# RESUME



# DR. MD. SANAUL RABBI

Associate Professor Department of Mechanical Engineering Chittagong University of Engineering and Technology (CUET), Chittagong- 4349, Bangladesh. Cell: +8801717-300305 E-mail address: rabbi@cuet.ac.bd

## **OBJECTIVE**

Want to become a significant contributor in the field of Mechanical Engineering and want to do research at admiration level.

Name of Degree Earned	Name of Institution	Board	Passing Year	CGPA/Marks Obtained
Ph.D. (ATF)	Saga University, Japan	-	2018	-
M.Sc. Engineering ( <b>Mechanical</b> )	Chittagong University of Engineering and Technology (CUET), Chittagong, Bangladesh.	-	2013	<b>3.71</b> (Out of 4.00)
B.Sc. Engineering ( <b>Mechanical</b> )	Chittagong University of Engineering and Technology (CUET), Chittagong, Bangladesh.	-	2008	<b>3.59</b> (Out of 4.00) (75.80% Marks)
Higher Secondary Certificate (H.S.C) Examination	Rangpur Govt. College	Rajshahi	2002	<b>First*</b> (Obtained 776 Marks out of 1000)
Secondary School Certificate (S.S.C) Examination	Gaibandha Govt. Boys High School	Rajshahi	2000	First* (Obtained 805 Marks out of 1000)

# EDUCATIONAL BACKGROUND

#### **PROFESSIONAL AFFILIATIONS**

- Member of Institute of Engineering Bangladesh, IEB (M-31077).
- Member of Bangladesh Society of Mechanical Engineers, BSME.

#### **PROFESSIONAL EXPERIENCE**

Assistant Professor Department of Mechanical Engineering Chittagong University of Engineering and Technology, Chittagong, Bangladesh November 2008 to till today

#### LIST OF PUBLICATIONS

#### a. Book

# 1. "Easy Way to Design and Fabrication of A Low Cost Solar Street Lamp"

Number: 95012, ISBN: 978-3-659-49212-9, LAP LAMBERT Academic Publishing is a trademark of Omni Scriptum GmbH & Co. KG, Heinrich-Böcking-Str. 6-8, 66121, Saarbrücken, Germany

#### **b. Journal Papers**

- "Mathematical Simulation of New Vehicle Suspension System With High Negative Stiffness System for Lower Natural Frequency", Md. Arafat Rahman, S U Chowdhury, M S Rabbi, M S Khan ; Mechanical Engineering Research Journal (MERJ), Vol. 7, pp. 24-32, 2010.
- "Development of a Position Monitoring System for Patients", Md. Kamrul Hasan, S. C. Banik and M S Rabbi, Mechanical Engineering Research Journal (MERJ), Vol. 8, pp.1-7, 2012.
- *3. "Development of a Smart Home by Voice Control",* K. T. Rasul, **M S Rabbi** and S. C. Banik, Mechanical Engineering Research Journal (MERJ), Vol. 8, pp.77-80, 2012.
- 4. "Development of a Prototype CNC Router", M S Rabbi, S. C. Banik and M. T. Islam, International Journal of Mechanical Engineering (IJME), ISSN 2319-2240, Vol. 2, Issue 2, pp. 63-68, 2013.
- "Effects of Cavity Size on the Control of Transonic Internal Flow around a Biconvex Circular Arc Airfoil", M. Mostaqur Rahman, A. B. M. Tiufique Hasan and M S Rabbi, doi: 10.1063/1.4984642.
- "Image Reconstruction of Subsurface Damage in Unidirectional Fiber Composite Laminate by Dynamic Shear Strain Analysis of Lamb wave-a Numerical Approach", M S Rabbi, K. Teramoto, and Md. T. I. Khan, International Journal of COMADEM, Vol. 21, Issue 1, pp. 3-8, 2018.
- *"Analytical and computational study on imaging of through-thickness cylindrical edge in plate-like quasi-isotropic composite laminates using A<sub>0</sub>-mode Lamb wave", M S Rabbi, K. Teramoto, and Md. T. I. Khan, International Journal of COMADEM, Vol. 22, Issue 4, pp. 61-68, 2019.*

- 8. "A<sub>0</sub>-mode Lamb wave based detection of corrosion under coating film in plate-liike metallic structures; analytical, finite element and experimental studies", M S Rabbi, and K Teramoto, GUB Journal of Science and Engineering, Vol. 5, Issue 1, 2019.
- 9. "Combined Effect of Winglet and Trailing Edge Serrations on Performance of Aircraft Wings: Computational and Experimental Study", M S Rabbi and Faisal Ahmed, International Journal of Advanced Science and Engineering (IJAST), Vol. 29, No. 11, pp. 619-624, 2020.

#### c. Conference Papers

- "Implementation of Alcohol Produced from Sugarcane in Internal Combustion Engine", R. A. Chy., M S Rabbi, J. U. Ahmmed, 1<sup>st</sup> International Conference on Mechanical Engineering and Renewable Energy (ICMERE), 22-24 December, 2011, Chittagong, Bangladesh.
- 2. *"Design and Fabrication of a Cost Effective Cyclone Separator",* N. Nahar, M.A. Wazed. **M S Rabbi** and M. K. Islam, 5<sup>th</sup> BSME ICTE, 2012, Dhaka, Bangladesh.
- 3. "*Bio-Gas from Anaerobic Digestion of Chicken Excreta*", M S Rabbi, B. Salam and S. Biswas, National Conference on Physics for Technology Development, 27-28 December, 2012, Dhaka, Bangladesh.
- 4. *"Bio-Gas from Co-Digestion of Water Hyacinth and Chicken Excreta"*, M S Rabbi, B. Salam and U K Mondol, 15<sup>th</sup> Annual Paper Meet (APM), 27-28 November, 2013, IEB, Dhaka, Bangladesh.
- 5. "Design and Fabrication of GSM Based Automatic Irrigation System", M Biswas, M A Wazed, M S Rabbi, 2<sup>nd</sup> International Conference on Mechanical Engineering and Renewable Energy (ICMERE), 24-27 December, 2013, Chittagong, Bangladesh.
- 6. **"Design and Fabrication of Model Size Remote Controlled Hovercraft",** S Chowdhury, **M S Rabbi**, S C Banik, 2<sup>nd</sup> International Conference on Mechanical Engineering and Renewable Energy (ICMERE), 24-27 December, 2013, Chittagong, Bangladesh.
- "Detection of Sub-surface Delamination based on the Spatio-temporal Gradient Analysis over the A<sub>0</sub>-mode Lamb wave Fields", K. Teramoto, M S Rabbi, Md. T. I. Khan, International Congress on Ultrasonics (ICU), 10-14 May, 2015, Metz, France.
- 8. *"Experimental Investigation of Thermo Electric Power using Candlelight"*, D. Sarker, **M S Rabbi**, J U Ahamed, A Razzaq, 3<sup>rd</sup> International Conference on Mechanical Engineering and Renewable Energy (ICMERE), November, 2015, Chittagong, Bangladesh.
- "Time reversal analysis for damage detection in the dispersive media under PDE constraints", K. Teramoto, M S Rabbi, International Symposium on Applied Electromagnetics And Mechanics (ISEM), 15-18 September, 2015, Kobe, Japan.
- "Image Reconstruction of Corrosion under Coating Film by Dynamic Shear Strain Analysis of Lamb Waves", M S Rabbi, K. Teramoto, 19<sup>th</sup> World Conference on Non-Destructive Testing (WCNDT), 13-17 June, 2016, Munich, Germany.

- 11. "Noise Reduction of Helicopter Rotor Blades by Using Spoiler", M T Islam, M S Rabbi, M S Uddin, 8<sup>th</sup> BSME International Conference on Thermal Engineering (ICTE), 19-21 December, 2018, Dhaka, Bangladesh.
- 12. "Effect of fibre direction on directivity pattern of A<sub>0</sub> mode Lamb wave scattered at through-hole damage region in unidirectional laminates: A computational study", M S Rabbi, K. Teramoto, M Hasan, 4<sup>th</sup> International Conference on Advances in Civil Engineering (ICACE), 19-21 December, 2018, Chittagong, Bangladesh.
- 13. "Stress analysis of welded joint portions at rear-side footrests of public transportation like human hauler", M Asheful Alam, M S Rabbi, Sama E Shan, Md Shamim Hasan, 5<sup>th</sup> International Conference on Mechanical, Industrial & Energy Engineering (ICMIEE), 23-24 December, 2018, Khulna, Bangladesh.
- 14. "A Computational study in fuel economy improvements for highway bus in Bangladesh", M H Pranta, M S Rabbi, Md. Anamul Haque, 5<sup>th</sup> International Conference on Mechanical Engineering and Renewable Energy (ICMERE), December, 2019, Chattogram, Bangladesh.
- 15. "Computational study of the Lamb wave dispersion curve in steel plate", Md. Mazharul Islam, **M S Rabbi**, Md. Eftaykharul Islam, 5<sup>th</sup> International Conference on Mechanical Engineering and Renewable Energy (ICMERE), December, 2019, Chattogram, Bangladesh.
- 16. "Performance comparison of moisture removal in direct solar dryers", Chowdhury Md. Adib Zawad, M S Rabbi, 5<sup>th</sup> International Conference on Mechanical Engineering and Renewable Energy (ICMERE), December, 2019, Chattogram, Bangladesh.
- 17. "Use of Root Cause Analysis in Improvement of Product Quality and Productivity in Pragoti Industries Ltd.", P S Roy, M S Rabbi, 4<sup>th</sup> International Conference on Mechanical, Industrial and Materials Engineering (ICMIME), December, 2019, Rajshahi, Bangladesh.
- 18. "Combined Effect of Winglet and Trailing Edge Serrations on Performance of Aircraft Wings: Computational and Experimental Study", M S Rabbi and Faisal Ahmed, 4<sup>th</sup> International Conference on Recent Advancements in Interdisciplinary Research (ICRAIR), May, 2020, Malaysia.

#### **FIELD OF INTEREST**

Structural Health Monitoring (SHM), Non-destructive Testing (NDT), Composite Materials, Mechatronics, Control Engineering, Automation, Production and Industrial Management.

#### **COMPUTER LITERACY**

- Systems Experience: Windows, MacOS.
- Language Experience: FORTRAN77, C/C++, MATLAB.
- > Drawing and Drafting Software Experience: AutoCAD, Solidworks.
- ➢ FEM: LS DYNA, ANSYS.

#### LANGUAGE PROFICIENCY

**English:** Speaking, Writing, Listening and Reading fluently as Studied and currently teaching undergraduate courses in English. **Bengali:** As Mother Tongue.

#### **SPECIAL TRAINING**

- Bangladesh University of Engineering & Technology February, 18-19, 2010
  Title: Supply Chain Management
- Greenfield Automation Technologies Limited January 25- February 16, 2011
  Title: Basics of Pneumatic Technology
- Bangladesh Public Administration Training Center (BPATC) January 22-26, 2012
  Title: Total Quality Management (TQM)

## AWARD & SCHOLERSHIPS

- Japanese Government Scholarship (for pursuing Ph.D., 2014-2017), MEXT (Monbukgakusho), Saga University, Japan.
- Bangladesh Government Technical Scholarship (2004-2008).
- Board scholarship on the basis of Higher Secondary Certificate examination result (2002).
- Board scholarship on the basis of Secondary School Certificate examination result (2000).
- Junior School Scholarship (1997).
- Primary School Scholarship (1995).

#### PERSONAL DETAILS

Name: Dr. Md. Sanaul Rabbi Father: Late Nurul Islam Sarker Mother: Mrs. Sultana Razia Religion: Islam Sex: Male Marital Status: Married Spouse: Haspia Zannat Child: Md. Sadit Islam Date of Birth: 20/01/1985 Nationality: Bangladeshi

#### PRESENT ADDRESS

Associate Professor Department of Mechanical Engineering Chittagong University of Engineering and Technology (CUET), Chittagong- 4349, Bangladesh. Cell: +8801717-300305

#### PERMANENT ADDRESS

Vill. : Palashbari Post. : Vendabari P.S. : Pirgonj Dist.: Rangpur **RESEARCH** 

#### Ph. D. Research:

Thesis: Subsurface Damage Detection in CFRP using Dynamic Shear Strain Analysis

1) Dr. Bodius Salam	2) Dr. Sajal Chandra Banik		
Professor	Professor		
Department of Mechanical Engineering.	Department of Mechanical Engineering.		
Chittagong University of Engineering and	Chittagong University of Engineering and		
Technology (CUET).	Technology (CUET).		
E-mail: bodiussalam@yahoo.com	E-mail: baniksajal@yahoo.com		
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of Lamb Wave, under the supervision of Prof. Dr. Kenbu Teramoto, Department of Advanced Technology Fusion, Graduate School of Science & Engineering, Saga University, Japan.

#### M. Sc. Research:

Thesis: **Development and Performance Analysis of an Automated Routing Machine,** under the supervision of Dr. Sajal Chandra Banik, Associate Professor, Department of Mechanical Engineering, Chittagong University of Engineering & Technology, Chittagong, Bangladesh.

#### **References by Permission**