutical Journal* 19(2): 197-205 (2016).

**July, 2015- June, 2016 ↓**

- [63] M. R. H. Khan, A. Rahman, **Md. Zakir Sultan**, M. Z. Sultan, and M. A. Rashid. Fluorescence Spectroscopic studies of *in-vitro* interactions of famotidine and tapentadol hydrochloride with bovine serum albumin. *Dhaka Univ. J. Pharm. Sci.* 15(1): 21-26 (2016).
- [62] S. C. Dey, M. Al-Amin, T. U. Rashid, **Md. Zakir Sultan**, M. Ashaduzzaman, M. Sarker, S. M. Shamsuddin. Preparation, characterization and performance evaluation of chitosan as an adsorbent for remazol red. *International Journal of Latest Research in*

- Engineering and Technology* 2(2): 52-62(2016).
- [61] N. Das, M. S. Hasan, S. Z. Raihan and **Md. Zakir Sultan**. Antinociceptive, anti-inflammatory and hypoglycemic activities of *Terminalia citrina* leaves. *Bangladesh Pharmaceutical Journal* 19(1): 25-31 (2016).
- [60] R. A. Joly, M. R. Islam, S. Sultana, A. Rahman, **Md. Zakir Sultan**, M. S. Islam, M. S. Islam and A. Hasnat. Interaction of duloxetine hydrochloride with deoxyribonucleic acid measured by fluorescence spectroscopy. *Dhaka Univ. J. Pharm. Sci.* 14(2): 199-206 (2015).
- [59] M. N. Hasan, M. N. I. Khan, **M. Z. Sultan**. The pregnant and lactating mother's KAP (Knowledge, Attitude and Practice) and nutritional care during antenatal and postnatal period in Ukhia, Cox's Bazar, Bangladesh. *J. Sci. Res.* 8 (1): 55-70 (2016).
- [58] S. F. Koly, S. P. Kundu, S. Kabir, M. S. Amran and **Md. Zakir Sultan**. Analysis of aceclofenac and bovine serum albumin interaction using fluorescence quenching method for predictive, preventive, and personalized medicine. *The EPMA Journal* 6:24 (2015).
- [57] S. N. I. Rabbi, M. Z. Sultan, M. D. Sohel and **Md. Zakir Sultan**. Study of interaction between febuxostat and bovine serum albumin by fluorescence spectroscopy. *Journal of Bioanalysis & Biomedicine.* 7(5): 164-170 (2015).
- [56] M. A Rashid, S. N. I. Rabbi, T. Sultana, M. Z. Sultan and **Md. Zakir Sultan**. Fluorescence spectroscopic study of interaction between olanzapine and bovine serum albumin. *Pharmaceutica Analytica Acta*, 6 (8):(2015). <http://dx.doi.org/10.4172/2153-2435.1000408>
- [55] S. P. Kundu, Md. Zakir Sultan, A. Rahman, S. K. Paul, S. Shikder, S. Kundu, M. S. Amran and M. A. Hossain. The study of analgesic activity of complexes of magnesium sulfate with aspirin, paracetamol and naproxen. *Clinical Pharmacology & Biopharmaceutics.* 4 (3): 143 (2015). doi:10.4172/2167-065X.1000143
- [54] S. F. Koly, Md. Zakir Sultan, A. Rahman, S. Kabir and M. S. Amran. An *in vitro* study of binding of aceclofenac and pantoprazole with bovine serum albumin by UV spectroscopic method. *Journal of Pharmaceutical Sciences & Emerging Drugs.* 3:2 (2015). doi: [10.4172/jpsed.1000109](http://dx.doi.org/10.4172/jpsed.1000109)
- [53] M. F. Rahman, M. Z. Sultan, A. Rahman, M. A. Rahman and M. A. Salam. Simultaneous estimation of antihypertensive and antidiabetic drugs by HPLC. *Research and Reviews: Journal of Pharmaceutical Quality Assurance*, 1(1):25-29 (2015).
- [52] S. Amran, S. F. Koly, S. P. Kundu, A. A. Chowdhury, A. Hossain, Zakir Sultan, A. Rahman, S. K. Paul, S. Shikder, T. N. Mredula and S. Kundu. The pharmacokinetic study of aspirin, paracetamol and naproxen with magnesium sulfate. *Pharmaceutica Analytica Acta* 6 (5): 372, (2015). doi:10.4172/21532435.1000372  
**July, 2014- June, 2015**
- [51] N. Das, D. Goshwami, M.S. Hasan, Z. Al-Mahmud, S.Z. Raihan, **Md. Zakir Sultan**. Evaluation of antinociceptive, anti-inflammatory and anxiolytic activities of methanolic extract of *Terminalia citrina* leaves. *Asian Pacific Journal of Tropical Disease.* 5(Suppl 1): S137-S141 (2015).



**PS Principal Scientist (15 May, 2015)↑**

- [50] M. Haque, M.M. Begum, M. Hasan, A. F. M. T. Rahman, M. I. Hussain, M. M. Rahman, M. H. Ali, M. A. Islam, **Md. Zakir Sultan**, M. R. Ferdous, C. M. Hasan. Investigation of the medicinal potentials of *Syzygium jambos* (L.) extract and characterization of the isolated compounds. *American Journal of Bio Science*. Special Issue: Pharmacological and Phytochemicals Investigation. 3(2-1): 12-18 (2015). doi: 10.11648/j.ajbio.s.2015030201.13
- [49] S. Ferdous, **Md Zakir Sultan**, T. Bashar, A. Rahman and M. S. Islam. *In vitro* and *in vivo* studies of drug-drug interaction between metformin and cefepime. *Pharmaceutica Analytica Acta*. 6 (3):348-352 (2015).
- [48] R. Kayeshand **Md. Zakir Sultan**. A novel ion-pair RP-HPLC method for simultaneous quantification of naproxen and esomeprazole in pharmaceutical formulations. *Journal of Chromatographic Science*. 53: 687-693 (2015). Doi:10.1093/chromsci/bmu103
- [47] M. M. R. Sajjad, M. T. Sharif, K.N. Deepa, K. Nahar, M. S. Rahman, M.Y. Mian, A. Rahman, **Md. Zakir Sultan**, S. Kabir, A. A. Chowdhury, M. S. Amran. Evaluation of cardiovascular activities of an ayurvedic preparation “Khadirarishta” in rat model. *European Journal of Pharmaceutical and Medical Research*. 2(2), 223-234 (2015).
- [46] M. A. Rahman, **Md. Zakir Sultan**, M. S. Rahman and M. A. Rashid. Food adulteration: A serious public health concern in Bangladesh. *Bangladesh Pharmaceutical Journal*. 18(1): 1-7 (2015).
- [45] K. Nahar, M. S. Rahman, M. M. R. Sajjad, **Md. Zakir Sultan**, N. J. Lubna, A. A. Chowdhury, S. Kabir, M.S. Amran. Evaluation of some physicochemical properties as quality control parameters of an ayurvedic preparation “Khadirarishta”. *European Journal of Preventive Medicine*. 3(2): 17-21 (2015).
- [44] M. A. Salam, M. Rokonujjaman, A. Rahman, U. N. Sultana, **Md. Zakir Sultan**. Study of *in vitro* interaction of sildenafil citrate with bovine serum albumin by fluorescence spectroscopy. *Pharmacology & Pharmacy*. 6:94-101 (2015).
- [43] A. M. Shakar, M. J. Hossain, R. Kayesh, A. Rahman and **Md. Zakir Sultan**. Incompatibility of bisoprolol fumarate with some super-disintegrating agents. *British Journal of Pharmaceutical Research*. 5(2): 137-145 (2015).
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