

Name: Dr. MST SHAMSUN NAHAR ナハ-ル モサマトサムスン美和
Nationality: Japanese
Institution: Eurofins Earth Techno (Environmental Testing), Toyama, Japan

Activities

Inter-university academic exchange agreement and selection of Scholarship students
I am **Dr. Mst. Shamsun Nahar**, cooperating in the selection of the Japanese
Government

Scholarship at the University of Toyama and arranging inter-university academic exchange
agreement:

1. MOU (Memorandum of Understanding) with UT and the University of Rajshahi

Recently, I am organizing MOU (Memorandum of Understanding) between the
University of Rajshahi (second biggest university in Bangladesh) with **University of
Toyama**. In March 2023, Professor Jing Zhang visited the University of Rajshahi,
Bangladesh for this purpose and made a meeting with the Vice Chancellor of the
University of Rajshahi for academic exchange with UT.

2. Introducing Asian students (Bangladesh, Pakistan, Indonesia, India) to UT

1. 2024 年 Masters student

Sana Arshad

Professor Jing Zhang, University of Toyama, Faculty of Science, Department of
Environmental Biology and Chemistry

2. 2022 年 Masters student

Mst Tania Khatun

Professor Jing Zhang, University of Toyama, Faculty of Science, Department of
Environmental Biology and Chemistry, Japan

3. 2021 年 Post Doctoral

Dr. Enamul Haque, Associate Professor, Jahangirnagar University

Professor Jing Zhang, University of Toyama, Faculty of Science, Department of
Environmental Biology and Chemistry, Japan

4. 2018 年 PhD (Monbukagakusho) student

Md. Nurunnabi Mondal

Professor Keiji Horikawa

University of Toyama, Toyama, Japan

Department of Environmental Biology and Chemistry

5. 2011 年 PhD (Monbukagakusho) student

Roy Andreas

Senior Lecturer, Chemistry Department, Jenderal Soedirman University

Professor Jing Zhang, University of Toyama, Faculty of Science, Department of
Environmental Biology and Chemistry

6. 2009 年 PhD (Monbukagakusho) student

Dr. Md. Abul Kashem (PhD)

Prof Masayasu Suzuki

Department of Electric and Electronic Engineering

Faculty of Engineering, University of Toyama, 3190 Gofuku, Toyama 930-8555, Japan
University of Toyama

7. 2006 年 Masters

Md. Ashafuddula

Professor Tomiichi Hoshino

Faculty of Economics, Department of Economics, University of Toyama

8. 2006 年 (Monbukagakusho, JSPS) student

Md. Chanmiya Sheikh

Prof. Hiroyuki Morita

Department of Applied Chemistry, Faculty of Engineering, University of Toyama, 3190 Gofuku, Toyama 930-8555, Japan

Publication list

I am Dr. Mst Shamsun Nahar Miwa, a Japanese national, was born in Bangladesh, and completed my Ph.D. degree in the Department of Environmental Applied Chemistry, Faculty of Engineering, University of Toyama, Japan, Now I have been working as an Environmental Analytical Chemical Researcher in Eurofins Earth Techno Co. Ltd, (Environmental Testing) Toyama, Japan; continuing research activities in Japan Science and Technology.

Mst. Shamsun Nahar (PhD)

Ph.D. supervisor

Department of Chemical and Biochemical Engineering, Faculty of Engineering, University of Toyama, 3190 Gofuku, Toyama 930-8555, Japan.

Kiyoshi Hasegawa, Professor (2002-2007)

Department of Chemical and Biochemical Engineering, Faculty of Engineering, University of Toyama, 3190 Gofuku, Toyama 930-8555, Japan

Shigehiro Kagaya, Professor (2002-2007)

Department of Environmental Applied Chemistry, Faculty of Engineering, University of Toyama, 3190 Gofuku, Toyama 930-8555, Japan

Co-work

Mst. Shamsun Nahar and Jing Zhang, Kiyoshi Hasegawa, Shigehiro Kagaya, Shigeyasu Kuroda, Phase transformation of anatase-rutile crystals in doped and undoped TiO₂ particles obtained by the oxidation of polycrystalline sulfide, Mater. Sci. Semi. Process, 12 (2009) 168-174. (Cited by in Scopus:17).

Mst. Shamsun Nahar, Kiyoshi Hasegawa, Shigehiro Kagaya, and Shigeyasu Kuroda, Adsorption and aggregation of iron-hydroxy complexes during the photodegradation of phenol using the iron-added-TiO₂ combined system, J. Hazard. Mater Vol.162, pp. 351-355, February 2009. (Cited by in Scopus: 18).

Mst. Shamsun Nahar, Kiyoshi Hasegawa, Shigehiro Kagaya, and Shigeyasu Kuroda, Comparative assessment of the efficiency of Fe-doped TiO₂ prepared by two doping methods and photocatalytic degradation of phenol in domestic water suspensions, IOP Sci. Technol. Adv. Mater.8, 286-291, 2007.

Mst. Shamsun Nahar, Kiyoshi Hasegawa, Shigehiro Kagaya, and Shigeyasu Kuroda, Degradation of phenol under visible light irradiation using TiO₂ with Fe(III) and easy sedimentation of TiO₂ particle, Bull. Chem. Soc. Jpn., Vol. 80, pp. 1017-1019, May 2007.

Mst. Shamsun Nahar, Kiyoshi Hasegawa, Yosuke Ohki, Kenji Izawa, and Shigehiro Kagaya, Enhanced degradation of phenol in an electrolyte-containing model wastewater using a combined photocatalyst of TiO₂ and Fe(ClO₄)₃ in a continuous flow-type shallow photoreactor combined with coagulation of TiO₂, J. Ecotech. Res. Vol. 13, pp. 21-27, May 2007.

Mst. Shamsun Nahar, Kiyoshi Hasegawa, Shigehiro Kagaya, Photocatalytic degradation of phenol by visible light-responsive iron-doped TiO₂ and spontaneous sedimentation of the TiO₂ particles. *Chemosphere*, Vol. 65, pp. 1976-1982, June 2006..

Research (2007-2008)

Shigeyasu Kuroda, Professor

Department of Chemical and Biochemical Engineering, Faculty of Engineering,
University of Toyama, 3190 Gofuku, Toyama 930-8555, Japan

Mst. Shamsun Nahar, Kiyoshi Hasegawa, Shigehiro Kagaya, and Shigeyasu Kuroda, Adsorption and aggregation of iron-hydroxy complexes during the photodegradation of phenol using the iron-added-TiO₂ combined system, *J. Hazard. Mater* Vol.162, pp. 351–355, February 2009.

Post-doctoral Research (2008-2013)

Supervisor: Professor Jing Zhang

University of Toyama Faculty of Science

Department of Chemical and Biochemical Engineering, University of Toyama, 3190 Gofuku, Toyama 930-8555, Japan

Mst. Shamsun Nahar, Jing Zhang, Akira Ueda and Fujishiro Yoshihisa, Severe Water Problem Investigation in Urban Areas of a Developing Country: the Case of Dhaka, Bangladesh, *Environ Geochem Health*. 2014 Dec; 36(6):1079-94.

Mst. Shamsun Nahar and Zhang, J. Recovery of trace metal isotopes in seawater samples using multifunctional Neem (*Azadirachta indica*) biosorbent: A comparison with monofunctional NOBIAS–chelate–PA1 resin, *ACS Sustainable Chem. Eng.* 2013, 1(5), 488–495.

Mst. Shamsun Nahar and Zhang, J. Impact of natural water chemistry on public drinking water in Japan, *Springer, Environ. Earth Sci.* 69 (1), 127-140, 2012.

Mst. Shamsun Nahar and Zhang, J. Assessment of sources variation in potable water quality including organic, inorganic and trace metals, *Springer, Environ. Geochem. Health*, 2012, 34, 141-150.

Mst. Shamsun Nahar and Zhang, J. Effects of electrolyte, deposition current density and temperature on the physicochemical properties of synthesized conducting polyaniline. *Taylor and Francis, Polym.- Plast. Technol. Eng.* 2012, 51(14), 1416-1423.

Mst. Shamsun Nahar, Jing Zhang, Concentration and distribution of organic and inorganic water pollutants in Eastern Shizuoka, Japan, *Toxicol Environ Chem* 2011, 93 (10), 1946-1955.

Mst. Shamsun Nahar and Jing Zhang, Analysis of damaged silicon rubber hose, *American J Anal Chem*, 2011, Vol. 2, pp. 363-370.

Mst. Shamsun Nahar and Jing Zhang, Charge transfer in anion doped polyaniline, ISBN 978-1-84626, IPCSIT(ISSN:2010-460X), Thomson ISI (ISTP)

Mst. Shamsun Nahar, Jing Zhang, Influence of biogeochemical qualities of Shizuoka water on the degradation of PVC shower hose, *J. Environ. Protect.* 2010, Vol. 2, pp. 204-212.

Mst. Shamsun Nahar and Jing Zhang, Kiyoshi Hasegawa, Shigehiro Kagaya, Shigeyasu Kuroda, Phase transformation of anatase–rutile crystals in doped and undoped TiO₂ particles obtained by the oxidation of polycrystalline sulfide, *Mater. Sci. Semi. Process*, 12 (2009) 168-174.

Mst. Shamsun Nahar, The Use of $\delta^{18}\text{O}$ as an Indicator of Vanadium Movement in a Dormant Stratovolcano Region, *Toxicological and Environmental Chemistry · Volume 99*, Issue 5-6, Pages 735-752, 2017.

Mst. Shamsun Nahar, An introduction to the new degradation of polyvinyl chloride (PVC) shower hose. *Plastics Rubber and Composites*, Volume 46, Issue 5, Pages 212-222, 2017.

Mst. Shamsun Nahar, et al, Geochemical Color Maps of the Dhaka Water, Bangladesh—New Map Presentations for Toxic Metals and Isotopes. *Journal of Geoscience and Environment Protection*, 2017, 5, 134-151 2017.

Post-doctoral Research (2011-2012)

Supervisor: Professor Akira Ueda

Department of Chemical and Biochemical Engineering, University of Toyama, 3190 Gofuku, Toyama 930-8555, Japan

Mst. Shamsun Nahar, Jing Zhang, Akira Ueda and Fujishiro Yoshihisa, Severe Water Problem Investigation in Urban Areas of a Developing Country: the Case of Dhaka, Bangladesh, Environ Geochem Health. 2014 Dec; 36(6):1079-94

Combined co-works with UT and company

1. 川上 智規 (2019-2020)

富山県立大学

工学部 環境・社会基盤工学科

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2. 丸茂先生 (2015-2017)

富山大学理学部

3. Ammos (2016-2018)

ポエック株式会社 ライフサイエンス事業部

〒930-0866 富山県富山市高田 527 富山県総合情報センター4F

4. Co research works with UT and Bangladesh

Narayanganj city Corporation (2019-still)

Dr. Selina Hayat Ivy (Mayor of Narayanganj District Bangladesh)

Co-works in Narayan gang city corporation, Dhaka Bangladesh

5. Dr. Md. Nurunnabi Mondal (2016-2017)

Associate Professor

Department of Fisheries Management

Faculty of Fisheries

Bangabandhu Sheikh Mujibur Rahman Agricultural University, Gazipur-1706, Bangladesh.

6. Joint work with University of Toyama and TOYOX and TOTO Co. Ltd. 2009-2010:

I collaborated with Japanese company (Toto and Toyox) from May, 2009 to March, 2010, to find investigation procedure of unknown physical changes in shower hoses by assessing the bio-physico-chemical qualities of Eastern Shizuoka Water. I also investigate the damaged silicon rubber hose from TOYOX company, that are used in China (Hang-Zhou Hangchou) Juice company.