

# Curriculum Vitae

## PERSONAL INFORMATION:

Name : **Dr. N. M. Golam Zakaria**  
Date of Birth : February 23, 1974  
Present Position : **Professor**  
Address : Department of Naval Architecture & Marine Engineering  
Bangladesh University of Engineering & Technology (BUET),  
Dhaka-1000, Bangladesh  
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Nationality : Bangladeshi by birth

## PROFESSIONAL EXPERIENCE:

<b>Position</b>	<b>Organization</b>	<b>Duration</b>
Visiting Professor	Institute of Maritime Sciences and Technology, Dokuz Eylul University, Izmir, Türkiye	05 July to 12 July 2025 Under Erasmus+ Program KA171 Project
Head	Department of Naval Architecture & Marine Engineering, BUET, Dhaka, Bangladesh	29 <sup>th</sup> February 2020 to March 02, 2022
Adjunct Faculty <b>(Professor)</b>	Department of Naval Architecture & Marine Engineering, MIST Dhaka, Bangladesh	June 2021 to January 2022
Visiting Professor	Ecole Centrale de Nantes, France for academic year 2016-2017	June 12, 2017 to June 18, 2017
Adjunct Faculty <b>(Professor)</b>	Dept. of Port and Shipping Management, BSMRMU, Mirpur-12 Dhaka, Bangladesh	October 2016 to March 2017
Adjunct Faculty <b>(Professor)</b>	Department of Naval Architecture & Marine Engineering, MIST Dhaka, Bangladesh	January 2015 to June 2015
Visiting Professor	Ecole Centrale de Nantes, France for Academic year 2013-2014	May 11, 2014 to June 3, 2014
Professor	Department of Naval Architecture & Marine Engineering, BUET, Dhaka, Bangladesh.	5 <sup>th</sup> November 2012 to date
Associate Professor	Department of Naval Architecture & Marine Engineering, BUET, Dhaka, Bangladesh.	February 28, 2010 to 4 <sup>th</sup> November 2012
Assistant Professor	Department of Naval Architecture & Marine Engineering, BUET, Dhaka, Bangladesh	25 <sup>th</sup> August 2002, to 27 Feb. 2010
Researcher	Laboratory of Ocean System Design, Yokohama National University, Yokohama, Japan	October 2002~ March 2006
Lecturer	Department of Naval Architecture & Marine Engineering, BUET, Dhaka, Bangladesh	4 <sup>th</sup> November 1999 to 24 <sup>th</sup> August 2002
Teaching Assistant	Department of Naval Architecture & Marine Engineering, BUET, Dhaka, Bangladesh	January 1999 to June 1999

### **ACADEMIC RECORDS:**

<b>Degree Awarded</b>	<b>Institution</b>	<b>Completed in</b>	<b>Discipline</b>
Ph.D.	Yokohama National University, Yokohama, Japan	2006	Naval Architecture & Ocean Engineering
M.Sc. Engineering	Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh	2002	Naval Architecture & Marine Engineering
B.Sc. Engineering	Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh	1998	Naval Architecture & Marine Engineering
Higher Secondary Certificate (H.S.C.) (Equiv. to A level)	M.C. College, Sylhet, Bangladesh	1991	Main Area: Physics, Chemistry, English, Mathematics, Zoology and Botany
Secondary School Certificate (S.S.C.) (Equiv. to O level)	The Aided High School, Sylhet, Bangladesh	1989	Main Area: Physics, Chemistry, English, Mathematics and Biology

### **KEY AREAS OF EXPERTISE:**

- Ocean Wave Mechanics
- Hydrodynamics, Motion and Stability of Floating Bodies
- Shipbuilding & Maritime Economics
- Marine Pollutions & Energy Efficiency Design
- Ship Recycling.

### **TEACHING INTEREST:**

- Fluid Mechanics
- Hydrodynamic Loading of Floating Bodies
- Maritime Regulations
- Ship Building Technology
- Hydrostatics and Stability
- Maritime Economics and Transportation
- Marine Renewable Energy

### **PROFESSIONAL WORK AT NATIONAL AND INTERNATIONAL LEVELS:**

- Team member for the Feasibility Study of Bangladesh Coast Guard (BCG) Project for Enhancing Capacity in Marine Safety & Security, August 2025.
- Team member for the review of design of Urea Jetty Structure and Fendering System for Karnafuli Fertilizer Company (KAFCO) Limited at Chittagong, July 2025.
- Team Leader for assessment and verification of Ship Recycling Facility Plan (SRFP) submitted by Jamuna Ship Breakers for Ministry of Industries of Govt. of the People's Republic of Bangladesh in May 2025.
- Team Leader for the consultancy Project on Inland Water Navigation in the Sundarban Region (Bangladesh) for the World Bank, Bangladesh from December 2023 to May 2024
- Team member for the designing of the new TSP Jetty for TSP Complex Ltd. (TSPCL) at North Patenga, Chittagong (ongoing).
- Team Leader (NAME Part) for the Top Supervision of construction work and related consulting service for the Establishment of Logistics and Fleet Maintenance Facilities for Bangladesh Coast Guard (BCG) at Gazaria, Munshigonj from June 2023

- Team Leader for the consultancy project on Establishment of Logistics and Fleet Maintenance Facilities (Design and Drawing Phase) for Bangladesh Coast Guard” at Gazaria, Munshigonj from July 2020 to June 2022
- Team member of the multidisciplinary Project for Technical Support Services for the Engineering, Procurement and construction including installation and commissioning of a complete ship docking and repair facility at BNS Mongla for Bangladesh Navy (ongoing since 2020).
- Team member for consultancy services on feasibility study for the development of BFDC dockyard and other ancillary facilities at Mongla, 2024.
- Team member for the Feasibility Study for the Construction of Lighterage Jetty and Service Jetty on the bank of Karnaphuli River near Hamid Char and Adjoining Areas for Chittagong Port Authority (ongoing since 2021).
- Team member of the Consulting Services for the manufacturing & Supervision of 35 dredges and ancillary crafts with other accessories for Bangladesh Inland Transport Authority (BIWTA) (on going since 2021)
- Team member for constancy services for feasibility study for procurement of 2 (Two) high power salvage vessels with allied facilities, different types of 61(Sixty One) service vessels including 6(Six) river cleaning vessels & different types of 132 (One hundred thirty two) pontoons for Bangladesh Inland Water Transport Authority (BIWTA), 2021
- Team Leader for assessment and verification of Ship Recycling Facility Plan (SRFP) submitted by PHP Ship Breaking and Recycling Industries Limited for Ministry of Industries of Govt. of the People’s Republic of Bangladesh in July 2018.
- Team member for preparation of stability booklet of GRP/FRP catamaran ship of Chittagong Veterinary and Animal Science University in May 2018.
- Team member for verification of structure and power and preparation of stability booklet for Cabin cruiser speed boat in May 2018.
- Team member for certification of imported 20 inch CSD Dregder, Tug, House Boat and Floaters in June 2018.
- Team member for the study on solid and faecal sludge management system and designing in railway, waterway and highway of Bangladesh for Department of Public Health Engineering (DPHE), from 2018 to 2022.
- Consortium Member for Provision of Capacity Building Services for IMO-NORAD Project on Safe and Environmentally Sound Ship Recycling in Bangladesh-Phase II (SENSREC-PH2) with Applecross Group LLC , USA ; Strathclyde University; World Maritime University, Sweden and others. Ongoing
- Consortium Member for Training Content Development for IMO-NORAD Project on Ship Recycling- SENSREC WP4, Part-II with ACS Marine Risk Control Ltd., Glasgow, UK; Strathclyde University,UK; World Maritime University, Sweden and others from April 2016 to November 2016
- Consortium Member for the review and upgrade of existing training courses on occupational health safety and environmental issues and piloting of the new training materials for IMO-NORAD Project on Ship Recycling- SENSREC WP4, Part-I with Strathclyde University,UK; Dokuz Eylul University,Turkey; World Maritime University, Sweden and others from September 2015 to January 2016
- Team member for Slipways Capacity Certificate for Chittagong Marine Dockyard at Kolagaon, Patiya, Karnafuli, Chittagong in April 2017
- Team member for verification of proper use of shipbuilding materials imported by Aman Shipyard Limited, Baidyer Bazar, Sonargaon, Narayanganj on March 2017
- Team Leader for the verification of proper use of shipbuilding materials imported by Radiant Marine Design & Services Ltd and Radiant Shipyard Ltd on November 2016.
- Member of consultancy services for feasibility study and design, drawing, estimation and preparation of BOQ for construction of slipways for Bangladesh Coast Guard, Gazaria, Munshigonj, 2016
- Member of consultancy team for Rehabilitation of Distressed RCC Jetty at Guptachhara Sandwip, Chittagong, Ministry of Port and Shipping with the department of Civil Engineering, BUET in 2015-2016 for BIWTA.

- Team member for checking of drawings and preparation of Stability Booklet of Fiberglass High Speed Boat for BF International Ltd in 2015.
- Team member for consultancy services for designing and supervision of construction of new shipyard along with multi channel slipways for Bangladesh Fisheries Development Corporation (BFDC), Chittagong (On going).
- Construction and supervision of 4 nos. of 158TEUs Self Propelled Multipurpose Inland Container Ship for Bangladesh Inland Water Transportation (BIWTC) form 2010-2018.
- Team member for evaluation of Price of 8 nos. export quality ships for IBBL-ASSL in 2015.
- IHM Expert (Category-A) qualified by Class NKCS, Japan in 2013
- Team Leader for the verification of proper use of shipbuilding materials imported by Desh Shipbuilding & Engineering Ltd., 21/22 Agrabad C/A, Chittagong on October 2014
- Team Leader for the verification of proper use of shipbuilding materials imported by Western Marine Shipyard Ltd (WMSHL), Kolagaon, Patiya, Chittagong on June 2014
- Team Leader for the verification of proper use of shipbuilding materials imported by Highspeed Shipbuilding & Engineering Co. Ltd., 103 Motijheel Commercial Area, Dhaka on March 2014
- Team Member of Curriculum development for Sonargaon University (Private) for the department of Naval Architecture & Marine Engineering in September 2013
- Team member for existing boat design improvement for the boat plying at remote location in Borga, Gaibandha, Rangpur and Sirajgong district for M4 project (Phase-I) of Swiss Contact, Bangladesh, 2013.
- Team member for Construction of 1500 Ton capacity new slipways for Dockyard and Engineering Works Ltd., Bangladesh Navy, March 28, 2012
- Team member for load bearing capacity of the two slipways of Shah Amanat Dockyard, at Sikolbaha, Karnafuli, Chittagong, June 2012
- Team member for consultancy services for strengthening of the platform of Bangladesh Navy's Floating Dockyard (BNFD) Sundarban, January 2012
- Team member for consultancy service for checking and verification of drawings and stability booklet of Passenger ships ( M.V. Parapar- 8 & 11 ) for Three Angle Marine Consultant Ltd., Dhaka in March 2011
- Team Leader for checking stability booklet of 90m passenger ship (M.V. Achoul-8) for Three Angle Marine Consultant Ltd. , Dhaka in January 2011
- Team member for assessing slipway capacity for Dockyard & Engineering Works Ltd , Narayangong, 2010
- Team Member for the acquisition of two container vessels (to be classed by an International Classification Society) for Bangladesh Inland Waterways Transportation Corporation (First phase completed in February, 2009 and Second phase completed 2012.
- Team Member for Consultancy services for Analysis, Recommendations/Remedial measures on the tilted barge of Rural Power Company Limited (RPCL) at Mymensingh in February, 2010
- Team member for design checking, verification and preparation of stability booklet of K-Type Ferry for Inland Waterways Transportation Corporation on behalf of Khulna Shipyard Ltd in 2009
- Team Leader for preparation of Stability Booklet of BNS DURDANTA of Bangladesh Navy on behalf of Khulna Shipyard Ltd in 2008
- Team member for assessing approved design, compliance of the design during construction stages and the safety aspect of 4-storied inland passenger vessel named MV KALAM KHAM-I in 2007
- Team member for preparation of design & drawings of four vessels for Ananda Shipyard & Slipways Ltd. classed by Germanischer Lloyd of the following sizes for the Govt. of Mozambique in 2006:
  - Ferry vessel(48 m x 10.62 m x 3.5 m)
  - Passenger cum Cargo vessel (26 m x 5.8 m x 2.8 m)
  - Landing craft (19.92 m x 5.88 m x 1.75 m)
  - Catamaran water taxi ( 12.5 m x 6.2 m x 1.5 m)

## **RESEARCH GRANTS RECEIVED:**

- Awarded the Royal Academy of Engineering, UK, research grant on Safety Envelope for Ship Recycling Practices in Bangladesh: Hazard Identification and Risk Evaluation as Co-Lead with Newcastle University in Singapore (Amount of £1,40,000/= duration 5 years) ongoing
- Awarded Basic Research Grant from Bangladesh University of Engineering and Technology (BUET) (USD 2500, duration, 2025-2027, 24 months) ongoing
- Awarded Basic Research Grant from Bangladesh University of Engineering and Technology (BUET) (USD 2500, duration, 2022-2024, 24 months)
- Awarded University Grant Commission's Academic Innovation Funded project (**CP-2083**) on Self-Assessment Exercise for Naval Architecture and Marine Engineering Program as Assistant Sub-Project Manager (Amount of Fund **USD 48,000/=**, duration: April 2012-March 2014)
- Awarded CASR Project titled 'Development of a design tool for high speed planning vessels of Bangladesh' under higher training & research programme of BUET (CASR Meeting No. 235, Agendum 102, amount of fund **USD 2300/=**, duration 12 months)

## **PUBLICATIONS (PROCEEDINGS / JOURNAL/ PRESENTATIONS / ARTICLES):**

### **a) Conferences (national and international):**

- 1) M.G. Siddique, S.S., Rahaman, M.M., **Zakaria, N.M.G.**, Afroz, L., Kibria, "Numerical Analysis of A Marine Propeller In Open Water And Behind The Hull Under Non- Cavitating And Cavitating Conditions", Wageningen 2025: Workshop on CFD in Ship Hydrodynamics, Wageningen, Netherlands, Nov 17,2025
- 2) M.G. Siddique, S.S., Rahaman, M.M., **Zakaria, N.M.G.**, Afroz, L., Kibria, "Numerical Simulation of Bow Wave Breaking of a Container Ship: A Detail CFD Based Flow Field Analysis", Wageningen 2025: Workshop on CFD in Ship Hydrodynamics, Wageningen, Netherlands, Nov 17,2025
- 3) Shahid, N.T., Labib, I. and **Zakaria, N. M. G.**, " A Comparative Analysis of Supervised Machine Learning Models for the Prediction of Ship's Speed", Paper ID 27, 6th International Mechanical Engineering Conference & 18th Annual Paper Meet , Mechanical Engineering Division, IEB, Ramna, Dhaka, 27-29 November 2025
- 4) Saha, A., **Zakaria, N.M. G.** and Rahman, A., " Weld sample classification for ship structure using a deep convolutional neural network", Paper ID 97, 14<sup>th</sup> International Conference on Marine Technology (MARTEC2024), Johor Bahru, Malaysia, 24-26 September, 2024
- 5) Jannatul Ambia Shorna, J. A., Asgar, N., and **Zakaria N. M. G.**, " Life cycle assessment of alternative marine fuels for inland shipping of Bangladesh", Paper ID 133, 14<sup>th</sup> International Conference on Marine Technology (MARTEC2024), Johor Bahru, Malaysia, 24-26 September, 2024
- 6) Debnath, A., Arafat, Y. M., **Zakaria, N. M. G.**, " A comprehensive machine learning approach for fuel consumption prediction of bulk carrier ship", Paper ID 127, 14<sup>th</sup> International Conference on Marine Technology (MARTEC2024), Johor Bahru, Malaysia, 24-26 September, 2024
- 7) Hasan, T., Islam, S. and **Zakaria, N.M. G.**, "A machine learning approach for preliminary ship design based on the data collected from the ship recycling industry in Bangladesh, Paper ID 128, 14<sup>th</sup> International Conference on Marine Technology (MARTEC2024), Johor Bahru, Malaysia, 24-26 September,2024, available at SSRN: <https://ssrn.com/abstract=4446276> or <http://dx.doi.org/10.2139/ssrn.4446276>

- 8) Dipto, S. S., Rahman, H., Mehtaj, N., Mawla, M. S., **Zakaria, N.M. G.**, and Dev, A. K., “A study on the financial feasibility of compliant ship recycling yards in Bangladesh”, published in the Proceedings of the 13th International Conference on Marine Technology (MARTEC 2022), Available at SSRN: <https://ssrn.com/abstract=4446241> or <http://dx.doi.org/10.2139/ssrn.4446241>
- 9) Saha,A., Sumaiya,S. A. and **Zakaria, N.M. G.**, “Resistance Prediction of Sailing Yachts Using Machine Learning”, Proceedings of the International Conference on Ship and Offshore Technology ICSOT 2023, December 8-9, 2023, IIT Kharagpur, India. <https://www.researchsquare.com/article/rs-4156906/v1>
- 10) Mahadi, ASM and Ahmed, S., Rahaman, M. M. and **Zakaria, N.M. G.**, “A comparative study of blue economy status and initiatives between Bangladesh and China,” available at SSRN: <https://ssrn.com/abstract=4446255> or <http://dx.doi.org/10.2139/ssrn.4446255>
- 11) Zani, M. R., Hossain, M.T., Rahman, M., Rahaman, M. M. and **Zakaria, N.M. G.**, “Computational fluid dynamics analysis of engine room ventilation of a bulk carrier plying in the inland waterways of Bangladesh”, available at SSRN: <https://ssrn.com/abstract=4447466> or <http://dx.doi.org/10.2139/ssrn.4447466>
- 12) Kabir, M. H., Kibria, M. G., Rahaman, M. M. and **Zakaria, N.M. G.**, “A study on the variation in structural scantling requirements among various Classification Societies for a Coastal Cargo Vessel”, available at SSRN: <https://ssrn.com/abstract=4447467> or <http://dx.doi.org/10.2139/ssrn.4447467>
- 13) Nur, A.S.M. A. B., Kader, E., Islam, S.M., Rahaman, M. M. and **Zakaria, N.M.G.**, “An investigation of the sensitivity between various financial parameters and the financial performance of a ship building project in Bangladesh, available at SSRN: <https://ssrn.com/abstract=4447477> or <http://dx.doi.org/10.2139/ssrn.4447477>
- 14) Mehtaj, N., Dipto, S.S., **Zakaria, N.M.G.**, Awal.,Z.I., Hannan, M.A and Dev, A.K., “A techno-economic study on ship recycling practices in Bangladesh: from safety perspective”, published in the 3<sup>rd</sup> International Conference on the Decommissioning of Offshore & Subsea Structures: 21-22 February 2022, UK
- 15) Islam, M.M. and **Zakaria, N.M.G.**, “Seakeeping behaviour of catamaran with forward speed’, published in the 3<sup>rd</sup> International Conference in Shipbuilding & Offshore Engineering (ICSOE 2021), June 24-25, 2021 , India
- 16) Zakaria, N.M.G. Sumon, M.O. and Badhon, D., “An assessment of impacts of marine pollution by the operation of inland vessels in Bangladesh”, published in 11<sup>th</sup> International Conference on Marine Technology (MARTEC 2018), Paper ID\_103, held on 13-14 August,2018 at UTM, Kula Lumpur, Malaysia
- 17) **Zakaria, N.M.G.** and Rahaman, S, “An overview of Present Status of Inland Vessels in Bangladesh based on formulated Energy Efficiency Design Index ”, published in 11<sup>th</sup> International Conference on Marine Technology (MARTEC 2018), Paper ID\_49, held on 13-14 August, 2018 at UTM, Kula Lumpur, Malaysia
- 18) Hossain, K.A. and **Zakaria, N.M.G.**, “Proposed sustainable ship recycling process for South East Asian Recycling Yards”, published in 11<sup>th</sup> International Conference on Marine Technology (MARTEC 2018), held on 13-14 August,2018 at UTM, Kula Lumpur, Malaysia
- 19) **Zakaria, N.M.G.** and Rahaman, S, “Energy Efficient Design Index (EEDI) for inland vessels in Bangladesh”, published in 10<sup>th</sup> International Conference on Marine Technology (MARTEC 2016), held on 9-10 December,2016 at BUET, Dhaka, Bangladesh
- 20) **Zakaria, N.M.G.** and Rashid K., “Environmental pollution in Bangladesh by inland tanker operation”, published in 10<sup>th</sup> International Conference on Marine Technology (MARTEC 2016), held on 9-10 December,2016 at BUET, Dhaka, Bangladesh
- 21) Hossain, K.A. and **Zakaria, N.M.G.**, “SWOT Analysis of China Shipbuilding Industry by Third Eyes”, published in 10<sup>th</sup> International Conference on Marine Technology (MARTEC 2016), held on 9-10 December,2016 at BUET, Dhaka, Bangladesh
- 22) Hossain, K.A. and **Zakaria, N.M.G.**, “A Study on Global Shipbuilding Growth, Trend and Future Forecast”, published in 10<sup>th</sup> International Conference on Marine Technology (MARTEC 2016), held on 9-10 December,2016 at BUET, Dhaka, Bangladesh

- 23) **Zakaria, N.M.G.** and Hossain, M.A., “Numerical prediction of added resistance in waves”, published in 9<sup>th</sup> International Conference on Marine Technology (MARTEC 2014), held on 24-26 October, 2014 at ITS, Surabaya, Indonesia
- 24) **Zakaria, N.M.G.**, Miazee, M.A.A. and Rahman, M.M., “Numerical Prediction of Heave and Pitch Motions of Ship in Waves”, International Conference on Mechanical Engineering (ICME2015), Paper ID600, 18-20December 2015, Dhaka, Bangladesh
- 25) **Zakaria, N.M.G.** and Hossain, K.A., “Green Ship Recycling : Bangladesh perspective”, published in 15<sup>th</sup> Annual Paper Meet, held on 7-8 February 2014 at IEB, Dhaka, Bangladesh
- 26) **Zakaria, N.M.G.** and Ali, M.T., “Generation of wave pattern by a three dimensional moving body”, 8<sup>th</sup> International conference on Marine Technology (MARTEC2012), paper ID: UMT/FMSM/MARTEC/MTP-13, October 20-22, 2012, Kuala Terengganu, Malaysia.
- 27) Ali, M.T., **Zakaria, N.M.G.** and Rahaman, M.M., “On hydrodynamic interaction for a group of 3-D rectangular bodies floating freely in regular waves”, 8<sup>th</sup> International conference on Marine Technology (MARTEC2012), paper ID: UMT/FMSM/MARTEC/MTP-50, October 20-22, 2012, Kuala Terengganu, Malaysia.
- 28) **Zakaria, N.M.G.**, Fareque O. and Moheuddin S.M., “Economic performance assessment of passenger vessels in coastal and inland routes of Bangladesh”, Proceedings of the 6<sup>th</sup> international Mechanical Engg. Conference and 14<sup>th</sup> Annual Paper Meet (6IMEC & 14APM), IE-07, 28-29 September 2012, Dhaka, Bangladesh.
- 29) **Zakaria, N.M.G.** and Ali, MT, “Export oriented shipbuilding industries in Bangladesh: Present status and way forward”, Proceedings of the 6<sup>th</sup> international Mechanical Engg. Conference and 14<sup>th</sup> Annual Paper Meet (6IMEC & 14APM), IE-06, 28-29 September 2012, Dhaka, Bangladesh.
- 30) **Zakaria, N.M.G.** and Hossain, K.A., “Underlying problems of ship recycling industries in Bangladesh and way forward”, Proceedings of the 6<sup>th</sup> international Mechanical Engg. Conference and 14<sup>th</sup> Annual Paper Meet (6IMEC & 14APM), IE-08, 28-29 September 2012, Dhaka, Bangladesh.
- 31) **Zakaria, N.M.G.**, Rahaman, M.M. and Hossain, K.A., “Study on some competitive parameters for shipbuilding industries in Bangladesh”, Proceeding of International Conference on Marine Technology (MATEC2010), 11-12 December 2010, Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh.
- 32) Iqbal, K.S., **Zakaria, N.M.G.**, Khaled, M.E. and Khan, M.M., “Sustainable container ship for inland shipping in Bangladesh”, Proceeding of International Conference on Marine Technology (MATEC2010), 11-12 December 2010, BUET, Dhaka, Bangladesh.
- 33) Hossain, K.A., Iqbal, K.S. and **Zakaria, N.M.G.**, “Ship recycling prospects in Bangladesh”, Proceeding of International Conference on Marine Technology (MATEC2010), 11-12 December 2010, BUET, Dhaka, Bangladesh.
- 34) **Zakaria, N.M.G.** and Ali, M.T., “Prediction of resistance of ships by 3-D near field approach and its comparison with some alternative methods”, 9<sup>th</sup> International conference on hydrodynamics, Paper no. W39, Page 427-432, October 11-15, 2010, Shanghai, China.
- 35) **Zakaria, N.M.G.** and Hossain, K.A., “Service providers and supporting industries of shipbuilding sector in Bangladesh and its impact on overall development of shipbuilding”, published in the 6<sup>th</sup> International Conference and 13<sup>th</sup> Annual Paper Meet of Mechanical Engineering Division, IEB, Dhaka, Bangladesh. 30-31 December, 2009, Bangladesh.
- 36) **Zakaria, N.M.G.** and Barea, M.S., “Numerical study on seakeeping performances of ship by exact linear 3-D Potential Method” , OMAE 2007, USA.
- 37) Inoue, Y. and **Zakaria, N.M.G.**, “Numerical analysis on added resistance of ship by 3-D Green Function Method”, OMAE2006, Germany.
- 38) Inoue, Y. and **Zakaria, N.M.G.**, “A Numerical Study on Sea Keeping Performances of Ships By Exact 3-D Potential Method”, ICMRT, page no. 177-186, September 2005, Italy.
- 39) Inoue, Y. and **Zakaria, N.M.G.**, “Parametric study on relative wave height of ships in the rough sea”, IMAM, page no. 167-178, September2005, Portugal.

- 40) Inoue, Y. and **Zakaria, N.M.G.**, “A parametric study on relative wave heights of ships in short crested irregular sea with forward speed”, 24th International conference on Offshore Mechanics and Arctic Engineering (OMAE2005), June2005, Greece.
- 41) Inoue, Y. and **Zakaria, N.M.G.**, “ A design aspect of relative wave heights of ships in abnormal seas by 3-D Source Technique with forward speed”, RINA Symposium on Design & Operation for Abnormal Conditions III, January2005, London, UK.
- 42) Inoue, Y. and **Zakaria, N.M.G.**, “A design aspect of relative wave heights of ships in rough seas by 3-D Source Technique with forward speed”, 9th Symposium on Practical Design of Ships and Other Floating Structures(PRADS), 2004, Germany.
- 43) **Zakaria, N.M.G.** and Baree, M.S., “Prediction of added resistance of a small ship in regular waves applying Maruo’s Theory”, Proceeding of the Seventh Annual Paper Meet of the Mechanical Engineering Division and IEB, October ,2001, Bangladesh.
- 44) **Zakaria, N.M.G.** and Baree, M.S., “An Application of the Holtrop & Mennen’s Method for power prediction of a passenger vessel”, Proceedings of the Fifth Annual Paper Meet of Institute of Engineers (Mechanical Engineering Divn.) November, 1998, Bangladesh.

**b) Journal Publications (recognized and refereed journals):**

- 45) Islam, A. H. M. R., Sarah , U. T., **Zakaria, N. M. G.** and Begum, A., “ Review on Assessment and Management of Occupational and Health Risks in the Shipbuilding Sector of Bangladesh”, MIST International Journal of Science and Technology, Vol. 13, Issue June 2025, 2025/7/7, Page 37-47
- 46) Kazi Raihan-Ur-Rahman, Samiun Muntasir Sheam, Muhammad Mahdi Marzan and **N. M. Golam Zakaria**, “Electricity Consumption Prediction during Ship Construction: A Machine Learning Approach”, JOURNAL OF MARITIME RESEARCH, Vol XXII. No. I (2025) pp 385–390
- 47) Nafisa Mehtaj, **N. M. Golam Zakaria**, Zobair Ibn Awal, Shaumik Sharif Dipto, M. A. Hannan, A.K. Dev and Mir Tareque Ali , “Ship recycling process in Bangladesh and a survey-based risk assessment with mitigation proposal” , Journal Heliyon, [Volume 10, Issue 20](#), 30 October 2024, e39344
- 48) Md Moynul Hasan, Md Mashiur Rahaman and **NM Golam Zakaria**, “Fast aerodynamics prediction of wedge tail airfoils using multi-head perceptron network” 31 January, 2024, Arabian Journal for Science and Engineering. <https://link.springer.com/article/10.1007/s13369-023-08686-9>
- 49) Dipto, S. S., Rahman, H., Mehtaj, N., Mawla, M. S., **Zakaria, N.M. G.**, and Dev, A. K., “A study on the financial feasibility of compliant ship recycling yards in Bangladesh”, published on Journal of Naval Architecture and Marine Engineering Volume 20, Issue <http://dx.doi.org/10.3329/jname.v20i3.66>, Pages 1-8 , 2023
- 50) Mrinal Kanti Roy, Md Samiun Nur Islam, Minhazul Islam, Md Mashiur Rahaman, **NM Golam Zakaria**, “Conceptual Design and Economic Analysis of a floating stadium for indoor games in the capital city of Bangladesh” 30 December 2023, Journal of Maritime Research. <https://www.jmr.unican.es/index.php/jmr/article/view/738>
- 51) Shahriar Ahmed, ASM Mahadi Hassan, Md Mashiur Rahaman, **NM Golam Zakaria**, “Combining Wind Power, Aquaculture and Marine Tourism: A novel multi-use blue economy concept for Bangladesh”, 30 December 2023, Journal of Maritime Research.[https://scholar.google.com/citations?view\\_op=view\\_citation&hl=en&user=d8\\_X91IAAAAJ&sortby=pubdate&citation\\_for\\_view=d8\\_X91IAAAAJ:M05iB0D1s5AC](https://scholar.google.com/citations?view_op=view_citation&hl=en&user=d8_X91IAAAAJ&sortby=pubdate&citation_for_view=d8_X91IAAAAJ:M05iB0D1s5AC)
- 52) Md Moynul Hasan, Md Mashiur Rahaman, **NM Golam Zakaria**, “The effects of wedge tail thickness on NACA 0021 airfoil performance”, Journal of Maritime Research, Aug 25, 2023,<https://www.jmr.unican.es/index.php/jmr/article/view/714>
- 53) Md. Mashiur Rahaman, Hafizul Islam, **N.M. Golam Zakaria** and M. Ziauddin Alamgir, “Studying Static Derivatives of an Inland Bulk Carrier in Open and Restricted Waters using Open FOAM”, Journal of Maritime Research 19 (2), 31-38, October 29, 2022.
- 54) Rahman, M.M., **Zakaria, N.M.G.** and Rahman, M., “ Study on the Water Transport System in the Northern Region of Dhaka; the Capital City of Bangladesh’, Journal of Maritime Transport and

- 55) Rahman, S. and **Zakaria, N.M.G.**, “Development of Energy Efficiency Design Index for Inland Vessels of Bangladesh”, *Journal of Marine Science and Application*, **volume 19**, pages 275–282(2020), DOI 10.1007/s11804-020-00139-1
- 56) **Zakaria, N.M.G.** and Rahaman, S, “Development of Energy Efficiency Design Index for Inland Cargo Vessels of Bangladesh” published in the *Journal of Marine Science: Research and Development*, an open access journal, ISSN: 2155-9910 , Volume 7 , Issue 4, August 07, 2017.
- 57) **Zakaria, N.M.G.**, “Moving forward with export oriented shipbuilding industries in Bangladesh”, published in the *Journal of the Institutions of Engineers (India): Series C (IEI Springer Journal C)* **Volume 93, issue-4**, pp 373-382, **October 2012**, India.
- 58) **Zakaria, N.M.G.**, Ali, M.T. and Hossain, K. A., “Underlying problems of ship recycling industries in Bangladesh and way forward”, accepted for publication in the *Journal of Naval Architecture and Marine Engineering (JNAME)*, in **Vol. 9 & No.2 issue, 2012**, Bangladesh.
- 59) **Zakaria, N.M.G.**, Iqbal, K.S., Khaled, M.I. and Khan, M.M., “Selecting a design of sustainable inland container ship for Bangladesh based on economical and environmental performances”, published in **September 2012 issue, Vol. 73, No.3**, of the *Journal of the Institutions of Engineers, Malaysia*.
- 60) **Zakaria, N.M.G.**, Ali, M.T. and Hossain, K.A., “An overview of Bangladeshi Shipbuilding in the light of competitive parameters”, *Journal of Shipping and Ocean Engineering (JSOE)*, volume 1, pp.8-19, June 2011, USA.
- 61) **Zakaria, N.M.G.**, Iqbal, K.S. and Hossain, K.A., “Evaluation of the performance of contemporary shipbuilding industries in Bangladesh”, *Journal of Naval Architecture and Marine Engineering (JNAME)*, volume 7, pp 73-82, December 2010, Bangladesh.
- 62) Iqbal, K.S., **Zakaria, N.M.G.** and Hossain, K.A., “Identifying and analysing underlying problems of shipbuilding industries in Bangladesh”, *Journal of Mechanical Engineering(JME)*, volume ME 41, No.2, pp. 147-158, December 2010, Bangladesh.
- 63) **Zakaria, N.M.G.**, Hossain, K.A. and Islam, M.S., “SWOT analysis of Ship building industries in Bangladesh and its challenges to become potential ship-exporting nation” *Journal of Ship Technology*, Vol.6, No. 2, July 2010, India
- 64) Iqbal, K.S., **Zakaria, N.M.G.** and Hossain, K.A., “An investigation on Socio-economic and ecological impacts of ship recycling industries in Bangladesh, published in the *Journal of NOAMI*, Vol. 27, No. 1, June 2010, Bangladesh.
- 65) **Zakaria, N.M.G.**, “Effect of Ship Size, Forward Speed and Wave direction on Relative Wave height of Container Ship in Rough Seas”, *Journal of Institution of Engineers (Malaysia)*, Volume 72, Number 3, September, 2009, Malaysia.
- 66) Hossain, K.A. and **Zakaria, N.M.G.**, “Potentiality and Prospect of Shipbuilding Industries in Bangladesh” , *Journal of NOAMI*, Volume 25, Number 2, December, 2008, pp.33-54, Bangladesh.
- 67) **Zakaria, N.M.G.**, “Prediction of added resistance of ships by 3-D Green Function Method and its comparison with Semi-3D and 2-D approaches”, *Journal of Institution of Engineers (India)*, Volume 88, January 28, 2008, India.
- 68) **Zakaria, N.M.G.**, “Prediction of added resistance using a Near-Field Approach in Seakeeping”, *International Journal of Maritime Engineering, the Transactions of the Royal Institution of Naval Architects*, Vol. 149, Part A4, 2007, UK.
- 69) **Zakaria, N.M.G.** and Baree, M.S., “Alternative Methods on Added Resistance of Ships in Regular Head Waves”, *Journal of Institution of Engineers (Malaysia)*, Volume 68, Number 4, December, 2007, Malaysia.
- 70) **Zakaria, N.M.G.** and Baree, M.S., “An investigation of the effects of Some Parameters on Added Resistance of Ships in Regular Waves”, *Journal of Mechanical Engineering, IEB*, Vol. ME 30, June 2002, Bangladesh.

### **c) Presentations:**

- 71) **Zakaria, N.M.G.**, “Green Ship Recycling in Bangladesh : Ways to obtain the UN SDGs” delivered lecture in the Seminar on Prioritizing UN SDGs for Naval Architects & Marine Engineers and Identifying Corresponding Roles, organized by Department of Naval Architecture and Marine Engineering, Military Institute of Science and Technology (MIST), Mirpur Cantorment, Dhaka, Bangladesh on January 25, 2026.
- 72) **Zakaria, N.M.G.**, “An Overview of Ship Recycling Industries in Bangladesh” delivered a lecture (online) in the IX Academic Symposium on Production Engineering (SAEPRO) of EEL-USP Organized by School of Engineering of Lorena (EEL/USP) in partnership with the Center for Studies on Sustainable Systems at Fluminense Federal University (CESS/UFF) at Rio de Janeiro, Brazil on 26 November 2025
- 73) **Zakaria, N.M.G.**, “Challenges & Ways Forward for the Ship Recycling Industry of Bangladesh” presented at the Seminar on the Ship recycling Industry of Bangladesh in collaboration with Japan at Radisson Blu, Chattogram, 30 July 2025
- 74) **Zakaria, N.M.G.**, “An Overview of Ship Recycling Industries in Bangladesh”, presented in a seminar under ERASMUS KA171 Project at Institute of Marine Sciences and Technology, Dokuz Eylul University, Izmir, Turkiye on July 10, 2025
- 75) **Zakaria, N.M.G.**, “Challenges & Ways Forward for the Ship Recycling Industry of Bangladesh: Post HKC Enforcement”, presented on Explanatory Meeting on Verification and Certification for the SRFP & SRP Manuals (DRAFT) as per the Hong Kong Convention after June 26, 2025 (On behalf of the BSRB) at Pan Pacific Sonargaon Hotel, Dhaka , 17 June 2025
- 76) **Zakaria, N.M.G.**, “Ship Recycling Facilities and Ship Recycling Process as per HKC Requirements”, presented at Training Session 4 under Training on Capacity Building for Verification, DASR Issuance, SRP Approval and improvement of Administrative Guidance (including ORCA supervision and Patrolling capacity) at Mini Conference Room, Ministry of Industries, Dhaka-1000, May 20, 2025
- 77) **Zakaria, N.M.G.**, “ Ship Structure and Arrangements by Type of Ship And how to check the Ship Drawings”, presented at Training Session 4 under Training on Capacity Building for Verification, DASR Issuance, SRP Approval and improvement of Administrative Guidance (including ORCA supervision and Patrolling capacity) at Mini Conference Room, Ministry of Industries, Dhaka-1000, May 20, 2025
- 78) **Zakaria, N.M.G.**, “Ship Recycling Practice in Bangladesh” delivered a lecture (online) in a course on decommissioning and recycling of offshore installations under the Industrial Assembly (PMI) course of Universidade Federal Fluminense (UFF) at Rio de Janeiro, Brazil on 5th June 2025.
- 79) **Zakaria, N.M.G.**, “ An overview of shipbuilding industry in Bangladesh in light of IR 4.0”, presented in Seminar organized by School of Maritime Warfare and Tactics (SMWT), New Mooring, Chittagong, on December 05, 2021.
- 80) **Zakaria, N.M.G.**, “Green Ship Recycling in Bangladesh: Present Status”, presented in seminar on Green Ship Recycling in Bangladesh”, organized by Dept. of NAME under Sub-Project CP#2084 HEQEP at Seminar Room, IEB Chittagong Center, Chittagong, on April 19, 2014.
- 81) Iqbal, KS, **Zakaria, N.M.G.** and Ali, MT, “An approach to safer ship breaking: The role of Naval Architect”, presented in seminar on ship breaking and ship recycling in Bangladesh and compliance with international regulation, organized by Dept. of NAME, Council Building, BUET, January 17, 2012.
- 82) **Zakaria, N.M.G.**, Iqbal K.S. and Ali, M.T., “Ship recycling Methodology: Present status in Bangladesh & the way forward”, presented in seminar participated by IMO-EU delegates in the seminar room of Material and Metallurgical Engg., Dept. of MME, BUET, November 14, 2011.
- 83) **Zakaria, N.M.G.**, Iqbal, KS and Ali, MT, “A Socio-economic and environmental impacts of ship recycling in Bangladesh”, presented in seminar on ship recycling: Bangladesh, organized by Dept. of NAME, Council Building, BUET, September 17, 2011.
- 84) **Zakaria, N.M.G.**, “Development of ship recycling facility in Bangladesh”, Presented in the 6<sup>th</sup> Annual Ship Recycling Conference, 14-15 June 2011, London, UK.
- 85) Iqbal, KS, **Zakaria, N.M.G.**, and Ali, MT, “ Green Ship recycling in Bangladesh: Problems and Possibility”, presented in seminar on ship recycling: Bangladesh, organized by Dept. of NAME, Council Building, BUET, September 17, 2011

- 86) Ali, M.T., **Zakaria, N.M.G.** and Iqbal, K.S., “ Green Ship recycling”, presented in seminar on ship recycling: Bangladesh, organized by Dept. of NAME, Council Building, BUET, September 17, 2011.

#### **d) Articles (Newspaper/ Souvenir):**

- 87) **NM Golam Zakaria,**” The Shipbreaking industry in Bangladesh: Future perspective after HKC enforcement, published in Maritime Green Horizon- a quarterly Newsletter of Bangladesh Ship Recycling Board (BSRB), Inaugural Edition, August 2025
- 88) **NM Golam Zakaria, Arun Dev & Nafisa Mehtaj,** “Towards a safer ship recycling industry” published in The business standard on 04 October, 2022
- 89) **Zakaria, N.M.G.,** “ Shipbuilding 4.0 : Low labor cost alone can’t give us leverage anymore”, published in the Business Standard , August 14, 2021
- 90) **Zakaria, N.M.G.** and Rahaman, M.M., “Recommendations for Shipbreaking industry in Bangladesh” (In Bangla), published in the daily Ittefaq, August 26, 2014
- 91) **Zakaria, N.M.G.** and Rahaman, M.M., “Shipbreaking industry in Bangladesh: Present and Future” (In Bangla), Shilpobatra, no.03, 8 june 2014, published by MOI, Bangladesh
- 92) **Zakaria, N.M.G.,** “Shipbreaking Industry: Future Perspective”, published in the daily Star on October 28, 2013, Bangladesh.
- 93) **Zakaria, N.M.G.,** “Launch accidents: why do they happen”, published in the daily Star on March 18, 2012, Bangladesh.
- 94) **Zakaria, N.M.G.,** “Recent Launch Accident: Should we not do something? ”, published in the daily New Age on March 18, 2012, Bangladesh.
- 95) **Zakaria, N.M.G.,** “Ship breaking methodology: present practice in Bangladesh and way forward ”, published in the daily Sun on November 22, 2011, Bangladesh.
- 96) **Zakaria, N.M.G.,** “Prospects of Shipbuilding industry in Bangladesh”, published in the daily New Age December 17, 2011, Bangladesh.
- 97) **Zakaria, N.M.G.,** “ An overview of ship-breaking in Bangladesh”, published in the daily New Age on October 18, 2011, Bangladesh.
- 98) **Zakaria, N.M.G.,** Iqbal, K.S. and Hossain, K.A., “ Moving forward with Ship Breaking”, published in the daily Star on August 14, 2011, Bangladesh.
- 99) **Zakaria, N.M.G.,** “An overview of shipbuilding industry in Bangladesh”, souvenir published by Bangladesh University of Engineering and Technology (BUET) on the occasion of Convocation 2011, held on February 3, 2011.
- 100) **Zakaria, N.M.G.** and Hossain, K. A., “ Bangladesh: A shipbuilding tiger wake up”, souvenir published by Dept. of Naval Arch. and Marine Engg., BUET, on the occasion of International Conference on Marine Technology, held on 11-12 December, 2010.

#### **ACADEMIC / RESEARCH:**

- Session Chaiman of Technical Session – 2 (Shipbuilding) on 6th International Mechanical Engineering Conference & 18th Annual Paper Meet , Mechanical Engineering Division, at Seminar Room (1st floor), Old Building, IEB, Ramna, Dhaka, on 27 November 2025
- Session Chaiman on Hydrodynamics and Resistance of Marine Vehicles at the 14<sup>th</sup> International Conference on Marine Technology (MARTEC2024), Johor Bahru, Malaysia, 24-26 September, 2024

- Member Editorial Committee, International Conference on Marine Technology (MARTEC 2016), 9-10 December 2016, Dhaka, Bangladesh.
- Member, Technical Committee, International Conference on Marine Technology (MARTEC 2016), 9-10 December 2016, Dhaka, Bangladesh.
- Assistant Member Secretary, Organizing Committee, International Conference on Marine Technology (MARTEC 2016), 9-10 December 2016, Dhaka, Bangladesh.
- Assistant Member Secretary, Organizing Committee, International Conference on Marine Technology (MARTEC 2010), 11-12 December 2010, Dhaka, Bangladesh.
- Member, Editorial Committee, International Conference on Marine Technology (MARTEC 2010), 11-12 December 2010, Dhaka, Bangladesh.

### **SHORT COURSES, WORKSHOPS & TRAINING COURSE ATTENDED:**

- Participated in the Seminar on the Ship Recycling Industry in Bangladesh in collaboration with Japan, Pan Pacific Sonargaon Hotel, Dhaka, 28 July 2025
- Attended Workshop on draft Ship Recycling (Amendment) Act 2025 and draft Ship Breaking and Recycling (Amendment) Rules 2025 at Crystal Ball Room, InterContinental Hotel, Dhaka on February 2025
- Nominated as expert technical committee member to recommend specific proposal for production and development in the light of Shipbuilding Industry Development Policy 2021 formed by the Ministry of Industries on March 2025
- Attended Workshop on Green Inland Vessel Fleet Development in Bangladesh titled “Anchored in Sustainability: Initiative for Green Inland Navigation and a Future of Cleaner Waterways” held in Dhaka on February 28, 2028 funded by USAID.
- Nominated as expert for the prioritizing capacity building project of Dockyard & Engineering Works Ltd. of Bangladesh Navy for Infrastructure Investment Facilitation Company (IIFC), an advisory body of the Govt. of Bangladesh under the Economic Relations Division (ERD) of Ministry of Finance, February 2020
- Technical committee member for Ship Recycling Facility Plan (SRFP) approval as per the Ship Breaking and Ship Recycling Rules-2011, Ministry of Industries since March 2023.
- Attended validation/consultation Workshop on draft feasibility study on establishment of work class (Shipbuilding and Repairing Industry at Patuakhali report submitted by Gentium Solution Pvt. Ltd. organized by Ministry of Industries (MoI), on August 2023
- Attended stakeholder consultation workshops on “Identification of Trade-related Graduation Challenges and Preparation of Sector-Specific Trade Roadmaps for overcoming the Challenges” organized by Bangladesh Foreign Trade Institute, TCB Bhaban (5<sup>th</sup> Floor) on 03 November 2022
- Attended “Awareness Workshop on the Hong Kong Convention for the safe and environmentally Sound Recycling of Ships”, held at Sonargaon under SENSREC Project Phase III of Ministry of Industries on 24-25 April, 2024
- Attended “Awareness Workshop on Hazardous Waste Management” at Pan Pacific Sonargaon under SENSREC Project Phase III of Ministry of Industries on 08-09 May, 2024
- Attended short course on Ship Resistance and Propulsion Model Testing held on 5<sup>th</sup> - 9<sup>th</sup> January 2020 at the Marine Technology Centre, Universiti Teknologi Malaysia (UTM), Malaysia.
- Attended Training Workshop on STAR-CCM (Basic & Advanced level) under the project ‘Establishment of Towing Tank Center at BUET’ on 5-9 December, 2019 at BUET.
- Attended Training Workshop on SHIPFLOW (Basic & Advanced level) under the subproject ‘Modernization of Naval Architecture and Marine Engineering Program (CP2084) of Higher Education

Quality Enhancement Project (HEQEP) of University Grant Commission on 5-9 December, 2013 at BUET.

- Attended Training Workshop on Teaching and Curriculum Development organized under Self Assessment Exercise for Naval Architect Program (CP2083) of Higher Education Quality Enhancement Project (HEQEP) of University Grant Commission on June 6, 2013 at BUET
- Attended Inventory of Hazardous Material (IHM) Expert Training Workshop jointly organized by ClassNK and Indian Registrar of Shipping (IRS) at Bhavnagar, Gujrat on 04-06 August 2013, India.
- Attended Training Workshop on Quality Assurance in Engineering Education under Self Assessment Exercise for Naval Architect Program (CP2083) of Higher Education Quality Enhancement Project (HEQEP) of University Grant Commission on August 21, 2013 at BUET
- Attended Training Workshop on Naval Architecture Package (NAPA) under the subproject 'Modernization of Naval Architecture and Marine Engineering Program (CP2084) of Higher Education Quality Enhancement Project (HEQEP) of University Grant Commission on 25-27 September, 2013 at BUET
- Attended BTEC Implementation Training Workshop from Pearson Company's Edexcel Event on 29-30 March, 2013 at Chittagong
- Attended Self Assessment of Engineering Program Workshop organized under Higher Education Quality Enhancement Project (HEQEP) of University Grant Commission, held at Dept. of Naval Architecture and Marine Engineering, BUET on 26-28 August 2012, Dhaka.
- Attended Self Assessment Training Workshop (for self assessment exercise for Naval Architecture Program) organized by University Grant Commission (UGC) held on 1-4 July 2012 at UGC, Dhaka.
- Attended short course on Design in Auto CAD and Solid Works organized by Directorate of Continuing Education held on 2~4 September 2011, BUET, Dhaka.
- Attended short course on Dredging organized by Directorate of Continuing Education held on 6~7 August 2010, BUET, Dhaka.
- Attended short course on "Remote Sensing and GIS in Water Management" organized by Directorate of Continuing Education held on 27~29 January 2008 at BUET, Dhaka.
- Attended workshop on "Use of Linux in Everyday Life" organized by Department of Computer Science and Engineering held on 7~9 April 2007 at BUET, Dhaka.
- Attended short course on "Corrosion Protection for Industry" conducted by Directorate of Continuing Education held on 6~9 January 2002 at BUET, Dhaka.
- Attended short course on "Teacher's Appreciation Workshop" conducted by Directorate of Continuing Education held on 14~15 September 2001 at BUET, Dhaka.
- Attended short course on "Integration of Pollution Prevention Topics into the Engineering Curriculum" conducted by Directorate of Continuing Education held on 24~25 July 2001 at BUET, Dhaka.
- Attended short course on "Planning Management and Control of Construction Projects," conducted by Directorate of Continuing Education held in March, 2001 at BUET, Dhaka.
- Attended Practical Training Course in Shipyard Practice-II at Khulna Shipyard Limited, Khulna, Bangladesh from 23<sup>rd</sup> June to 13<sup>th</sup> July 1997.
- Attended Practical Training Course in Shipyard Practice-I at Dockyard & Engineering Ltd., Narayanganj, Bangladesh from 18<sup>th</sup> March to 4<sup>th</sup> April 1996.

### **PARTICIPATION IN NATIONAL LEVEL:**

- Member of Technical Team for the approval of Ship Recycling Facility Plan (SRFP) for Bangladesh Ship Recycling Board (BSRB), Ministry of Industries (MoI), Bangladesh since May 2025
- Member of Project Evaluation Committee (PEC) for Bangladesh Oceanic Research Institute (2<sup>nd</sup> Phase) under Socio-Economic Division of Bangladesh Planning Commission on December 2024
- Member of Technical Proposal Evaluation Committee for appointing Safety Agency for Ship Recycling

- Industry of MoI (Nominated by the Honorable Vice Chancellor, BUET, dated January 2022).
- Member of Technical Evaluation Committee for Reviewing Ship Recycling Facility Plan (SRFP) MoI (Nominated by the Honorable Vice Chancellor, BUET, dated March 2020)
  - Member of Evaluation committee to Evaluate Technical Performance and Effectiveness of Five Solar Boats Constructed by SREDA with the assistance of SREPGen Project on April 2019
  - Member of Technical Sub Committee (TSC) and Technical Evaluation Committee (TEC) for purchasing Speed Boats, Petrol Boats, Portable Floating Boats, Water Bike etc. for Bangladesh Police for the financial year 2015-2016 (Nominated by the Honorable Vice Chancellor, BUET, Ref: No. mo-5/ra-653, dated 11/08/2015.
  - Member of Committee formed by Ministry of Industry (MoI) regarding feasibility of setting up shipbuilding and ship recycling zone at Borguna Zilla of Bangladesh, (Nominated by the Honorable Vice Chancellor, BUET), Ref: No. mo-5/ra-3843, dated 02/02/2015.
  - Member of Committee formed by Ministry of Industry (MoI) for investigating the matter regarding Amader Environment System Limited (AESL), (Nominated by the Honorable Vice Chancellor, BUET), Ref: No. Ref. mo-5/ra-3409, dated 20/01/2014.
  - Member of Committee formed by Ministry of Industry (MoI) for expert opinion regarding ratification of Hong Kong International Convention for Safe and Environmentally Sound Recycling of Ship 2009 (Nominated by the Honorable Vice Chancellor, BUET) Ref: No.Sangstha/ma-5/re-1892, 08/10/2013
  - Member of Committee formed by Ministry of Shipping (MoS) for expert opinion regarding modification/addition/propose QT for Demonstrators (Electrical, Fire, Mechanical, Education) for Bangladesh Marine Academy (Nominated by the Honorable Vice Chancellor, BUET), Ref: No.Sangstha/ma-5/re-283, 14/07/2013
  - Member of Committee formed by Department of Shipping (DOS) for expert services on marine safety development policy for inland shipping in Bangladesh (Nominated by the Honorable Vice Chancellor, BUET) Ref: No.Sangstha/ma-5/re-7530, 23/05/2012
  - Member of Committee formed by Ministry of Industry to review Ship Breaking and Ship Recycling Rule 2011 (December 2011)
  - Member of Technical Evaluation Committee (TEC) for purchasing Research & Survey Vessel under Bangladesh Marine Fisheries Capacity Building Project, Ref. No sanstha/mo-5/ra-877/date 23-08-2011
  - Member of Committee formed by Department of Shipping(DOS) for submission of report after assessing approved design, compliance of the design during construction stages and making necessary recommendation for safe voyage of the vessel (Nominated by the Honorable Vice Chancellor, BUET) Ref: No.Sangstha/ma-5/re-284, 16/7/2007
  - Member of Standing Committee formed by Ministry of Commerce for adapting policy in respect of 'Export of Ship from Bangladesh: its problem and prospects' (Nominated by the Honorable Vice Chancellor, BUET) Ref: No.Bam/ro-1/rony- 3/2006/272, 13/12/2009
  - Member, Panel of Supervisor, Dept. of Shipping (DOS) since 2006

### **SCHOLARSHIP & AWARD RECEIVED:**

- Awarded Japan Govt. Scholarship (Monbokagakushu) for obtaining Doctoral degree from October 2002 to March 2006.
- Received Dean's Merit List Scholarship from Bangladesh University of Engineering & Technology, Dhaka-1000, Bangladesh from session 1991-92 to 1995-96.
- Received University Merit Scholarship from Bangladesh University of Engineering & Technology, Dhaka-1000, Bangladesh from session 1991-92 to 1995-96.
- Scholarship received from the Board of Intermediate and Secondary Education, Comilla for good academic performance in H.S.C. & S. S. C. Examination.

### **SUPERVISION OF THESIS/DESIGN:**

Level (UG/PG/Ph.D.)	Thesis/ Title	Year
Undergraduate Thesis Completed	60 no. of thesis have been supervised so far.	2006-2025
Undergraduate Project Completed	60 no. of ship design project have been supervised so far.	2006-2025
M.Sc.(Engg.)	Evaluation of Potential, Prospect and Challenge of Bangladeshi Shipbuilding in Light of Global Contest	January, 2010
M.Sc.(Engg.)	Evaluation of Environmental Pollution in Bangladesh by Inland Shipping Operation	April, 2015
M.Sc.(Engg.)	Development of Energy Efficiency Design Index for Inland Vessels of Bangladesh	August, 2017
Ph. D. (BUET)	Development of an Assessment Model for the Sustainable Ship Recycling Industry in Bangladesh	December 2018
M.Sc.(Engg.)	Techno-Economic and Environmental Impact Study of Passenger Water Transport Services in and around Dhaka City	March 2019
M.Sc.(Engg.)	Numerical Analysis of Dynamic Response and Wave-Load on Multihull Ship Advancing in Waves	December 2021
M.Sc.(Engg.)	Assessment of Challenges in Dredging Sector of Bangladesh Using Novel Best-Worst Multi-Criteria Decision-Making Method	December, 2024
M.Sc.(Engg.) MIST	A Comprehensive Study of Risks and Hazards in the Shipbuilding and Ship- Repairing Sector in Bangladesh	August 10, 2025
PhD (BUP)	Developing a Conceptual Strategic Framework for the Bangladesh Maritime Safety Administration	Ongoing
M.Sc.(Engg.) (BUET)	Evaluating the Economic Viability of establishing merchant shipbuilding facility in Bangladesh	Ongoing

#### **LIST OF SUPERVISED UNDER GRADUATE THESIS:**

S.L	Title of Thesis	Student Name(s)
1.	The Predication of Motion in Regular Waves For Series-60 Hull	Md. Asif Amin
2.	Prospects of Shipbuilding in Bangladesh. January-2008	Niladri Shekhar Talukder
3.	A comparative study on weight estimation of inland cargo vessel.	Md. Ariful Islam & Md. Al-Amin
4.	An Approximate Power Predication of Ships in wave.	Md. Kamrul Hasan Iqbal
5.	A Study on Productivity of Local Ship Building Industry of Bangladesh.	Md. Bayzidur Rahman & Pranab Kunar Saha
6.	Assessment of Economic Performance of Passenger vessels in Inland and Coastal Routes of Bangladesh.	Md. Omar Faruq & Sharif Md. Moheuddin
7.	Prediction of Ship Motion in Regular Head Waves.	Md. Al Amin Miazee & Md. Masudur Rahman
8.	Numerical Prediction of Added Resistance in Waves.	Md. Alfaz Hossain & Md. Abdur Rouf Talokder
9.	Application of NAPA Software in Ship Design.	Md. Humaun Kabir
10.	A Study on Ship Breaking Industry in Bangladesh.	Md. Nahid Hasan
11.	Application of Renewable Energy in Inland Shipping.	Nazia Nusrat Prity & Tanzina Ireen
12.	An Approximate Power Prediction Method for the Planing Hulls.	Rifat Ara Nargis & Md. Shamim Ahmed
13.	Renewable Energy in Shipping.	Mehlil Ahmed & Md. Habibur Rahman
14.	The Ship Breaking and Recycling in Bangladesh: An Overview (without supervisor signature).	Md. Saidur Rahman & Md. Tarin Tasnim

S.L	Title of Thesis	Student Name(s)
15.	An Investigation of Inland Maritime Accidents in Bangladesh (without supervisor signature).	Tamhid Tishad Neloy
16.	Feasibility Analysis of Nuclear Power Cargo Vessel.	Shaikh Shakib Rahman
17.	Life Cycle Analysis of Ship.	Badhon Das Shuvo & Sumon Mondol Opu
18.	Application of Life Cycle Assessment in Inland Shipbuilding Process.	Tarek Reza & Md. Shamim Reza
19.	Harnessing Ocean Wave Energy from the Bay of Bengal to Generate Electricity.	Md. Najiruzzaman & Md. Tanjim Khan
20.	Alternative Marine Fuel for Inland Vessel.	Md. Suzaul Islam & Abir Ashraf Bornardho
21.	Comparative Study of Ship Breaking Steel and New Steel as Shipbuilding Material.	Faisal Ahmed & Raihanul Islam
22.	Energy Production from Waste Plastic in Bangladesh.	Rakib Hasan & Abrar Jahin
23.	Preliminary Hazard Analysis for Ship Recycling in Bangladesh.	Sourav Kundu
24.	Numerical Prediction Ship Motion in Waves.	Jannatul Ferdous & Afsana Rahman
25.	A Sustainable Approach to Develop Better Efficiency of the Horizontal Earth Pipe Cooling (HEPC) System with Tabulator.	Zahid Hasan & Tanvir Ahmed Linkon
26.	Numerical Investigation of Wave Energy of Sandwip Region of Bangladesh.	Md. Tanvir Ahmed & Ashiqur Rahman Amin
27.	Design of an Electric Boat using Renewable Energy.	Md. Abdul Mueid Emon & Mehjabeen Rubaiyat
28.	Analysis of Effect of Air Lubrication System(ALS) on Fuel Consumption for Inland Ships in Bangladesh	Hasibul Hasan Porag & Maruf Rayhan
29.	Development of An Alarm Device to Reduce Ship Collision.	SM Amdadul Islam & Zihad Rian Jim
30.	Predicting Aerodynamic Characteristics of Aerofoils Artificial Neural Network.	Md. Moinul Hasan & Md. Fahim Faisal
31.	The Challenge of Implementation of Industrial Revolution 4.0 in the Shipbuilding Industries of BD.	Priti Halder & Golam Rabbi
32.	Resistance and Motion Prediction of Ships using Machine Learning: Model Comparison.	Argha Saha & Safia Alam Sumaiya
33.	Numerical Prediction of Ship Resistance, Sinking and Trim in Various Sea Condition.	Ragib Tanvir Lasker, Md. Al Sakib-& Lokman Hossain
34.	Life Cycle Assessment of Alternative Marine Fuels for Inland Shipping of Bangladesh.	Jannatul Ambia Shorna & Nasib Asgar
35.	A Comprehensive Machine Learning Approach for Fuel Consumption Prediction of Ship	Arpita Debnath & Md. Yasir Arafat
36.	A Machine Learning Approach for Preliminary Ship Design and Material Flow Analysis of the Ship-Breaking Industry in Bangladesh.	Touseef Hasan& Shamsul Islam
37.	Air Quality Dispersion from Ships' NOx Emission in Chittagong Port area: Modeling and Forecasting Approach.	Fahim Shahriar & Md. Nayonur Tahman

#### **PANEL MEMBER / EXAMINER FOR Ph.D. & M.Sc. THESIS:**

- External member of examination committee for Master's Degree in Port and Shipping Management titled 'A study of shipbuilding growth, trend and future forecast: Bangladesh perspective' under Department of Port and Shipping Management in Bangladesh Maritime University, February 2025.
- External member of examination committee for Master's Degree in Port and Shipping Management titled 'Comparative Analysis of Ship Repair Practices: Bangladesh vs. Global Standards' under Department of Port and Shipping Management in Bangladesh Maritime University, March 2025.
- Member of the examination committee of M.Sc. Engg. Thesis titled 'A comparative study on scantling requirements among different Classification Societies for Coastal Vessels Plying in the inland waterways

of Bangladesh' at Head Room of the department of Naval Architecture and Marine Engineering, BUET, held on December 2024

- Expert Panel Member for PhD Researcher on Development of Maritime Ports in Bangladesh: Status, Challenges and Way Forward (1<sup>st</sup> Doctoral Seminar) held on 02 July 2024 at the Virtual Class Room of Academic Block of Bangladesh University of Professionals (BUP), Mirpur, Dhaka-1000
- Panel member of examination committee for MS thesis for Bangabandhu Sheikh Mujibur Rahman Maritime University, (BSMRMU), Mirpur-12, Dhaka in the year 2018, 2021.
- Expert Panel Member for PhD Researcher on Design, Policy and Operations of Intermodal Freight Transportation System in Bangladesh: An Analytic Study (1<sup>st</sup> Doctoral Seminar) held on 08 March 2017 at the Virtual Class Room of Academic Block of Bangladesh University of Professionals (BUP), Mirpur, Dhaka-1000
- Member, Doctoral Committee for Ph.D. student S. M. Rashidul Hasan in the Department of Naval Architecture and Marine Engineering, BUET, Dhaka-1000
- Member of the examination committee of M.Sc. Engg. Thesis titled 'Effects of Wave on Added Resistance of Ship' held on August 16, 2016 at Head Room of the department of Naval Architecture and Marine Engineering, BUET
- Member of the examination committee of M.Sc. Engg. Thesis titled 'Computation of ship hull resistance using Reynolds-average Navier-Stokes equations (RaNSE) in calm water' held on June 27, 2015 at Head Room of the department of Naval Architecture and Marine Engineering, BUET

#### **MEMBER OF EDITORIAL BOARD/REVIEWER/RESEARCH COMMITTEE:**

- Member of Research and Academic Committee (RAC) of Accident Research Institute (ARI), BUET, Dhaka since May 2023 to January 2026.
- Worked as a reviewer for Journal of Engineering Science and Technology (JESTEC), School of Engineering, Taylor's University, Malaysia
- Worked as a reviewer of Ocean Engineering Journal, Published by Elsevier Ltd. in 2016
- Worked as a member of editorial board for Journal of Shipping and Ocean Engineering, David Publishing, USA
- Worked as a member of editorial board for the International Conference of Marine Technology 2010.
- Working as a member of thesis evaluation committee for **CLASS NK AWARD** since October 2010.
- Working as reviewer of Journal of Naval Architecture and Marine Engineering, Dhaka, Bangladesh

#### **ADMISTRATIVE AND MANAGEMENT EXPERIENCE:**

- Working as a Registrar of BUET since November 20, 2024
- Working as a member of Board of Trustee of Association of BUET Alumni (ABUETA) from 2025 to till date
- Worked as Board of Directors for Dockyard Engineering Works Ltd. (DEW) from 2023 to February 2026
- Worked as Head of the Department of Naval Architecture and Marine Engineering of BUET from February 2020 to March 2022.
- Worked as Board of Directors for Chittagong Dry Dock Ltd. (CDDL) from March 2020 to February 2022.
- Worked as Registrar of BUET from November 1, 2015 to June 11, 2017.
- Worked as a member of Board of Trustee of Association of BUET Alumni (ABUETA) from 2013 to **2018**.
- Worked as an Associate Director of Student Welfare (ADSW) of Directorate of Student Welfare Office, BUET, from July 02, 2013 to November 20, 2015.

- Worked as a Treasurer of Prokaushal Bishwabidyalay Club (BUET Teacher's Club) executive committee for the period of 2013-2014.
- Worked as a Publication Secretary of Prokaushal Bishwabidyalay Club (BUET Teacher's Club) executive committee for the period of 2014-2015.
- Worked as a Co-ordinator of seminar on Green Ship Recycling in Bangladesh, organized by Dept. of NAME under Sub-Project CP#2084 HEQEP at , Seminar Room, IEB Chittagong Center, Chittagong, April 19, 2014.
- Worked as an Associate coordinator for seminar on ship breaking and ship recycling in Bangladesh and compliance with international regulations, held at Council Bhaban, BUET on 17 January 2012.
- Worked as an Associate coordinator for seminar on ship recycling: Bangladesh Perspective, held at Council Bhaban, BUET on 17 September 2011.
- Worked as a Joint Secretary of BUET Teacher's Association Executive Committee for the period of 2011-2012.
- Worked as an assistant member secretary for the international conference on marine technology (MARTEC 2010) organized by the Department of Naval Architecture and Marine Engineering, BUET, Dhaka.
- Worked as a Member of Souvenir sub-committee for BUET Convocation 2011 held on February 2011.
- Worked as a Member of food sub-committee for BUET Alumni Reunion 2011 arranged by BUET Alumni Federation in March 2011.
- Worked as a Member of BUET Teacher's Association Executive Committee (Treasurer) for the period of 2010-2011.
- Worked as a Entertainment Secretary of BUET Teacher's Association for the period of 2007-2008.
- Worked as an assistant provost in the students' hall from September 2006 to November 2012.
- Working as an advisor of student at undergraduate level of different Level/ Term students' from April 2006.

**CURRICULUM IMPROVEMENT/ LAB DEVELOPMENT/ PRODUCTION OF TEACHING AIDS:**

- Have been working as a Member of the Board of Undergraduate Studies (BUGS) of the Department of Naval Arch. and Marine Engg., BUET, since April 2006.
- Worked as a member for implementations of Self-Assessment Exercise for Naval Architecture & Marine Engineering Program under University Grant Commission's Academic Innovation Funded Project.
- Worked as a Member of the Board of Postgraduate Studies (BPGS) of the Department of Naval Arch. and Marine Engg., BUET, since April, 2006.
- Contributing to the development of fluid mechanics experimental facilities under marine hydrodynamics laboratory.
- Updated lecture notes for Sessional Course of NAME 124.
- Advisor of Undergraduate Students since 2007.
- Member of Examination Committee, Undergraduate Studies, Department of Naval Architecture & Marine Engineering, BUET since 2009.
- Moderator of Examination Committee formed by Bangladesh Military Institute of Science and Technology for ME-415 course of L-4/T-1 in 2008.
- Scrutinizer of exam papers, Department of Naval Architecture & Marine Engineering, BUET, since 2006.

### **PROFESSIONAL AFFILIATIONS:**

- Life Member of Association of Bangladesh University of Engineering & Technology Alumni (BUET Alumni), Bangladesh
- Member of the Institution of Engineers (IEB), Bangladesh.
- Life member of Association of Naval Architectures and Marine Engineers, Bangladesh.
- Member of Japanese Universities Alumni Association in Bangladesh.
- Member of Royal Institute of Naval Architects (RINA) in UK.

### **COMPUTER SKILLS:**

Operating System(s) : Windows, Unix.  
Programming Languages(s) : Fortran, C/C++,  
Ship design and stability software: Autoship, Napa, Shipflow, Maxsurf, Delft Ship,  
Rhinoceros, Ship Constructor, Archimedes  
Others : Matlab, Origin, AutoCAD, GNU Plot

### **INTERESTS/ HOBBIES:**

Cricket, Football, Music, Movies, History.

### **REFERENCES:**

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2. Dr. Md. Sadiqul Barea  
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