

Brief Report

WasteSafe 2025 – the 9th International Conference on Sustainable Solutions for Waste Management in Developing Countries

22-23 February 2025 at Dhaka, Bangladesh

Like the past eight time, **WasteSafe 2025** - the 9th International Conference on Sustainable Solutions for Waste Management in Developing Countries, with theme areas of (i) Solid Wastes and Faecal Sludge Management, (ii) Plastics, Medical and EEE Wastes Management and (iii) Integrated Solid Waste and Wastewater Management & Treatment, was held successfully in Dhaka, Bangladesh during 22-23 February 2025. The conference was jointly organized by WasteSafe Environmental Limited, Bangladesh; Bauhaus University Weimar, Germany; University of Padova, Italy. The supports are provided by the strategic partners as International Waste Working Group (IWWG), WaterAid Bangladesh and SNV Bangladesh. The conference was sponsored partially by Mutual Trust Bank PLC. Technical papers were invited through website (www.wastesafe.info) and information bulletin from the academicians/researchers/professionals/social activists working on waste management around the worldwide well before the conference date.

After review, a total of 146 technical papers were selected for publications into the Conference Proceedings. In addition, the nominated 2 Keynote papers and 1 Theme paper are also included in the proceedings. In the Conference during 22-23 February 2025, Oral Presentation were delivered in the Inauguration session for theme lecture, the keynote sessions for 2 keynote papers and 10 parallel sessions for technical papers. In addition, there is also one poster session to demonstrate the research findings. Academicians, researchers, professionals and other personalities from five different countries - Bangladesh, Brunei, Italy, Germany and Nepal - submitted their scientific contributions in this conference. The papers are categorized in the areas of Solid wastes, Faecal sludge, Wastewater treatment, Plastic wastes, Electrical and Electronics Equipment Wastes, Construction and Demolition Wastes and Others. The papers have been lightly edited to homogenize the style and to revise the contents based on reviewers' comments. However, each individual author holds the final responsibility for the contents, originality and quality of the papers. Only the extended abstracts of the accepted papers are printed in the proceedings, while full papers are available in pdf files.

The Conference was held in the Multipurpose Hall of Cadel College Club premises at Purbachal, Dhaka, Bangladesh. *More than 100 academics*, researchers, professionals, students and other figures attended in the conference.



Photo 1(a) Inauguration Session and 1(b) Deliberation of Theme Lecture of WasteSafe 2025.

In WasteSafe 2025, a good number of experience and research findings were presented by young researchers from different institutes, mainly from developing countries. The critical discussions and suggestions that emerged from presentation of papers will undoubtedly assist these researchers in their studies. Some of the topics highlighted during discussion included difficulties in achieving sustainable solid waste and faecal management practices in developing countries, lack of public awareness, need for community participation, organizational reforms, law enforcement, potential application of composting, recycling, strong need for Plastics, EEE, Medical and Demolition wastes management and implementation of sustainable technologies for integrated wastewater management. Other original research works dealt with organic wastes, leachate treatment, construction of sustainable landfill using locally available building materials, optimization of co-composting and alternate natural materials to replace the use of plastics wastes.



Photo 2 Group photo of the participants in the WasteSafe 2025 at Dhaka.

Emeritus Professor Dr. M. Feroze Ahmed inaugurated the conference as the Chief Guest on 22 February Saturday at 9:30 AM. Prof. Dr. Muhammed Alamgir, Chair, WasteSafe 2025 International Conference and former Vice-Chancellor of Khulna University of Engineering & Technology (KUET) and Former Chairman (Additional Charge) & Member of University Grants Commission of Bangladesh (UGC), delivered his welcome speech and presided over the function. Mr. Gregor Biastoch from Bauhaus University Weimar, Germany gave his address as the Co-Organizers. On behalf of another co-organizer - University of Padova, Italy, the speech of Prof. Dr. Maria C. Lavagnolo, was also read out by Ms. Senta Berner. As the Special Guest, Mr. Md Khairul Islam, Regional Director, South Asia, WaterAid shared his long experience and insightful thoughts. Mr. Rajeev Munankami, Global Coordinator, SUWC, SNV addressed on behalf of the strategic partners. In the inauguration session, Prof. M. Feroze Ahmed delivered the theme lecture entitled as



Photo 3(a) Keynote session and 3(b) Participation from the audience in the discussion.

'Sustainable solutions for waste management in developing countries.' In the speech as the Chair of the Conference, Prof. Alamgir mentioned that in the 16 years history of WasteSafe Conference, for the first time, it is taking place in Dhaka instead of Khulna and organizing by WasteSafe Environmental Limited, Bangladesh. He also assured that WasteSafe Conference will continue as a completely non-profitable academic, research and professional event. He expressed his profound gratitude to all who supported this event in this transition and crucial time.

After Inaugural session and Tea break, Keynote session was held presided over by Dr. Abdullah Al Mueyed, CWIS-FSM support cell of DPHE, Bangladesh, in which two papers were delivered. Dr. Tariq bin Yousuf, Solid Waste Management Specialist, former Additional Chief Engineer of DNCC, talked on "Solid waste management in Bangladesh: Critical issues and Paradigm shift", while Dr. Tanvir Ahmed, Professor, Department of Civil Engineering, Bangladesh University of Engineering & Technology (BUET) delivered 2nd keynote paper entitled as "Achieving safely managed sanitation in Bangladesh: How to maximize benefits from investments in FSM systems in municipalities".



Photo 4 Handed over of "WasteSafe Lifetime Achievement Award 2025".

Waste researchers, professionals and experts from different countries presented their findings in the 2 days conference in 10 parallel technical sessions chaired by respected persons working in this discipline. A total number of 74 technical papers were presented in oral sessions, where the participants exchange views among themselves in related fields of interest in a warm and lively environment. In the evening of day one, 22 February 2025, 'WasteSafe Lifetime Achievement Award 2025' was declared by the Chair Prof. Alamgir and the citation was given by Mr. Gregor Biastoch, while the award was handedover by the Chief Guest of this event, Engr. Rezaul Karim, Chairman, Confidence Group. The hon'ble recipient of the award, Prof. Dr. M. Feroze Ahmed expressed his feelings through a brief speech. Since 2017, this award is given biennially to recognize the credential to an individual who has made outstanding contribution in the advancement of waste management. Immediately after Conference Dinner, as a part of social event, a glimpse of traditions of Bengali culture - dance and music - were displayed by the local artists.



Photo 5(a) Presentation of technical paper, 5(b) Handed over of Best paper award by the Chief Guest.

The WasteSafe 2025 International Conference ended with a simple Closing Session on February 23, 2025, presided over by Prof. Alamgir to evaluate the conference and to have specific suggestions and guidelines for the next WasteSafe Conference. Professor Dr. Qumrul Ahsan, Vice-Chancellor of University of Asia Pacific, Dhaka, graced the session as the Chief Guest, while Mr. Gregor Biastoch of BUW, Germany and Dr. Shankar Shrestha of NDRI, Nepal were present as the guests and expressed their evaluations and views. The participants took part in the open discussion and they highly appreciated the events and realized its necessity and suggested organizing a similar International

Conference in other developing country every odd year. Moreover, based on the feedback from the participants and the areas of technical papers presented in WasteSafe 2025, it is decided to keep the same thematical areas in the next conference - WasteSafe 2027. After the open discussion, the chair declared the names of 3 best papers in the areas of solid waste and faecal sludge, while the Chief Guest, Prof. Ahsan handover the certificate to them. The title of papers and recipients are: (a) Testing the biodegradability of jute to improve End-of-life cycle assessment – G. Biastoch, (b) Utilization of medical waste incineration fly ash in compressed stabilized earth blocks - T.A. Biruni, and (c) City-wise inclusive sanitation (CWIS) in Bangladesh: Advancing towards SDG 6.2 - S.Mukharjee.



Photo 6 Presentation of traditional cultural show during Conference Dinner on 22 February 2025.

Prof. Alamgir also acknowledged the contributions of the co-organizers, partners, sponsor and individuals. He thanked the Club authority for support and the volunteers, students from DU, KUET, NSU, ULAB, who actively supported the events and contributed towards its success. Finally, the chair declared that the next **WasteSafe 2027 – the 10th International Conference will take place in Dhaka, Bangladesh on 01-02 February 2027.**



Photo 7 Curtain drops of WasteSafe 2025 by saying Goodbye and wishing to see again.