

**Dr. Tasnima Zannat**  
**Head, Department of General Education**  
**&**

**Assistant Professor (Chemistry)**  
**Department of Civil Engineering**  
**Southern University Bangladesh**

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Please Visit the website:

<https://scholar.google.com/citations?user=it2NffoAAAAJ&hl=en>

<http://www.southern.edu.bd/Dr-Tasnima-zannat/>

<https://www.researchgate.net/profile/Tasnima-Zannat>

[www.southern.edu.bd.com](http://www.southern.edu.bd.com)

**Carrier Objective: Have an intention to become a committed teaching and research professional in the field of Environmental Chemistry, Green Chemistry & Environmental Engineering**

**Academic Qualification:**

Degree	Institution	Year of Pass
PhD in Chemistry (Analytical & Environmental Chemistry)	University of Chittagong	2017
MPhil in Chemistry (Course Work completed)	University of Chittagong	2009
M.Sc. in Chemistry (Physical & Inorganic Branch, Thesis Group)	University of Chittagong	2005
B.Sc. Hons. in Chemistry	University of Chittagong	2003
H.S.C (Science)	Chittagong Government Girls College	1996
S.S.C (Science)	Banskhali United High School	1994

**Fellowship of Academic bodies, professional Societies and sponsored Research activities:**

Year	Organization	Project received	Amount
2019-20	Research and Development Project of special allocation (R & D Project), from Ministry of Science and Information Technology.	200,000 tk (2500\$)	
2018-19	Research and Development Project (R & D Project), from Ministry of Science and Information Technology.	75,000 tk (900 \$)	
2011-2013	NSICT (National Science Information and Communication Technology) Fellowship for Ph.D Program from Ministry of Science and Information Technology.	300,000 tk (3800 \$)	
2008-2009	Mofizuddin Smriti Fellowship from Bangladesh Council of Science and Industrial Research.	100,000 taka (1200\$)	
2007-2008	NSICT Fellowship for M.Phil Program from Ministry of Science and Information Technology.	100,000 taka (1200\$)	

### Employment record (starting from present position)

University/College	Designation	Period
1) Department of General Education	Head	27 <sup>th</sup> November to till now
2) Department of Civil Engineering, Southern University Bangladesh	Assistant Professor	1 <sup>st</sup> September, 2015 to present.
	Lecturer	1 <sup>st</sup> July 2009 to August 2015
3) Imam Gazzali Degree College	Lecturer	March 2008 to October 2008
4) Cantonment public School & College	Guest Lecturer	June 2007
5) National Polytechnic College	Lecturer	October 2006 to February 2008.
6) National Public college, Chittagong	Lecturer	January 2006 to August 2006.
7) Chittagong Science & Technology Institute, Chittagong	Lecturer	March 2005 to April 2006

### Other related experience-research, industrial etc.

Organization/Employer Designation	Period
1) Research Fellow, Soil Management and Agronomical Division, Bangladesh Center of Science and Industrial Research (BCSIR)	January 2009
2) Served As a Part Time Chemist & Microbiologist in Rain Natural Drinking Water	January 2005 to December 2005
3) Supervision of Undergraduate research (Thesis Students in the Field of Environmental Engineering) at Department of Civil Engineering, SUB	From 2012 to till

### Book Publication:

**“Spectrophotometric determination of some essential and toxic elements with potential toxicity at nano trace levels at matrix”**

**M Jamal Uddin Ahmed, Tasnima Zannat**

August 2020

Publisher: LAP LAMBERT Academic Publisher, Brussels, Belgium, European Union

ISBN: 978-620-2-79545-6

### Paper Reviewer of Journal :

- 1) *International Journal of Environmental Chemistry*, Science Publishing Group, New York, New York, NY 10020 U.S.A.  
<https://www.sciencepublishinggroup.com/journal/peerreviewers?journalid=292>

### Paper Reviewer of International Conference:

- 1) 3rd International Conference on Advanced Technologies for Industrial Pollution Control (ATIPC-2022), was held On December 21 - 23, 2022 & Organized By Indian Institute Of Engineering Science & Technology, Shibpur, India.

- 2) 3rd International Conference On Research & Innovation In Civil Engineering(ICRICE-2022) Held On 7-8 January 2022 & organized by Department of Civil Engineering, Southern University Bangladesh

### **Editorial Board Member:**

- 3) 1<sup>st</sup>, 2<sup>nd</sup> & 3<sup>rd</sup> International Conference On Research & Innovation In Civil Engineering(ICRICE-2018 & ICRICE-2022), organized by Department of Civil Engineering, Southern University Bangladesh every two year.

### **Journal Publications:**

- Tasnima Zannat and Mohammad Jamaluddin Ahmed. Highly sensitive spectrophotometric method for the determination of vanadium in environmental, biological, food and soil samples using orthoaminophenol. *European Journal of Chemistry*, 2015, 6 (2), 141-150.
- M. Nasir Uddin, Tasnima Zannat and Salma Sultana. A simple spectrophotometric method for the determination of trace levels of molybdenum in industrial, environmental, biological and soil samples using benzoylacetone- benzoylhydrazonM. Jamaluddin Ahmed. *Analytical Methods*, 2014, 6, 2282-2293.
- Tasnima Zannat and Mohammed Jamaluddin Ahmed. A simple and rapid spectrophotometric method for the determination of iron in environmental, biological, pharmaceutical, food and soil samples using 1,2-dihydroxybenzene-3,5-disulfonic acid. *European Journal of Chemistry*, 2014, 5(1), 101-110.
- M. Jamaluddin Ahmed, Tasnima Zannat and Zannatul Fatema. A Simple Spectrophotometric Method for the Determination of Trace Level of Cadmium in Real, Environmental, Biological, Tobacco, Fertilizer and Soil Samples Using 2', 3, 4', 5, 7- Pentahydroxyflavone. *American Chemical Science Journal*, 2014, 4(4), 481-503.
- M. Jamaluddin Ahmed and Tasnima Zannat, "A simple spectrophotometric determination of copper in some real environmental biological, food and soil samples using salicyl aldehyde benzoyl hydrazonM." *Pakistan Journal of Analytical and Environmental Chemistry*, 2012,13(1), 22-35.
- "A Rapid Spectrophotometric Method for the Determination of Copper in Environmental, Biological and Soil Samples", M. Jamaluddin Ahmed, Tasnima Zannat, M. Saifuddin, and S. C. Bhattacharjee, *Green pages- The Global Directory for Environmental Technology*, 2010, page 4-10.
- "A Simple Spectrophotometric Method for the Determination of Molybdenum in Industrial, Environmental, Biological and Soil Samples Using, 2 -HydroxyacetophenonebenzoylhydrazonM", M. Jamaluddin Ahmed, K. Jakir Hossain and Tasnima Zannat, *Pakistan Journal of Analytical Chemistry*, 2005, Vol. 6, No. 2, Page 46-58.
- M. Jamaluddin Ahmed, D. A. Chowdhury, M. Nasir Uddin, K. Jakir Hossain, M. Didarul Alam Chowdhury and Tasnima Zannat, "2- hydroxyacetophenonebenzoylhydrazonM", a noble reagent for rare element, *Pakistan Journal of Analytical and Environmental Chemistry*, 2004, 5(2), Page 48-55.

### **Conference Proceedings:**

- Tasnima zannat\* and M. Jamaluddin Ahmed, " A highly sensitive and selective spectrophotometric method for the determination of vanadium in some real, environmental, biological, food and soil samples using 2-aminophenol. Proceedings of 38th Annual conference-2016, 31<sup>st</sup> March, 2017, Port Auditorium, organized by Bangladesh Chemical society. S1(B)OP-07, page no.13
- . "A Simple Spectrophotometric Method for the Determination of Trace Levels of Molybdenum in Industrial, Environmental, Biological and Soil Samples Using Benzoylacetone-benzoylhydrazonM". Presented orally as an invited lecture in the 3rd Pak-Turk Conference on Chemical Sciences( PAK TURK CCS-2012) which was held in Uludag University, Bursa, Turkey, during 13th- 15th, September, 2012. M. Jamaluddin Ahmed, Tasnima Zannat and Salma Sultana, *Proceedings of the 3rdPAK-TURK Conference on Chemical Science*, 2012, IL-13, p.18

- Tasnima Zannat, “ Green Chemistry and Green Engineering : Towards a sustainable Future”, BRGB-IDB Biodiversity Conference 2018, 12 May, 2018 , Organized by Biodiversity Research Group Bangladesh(BRGB), OP-23, Page no. 33
- Tasnima zannat\*, Ariful Islam, Ali Ahmed Bhuia, Mojammel Hossain,” Assesment of drinking water quality of squatter settlement: A case study of Motijharna slum area, Chittagong. Proceedings of 38th Annual conference-2016, 31<sup>st</sup> March, 2017, Port Auditorium, organized by Bangladesh Chemical society. S1-PP -10, Page.no.60
- Tasnima Zannat\*, Pankaj Barua, Onirban Barua, Redwan Alam Adnan, “Assesment of effluent Characteristics of different industries at Nasirabad Industrial Area” 4<sup>th</sup> National Conference on natural science and technology ( (NCNST’17), 24-25<sup>th</sup> March 2017, Asian University for women, ES-47. Page no. 46
- M. Ali ashraf<sup>1</sup>, Tasnima Zannat<sup>1\*</sup>, Md Shafiu Basar, M. Touhidul Islam Ripon, Bappa Talukdar, “ Arsenic Screening of tubewells within the city word : 24 North Agrabad under Chittagong city corporation, 1<sup>st</sup> International conference on research & Innovation in Civil Engineering, 12-13 January, 2018, Department of Civil Engineering, Southern University Bangladesh, OP, Page no. 12-18
- Tasnima Zannat<sup>1\*</sup>, Nurul Islam<sup>1</sup>, Mohammad Mahsin<sup>2</sup>, “Assessment of rainwater harvesting potential” 1<sup>st</sup> International conference on research & Innovation in Civil Engineering, 12-13 January, 2018, Department of Civil Engineering, Southern University Bangladesh, OP, Page no. 5-11
- Tasnima Zannat<sup>1\*</sup>, M. Ariful Islam<sup>1</sup>, Mohammad Hafizur Rahman<sup>2</sup> and Md. Mahbub Alam<sup>2</sup>, “Study on bottled drinking water quality available in Chittagong City, Bangladesh” 1<sup>st</sup> International conference on research & Innovation in Civil Engineering, 12-13 January, 2018, Department of Civil Engineering, Southern University Bangladesh, OP, Page no. 59-66
- F. T.Jahara, S. Akter, T. Zannat, B.Rokeya & A. Dev. Assessment Of Contribution Of Pollutants By Seven Selected Khals Into The River Karnafully. Proceedings of 3rd International Conference on Advances in Civil Engineering, 21-23 December 2016, CUET, Chittagong, Bangladesh Islam, Imam, Ali, Hoque, Rahman and Haque (eds.). pp 59-64.
- T. Zannat, B. Rokeya, M. Mostafa & S. M. E. Arafat. Water Quality Assessment of “Karnafully” River from Shikalbaha Power Station to Thai Food Khal during Flood Tide and Ebb Tide. Proceedings of 3rd International Conference on Advances in Civil Engineering, 21-23 December 2016, CUET, Chittagong, Bangladesh Islam, Imam, Ali, Hoque, Rahman and Haque (eds.). pp 112-117.
- Akbar, S. Akter, B.Rokeya, A.Dev & T. Zannat. Assessment On Solid Waste Manageme in Chittagong City, Bangladesh: A Case Study Of Sanonda R/A. Proceedings of 3rd International Conference on Advances in Civil Engineering, 21-23 December 2016, CUET, Chittagong, Bangladesh Islam, Imam, Ali, Hoque, Rahman and Haque (eds.). pp 53-58.
- “Highly sensitive spectrophotometric method for the determination of vanadium in environmental, biological, food and soil samples using orthoaminophenol.”Presented orally in the 16thAsian Chemical Congress, 2016(ACC 2016) which was held in BUET, Dhaka during 16-19 March, 2016. Abstract has been published in the Proceedings of Asian Chemical Congress. Tasnima Zannat and M. Jamaluddin Ahmed, 16th Asian Chemical Congress, 2016,AN-OP-08, page 98.
- “A Simple Spectrophotometric Method for the Determination of Trace Level of Cadmium in Real, Environmental, Biological, Tobacco, Fertilizer and Soil Samples Using 2/, 3, 4/, 5, 7-Pentahydroxyflavone” , M. Jamaluddin Ahmed, Tasnima Zannat and Fatema Zannat, *Bangladesh Society for Biochemistry and Molecular Biology Conference(BSBMB,2013)*,12-13 January, 2013. SBP-11, p.65.
- “A simple and rapid spectrophotometric method for the determination of iron in environmental, biological, pharmaceutical, food and soil samples using 1,2-dihydroxybenzene-3,5-disulfonic acid”Presented orally in the 35<sup>th</sup> Bangladesh Chemical Congress, 2012(BCC 2012) which was held in University of Dhaka during 07-09 December, 2012. Abstract has been published in the Proceedings of *Bangladesh Chemical Congress*, Tasnima Zannat, M. Jamaluddin Ahmed, 35<sup>th</sup> Bangladesh Chemical Congress 2012,OP-A28, page.42-43.
- “A Simple Spectrophotometric Method for the Determination of Copper in Some Real, Environmental, Biological, Food and Soil Samples Using Salicylaldehyde Benzoyl Hydrazone”Presented orally in the 34<sup>th</sup>Annual Conference of Bangladesh Chemical Society, 2011(BCS 2011)which was held in University of Dhaka during 19-20 December, 2011. Abstract has been published in the Proceedings of *Bangladesh Chemical Society*. M.J. Ahmed and T. Zannat, 34<sup>th</sup> Annual Conference of Bangladesh Chemical Society, 2011,PP-8,OP-Supplimentary, page.44.
- “Encapsulation of Sodium Bi Carbonate and use it for different flavoured carbonated powder soft drinks processing.” Amir Khasru Sikdar, Md. Kauser-Ul Alam, Tasnima zannat\*, 5<sup>th</sup> International conference on

Natural Science and Technology(ICNST' 18) 30-31 March, 2018, Asian University of Women, P-10, Page no.36

- “Assesment of water quality of Chittagong WASA”, Tasnima Zannat, Md. Iftekheruzzaman and Md. Osman, 1<sup>st</sup> National Conference on natural science and technology ( (NCNST'14), 12-13<sup>th</sup> April 2014, Asian University for women, P-05,page-16
- Tasnima Zannat<sup>\*</sup> , Bijoy Sankar Barua, , Kazi Babor & Biraj Sengupta “Determination of Aluminum in soil & water sample at Muradpur Industrial area, Chittagong Bangladesh” 3<sup>rd</sup> International conference on research & Innovation in Civil Engineering, 7-8 January, 2022, Department of Civil Engineering, Southern University Bangladesh, OP, Page no. 162-168
- Tasnima Zannat<sup>\*</sup> , Sayma Akter & Omar Faruque Hiron “Intrusion of salinity in the Coastal Belt Area: A case study In Chittagong, Anowara to Mirasharai Upazila” 3<sup>rd</sup> International conference on research & Innovation in Civil Engineering, 7-8 January, 2022, Department of Civil Engineering, Southern University Bangladesh, OP, Page no. 193-100

#### **Participated as Keynote Speaker:**

1. “Green Chemistry and Green Engineering : Towards a sustainable Future” Presented orally on April 04 ,2018, at Seminar hall, Department of Civil Engineering, Southern University Bangladesh.
2. A Simple and Rapid Spectrophotometric Method for the Determination of Iron in Environmental, Biological, Pharmaceutical, Food and Soil Samples Using 1,2-Dihydroxybenzene-3,5-Disulfonic Acid. Presented on April 19, 2016 at Seminar hall, Department of Civil Engineering, Southern University Bangladesh.
3. Heavy Metal Pollution at Ship Breaking area, Chittagong, Presented orally on March, 25, 2015 at Seminar hall, Department of Civil Engineering, Southern University Bangladesh.
4. Open Seminer on “ Determination of Heavy and Toxic metals in Environment” for Ph.D course completion, Department of Chemistry, University of Chittagong, 2015

#### **Participated as a panelist and Organizer of the Conference**

- Participated as a panelist in National Conference on natural science and technology (NCNST'16) in “Women in Science” program organized by Asian University of Women, Bangladesh
- Participated as a panelist in the seminar on “Assessment of Rain water of Chittagong City” organized by Department of Civil Engineering, Southern University Bangladesh, 06 April, 2017
- Participated as organizer of the “International Conference on Sustainable Development(ICSD-2015),Implementing the Sustainable Development Goals(SDGs): Getting Started” November 21-22, 2015, Southern University Bangladesh.
- Participated as organizer of the 1<sup>st</sup> , 2<sup>nd</sup> & 3<sup>rd</sup> International Conference on Research and Innovation in Civil Engineering(ICRICE-2018), organized by Department of Civil Engineering, Southern University Bangladesh every two year

#### **Participation in workshop and seminar**

- Successful participation in a workshop on ‘Online Academic Management’ held at Southern University Bangladesh on 11 October 2018 organized by Institutional Quality Assurance Cell (IQAC), Southern University Bangladesh.
- Successful participation in a Seminar on ‘Online Academic Management’ held at Southern University Bangladesh on 11 October 2018 organized by Institutional Quality Assurance Cell (IQAC), Southern University Bangladesh.
- Successful participation in a workshop on ‘Research Methodology for Science & Engineering’ held at Southern University Bangladesh on 14 August 2018 organized by Self Assessment Committee, Department of Civil Engineering, Southern University Bangladesh.
- Successful participation in a workshop on ‘Post Self-Assessment Improvement Plan’ held at Southern University Bangladesh on 11 June 2018 organized by Self Assessment Committee, Department of Civil Engineering, Southern University Bangladesh.

- Successful participation in a workshop on ‘Assessment Strategy for Students’ held at Southern University Bangladesh on May 28, 2018 under the initiative of Institutional Quality Assurance Cell (IQAC) of the University.
- Successful participation in a workshop on ‘Modern Teaching Methodology’ held at Southern University Bangladesh on May 27, 2018 under the initiative of Institutional Quality Assurance Cell (IQAC) of the University.
- Successful participation in a workshop on ‘Guidelines for Post Self Assessment Improvement Plan’ held at Chittagong Veterinary and Animal Sciences University on April 2018 under the initiative of HEQEP, UGC, Bangladesh.
- Successful participation in a workshop on ‘Review & Modification of University Rules, Regulations and Ordinance for Good Governance’ held at Southern University Bangladesh on March 20, 2018 under the initiative of Institutional Quality Assurance Cell (IQAC) of the University.
- Successful participation in a workshop on ‘Good Governance in the Higher Education of Bangladesh’ held at Southern University Bangladesh on March 19, 2018 under the initiative of Institutional Quality Assurance Cell (IQAC) of the University.
- Successful participation in a workshop on ‘Advanced Research Methodology: Tools & Techniques’ held at Southern University Bangladesh on February 01, 2018 under the initiative of Institutional Quality Assurance Cell (IQAC) of the University.
- Successful participation in a workshop on ‘Role and Responsibility & Ethical Principles of University Teachers’ held at Southern University Bangladesh on January 31, 2018 under the initiative of Institutional Quality Assurance Cell (IQAC) of the University.
- Successful participation in a workshop on ‘University Act, Policies, Ordinance and Rules’ held at Southern University Bangladesh on September 26, 2017 under the initiative of Institutional Quality Assurance Cell (IQAC) of the University.
- Successful participation in a workshop on ‘Online Teaching, Examination and Evaluation Techniques’ held at Southern University Bangladesh on February 10, 2017 under the initiative of Institutional Quality Assurance Cell (IQAC) of the University.
- Successful participation in a workshop on ‘Online Academic Management’ held at Southern University Bangladesh on February 09, 2017 under the initiative of Institutional Quality Assurance Cell (IQAC) of the University.
- Successful participation in the workshop on ‘Research Methods, Tools & Techniques and Scientific Method of Report Writing’ held at Southern University Bangladesh on December 11, 2016 under the initiative of Institutional Quality Assurance Cell (IQAC) of the University. UGC/WB HEQEP Project.
- Successful participation in the ‘Self Assessment Workshop on Sharing the Survey Findings & Analysis’, organized by Self Assessment Committee, Department of Civil Engineering on December 05, 2016 at the Conference Room, Southern University Bangladesh. UGC/WB HEQEP Project.
- Successful participation in the ‘Self Assessment Workshop on Teaching Methodology & Governance’ organized by Self Assessment Committee, Department of Civil Engineering on June 25, 2016 at the Conference Room, Southern University Bangladesh. UGC/WB HEQEP Project.

### **Training:**

1) Training on **How to operate the instrument( HPLC)** organized by Bangladesh Center of Science and Industrial Research (BCSIR), 2010

2) Training on “**How to operate the instrument( UV-Visible Spectrophotometer, Flame Photometer, Atomic Spectrophotometer, HPLC, GC and Mass Spectrophotometer, IR-Spectrophotometer, Spectrofluorometer)** organized by Department of Chemistry, University of Chittagong, 2013

- Successfully completed a training program on ‘Salient Elements of Outcome-Based Curriculum’ held at Southern University Bangladesh on 18 July 2018 under the initiative of Institutional Quality Assurance Cell (IQAC) of the University. UGC/WB HEQEP Project.

- Successfully completed a training program on ‘Outcome-Based Education: Emergence, Benefits, Approaches and Structure’ held at Southern University Bangladesh on 17 July 2018 under the initiative of Institutional Quality Assurance Cell (IQAC) of the University. UGC/WB HEQEP Project.
- Successfully completed a training program on ‘Policy of University, Software Information System, Teaching at Higher Education, Research Methodology and Teaching Professional Integrity’ held at Southern University Bangladesh on 8 May 2017. Organized by the Authority of Southern University.
- Successfully completed a training program on ‘Learning Outcome, Assessment System, Curriculum Design and Self-Assessment’ held at Southern University Bangladesh from 19 to 21 July 2016 under the initiative of Institutional Quality Assurance Cell (IQAC) of the University. UGC/WB HEQEP Project.
- Successfully completed a training program on ‘Training of Trainer’ held at Department of Civil Engineering, Southern University Bangladesh. Organized by the Authority of Southern University.

#### **Membership of Scientific and Professional Societies:**

- Life Member – Bangladesh Chemical Society
- Life Member – Bonding(Alumni association, Department of Chemistry, University of Chittagong)
- Honorary Member – SUBCEAA(Southern University Bangladesh, Civil Engineering Alumni association)
- Organizer and life member--Banskhali United High School Alumni Association
- Organizer and life member--“Banskhali Foundation” Banskhali, Chittagong

#### **Conducted Courses:**

1. Chemistry
2. Chemistry Lab
3. Basic Science
4. Environmental Science
5. Environmental Engineering-I
6. Environmental Engineering Lab-I
7. Undergraduate Thesis, Department of Civil Engineering

#### **Research Interest:**

1. Analytical Chemistry
2. Environmental Chemistry
3. Environmental Engineering
4. Green Chemistry & Green Engineering
5. Climate Change
6. Water Resources

#### **Extra Academic Qualification:**

Capable to handle the instrument of UV-visible Spectrophotometer, Spectrofluorometer, Atomic absorption spectrophotometer(AAS), Flame Photometer, GC & HPLC.

#### **Co- Curricular-Activities:**

- Singing, Playing Harmonium and Keyboard, Anchoring(Both English and Bengali), Poem writing and recitation,
- Capable to organize the seminar, symposium, workshop, cultural programs and work as a team leader of any program.