CURRICULUM VITAE
OF
DIPANKAR KUMAR

PRESENT STATUS
Assistant Professor
Department of Mathematics
Bangabandhu Sheikh Mujibur Rahman Science & Technology University, Gopalganj-8100, Bangladesh
Contact No. **:** +8801722285442
Email **:** dks.bsmrstu@gmail.com

CAREER OBJECTIVE

Looking for a post-doctoral or research position in the field of Coastal Remote Sensing, Coastal Engineering or Mathematics Physics in any reputed University or institution of the World, where I will utilize my potentiality, adaptability, and skills to do something innovative and share my knowledge for the sake of mankind.

RESEARCH INTEREST

- Shoreline evolution using remote sensing imagery
- Coastal morphological analysis
- Numerical modeling on coastal environments
- Investigation of optical and soliton solutions of the nonlinear PDEs
- Nonlinear dynamics in optics and fluids
- Mathematical Physics

ACADEMIC QUALIFICATIONS

Doctor of Engineering (October 2015 to March 2019: 3 years and 6 months**)**

University	**:**	University of Tsukuba, Japan
Department	**:**	Engineering Mechanics and Energy
Graduate School	**:**	Systems and Information Engineering
Result	**:**	Awarded, March 2019
Thesis Title	**:**	**Study on shoreline position and intertidal foreshore slope detection using remote sensing imagery**
Supervisor	**:**	Professor Dr. Satoshi TAKEWAKA
Medium of Instruction	**:**	English

Master of Science (One Year M. Sc.): Thesis Group

University	**:**	University of Rajshahi, Bangladesh
Department	**:**	Mathematics
Passing Year	**:**	2008 (Examination held in 2009, due to session jam)
Result	**:**	1st Class 1st position in order of merit (79.1%), Published year: 2010
Thesis Title	**:**	**Sediment transportation by wind and associated topographic changes in coastal dune**
Supervisor	**:**	Professor Dr. Gour Chandra Paul
Major Studied Courses	**:**	Mathematical Modeling; Astrophysics; Geophysical Fluid Dynamics; Water Waves Mechanics; Biomathematics; Industrial Mathematics.
Medium of Instruction	**:**	English

Bachelor of Science (Four Years B. Sc. Honors)

University	:	University of Rajshahi, Bangladesh
Department	:	Mathematics
Passing Year	:	2007 (Examination held in 2008, due to session jam)
Result	:	1st Class 2nd position in order of merit (70.3%), Published year: 2008
Major Studied Courses	:	Calculus; Advance Calculus; Set Theory and Related Topics; Matrix Algebra; Linear Algebra; Analytical Geometry; Ordinary and Partial Differential Equations; Real Analysis; Complex Analysis; Programming with FORTRAN 90 and C; Mathematical Methods; Engineering Mechanics; Hydrodynamics; Vector & Tensor Analysis; Numerical Analysis; Differential Geometry; Group Theory; Ring Theory; Classical Mechanics; Operation Research; Discrete Mathematics;
Medium of Instruction	:	English

Higher Secondary Certificate (H.S.C)

College	:	Govt. K. M. H. College, Bangladesh
Group	:	Science
Passing Year	:	2003
Result	:	
Board	:	Jessore

Secondary School Certificate (S.S.C)

School	:	Roypur Secondary School, Bangladesh
Group	:	Science
Passing Year	:	2001
Result	:	
Board	:	Jessore

RESEARCH EXPERIENCES

- Completed three years six months research works entitled with **"Study on shoreline position and intertidal foreshore slope detection using remote sensing imagery"** and submitted a dissertation in partial fulfillment of the requirements for Doctor of Engineering degree under the Department of Engineering Mechanics and Energy at University of Tsukuba, Japan.

- Completed one-year research works entitled with **"Sediment transportation by wind and associated topographic changes in coastal dune"** and submitted a dissertation in partial fulfillment of the requirements for the degree of Master of Science under Department of Mathematics at University of Rajshahi, Bangladesh.

PROFESSIONAL EXPERIENCE

1st August 2011 to 29th August 2014	:	**Lecturer,** Department of Mathematics**,** Bangabandhu Sheikh Mujibur Rahman Science and Technology University, Gopalganj-8100, Bangladesh.
30th August 2014 to till now	:	**Assistant Professor,** Department of Mathematics, Bangabandhu Sheikh Mujibur Rahman Science and Technology University, Gopalganj-8100, Bangladesh.

TEACHING EXPERIENCES

I teach first, second, third- and fourth-year regular courses of Mathematics at the undergraduate level.

REVIEWER IN REPUTED INTERNATIONAL JOURNALS

- Nonlinear Dynamics, **Springer**
- Optical and Quantum Electronics, **Springer**
- SN Applied Sciences, **Springer**
- Chinese Journal of Physics, **Elsevier**
- Journal of King Saud University – Science, **Elsevier**
- Journal of Ocean Engineering and Science, **Elsevier**
- Arab Journal of Basic and Applied Sciences, **Taylor and Francis**

COMPUTER SKILLS

- FORTRAN, C, MATLAB, Maple, ArcGIS, LaTeX and Surfer 8.0.

LANGUAGE SKILLS

- Bengali (Mother Tongue)
- English (Fair)

ACADEMIC AWARDS

October 2015 to March 2019	:	**MEXT Scholarship** from the Japanese Government.
2011	:	**A. F. Mujibur Rahman Foundation Gold Medal and Scholarship** for 1st class 1st position in M. Sc. Examination in Mathematics.
2008	:	**Prime Minister Scholarship** for an outstanding result in B. Sc. (Hons.) Examination in Mathematics.
2008	:	**Professor Aminul Islam Beg Talent Scholarship** for 1st class 2nd position in B. Sc. (Hons.) Examination in Mathematics.
January 2004 to December 2007	:	**RU Merit Scholarship** during undergraduate studies.

PERSONAL DETAILS

Name	:	Dipankar Kumar
Father's Name	:	Nirmal Kumar
Mother's Name	:	Depali Rani
Permanent Address	:	Village: Roypur, Post Office: Roypur, Post Code: 7200 Police Station: Jibannagar, District: Chuadanga, Bangladesh.
Mailing Address	:	Assistant Professor, Department of Mathematics Bangabandhu Sheikh Mujibur Rahman Science and Technology University, Gopalganj-8100, Bangladesh.
Date of Birth and Country	:	2nd April 1985, Bangladesh
Nationality	:	Bangladeshi
National ID Number	:	5536128191
Passport Number	:	BF0535629
Marital Status	:	Single
Sex	:	Male
Religion	:	Hinduism
Email	:	dks.bsmrstu@gmail.com
Cell	:	+8801722-285442/ +8801916-315572

WEB BASED RESEARCH AUTHOR ID

Google Scholar ID**:** https://scholar.google.com/citations?user=vqy0EIgAAAAJ&hl=en
ResearchGate ID**:** https://www.researchgate.net/profile/Dipankar_Kumar
Orcid Author ID**:** https://orcid.org/0000-0003-2949-166X
Scopus Author ID**:** 57199657577
Mendeley Profile**:** https://www.mendeley.com/profiles/dipankar-kumar/

RESEARCH PAPERS IN INTERNATIONAL JOURNALS

Coastal Engineering/ Remote Sensing Related Journal Articles:

1. **Kumar, D**. and Takewaka, S., **2019**. Automatic Shoreline Position and Intertidal Foreshore Slope Detection from X-Band Radar Images using Modified Temporal Waterline Method with Corrected Wave Run-up. *Journal of Marine Science and Engineering*, 7(2), 45. MDPI, IF-1.73.
2. **Kumar, D**. and Takewaka, S., **2018**. Estimation of Shoreline Positions by Combining X-band Radar and SAR Observations. *Journal of Japan Society of Civil Engineers, Ser. B2 (Coastal Engineering)*, 74(2), 779 – 784. JSCE, Scopus Indexed.
3. **Kumar, D.**, and Takewaka, S., **2019**. Execution of Missing Value Imputation Techniques for X-band Radar and SAR Satellite Observations of Shoreline Data Gaps (Under submission).
4. Hoque, A., **Kumar, D**., Paul, G.C., and Aoki, S., **2019**. Sedimentation in dune forest and CC block system and associated topographic changes (Under submission).

Mathematical Physics Related Journal Articles:

23. **Kumar, D**., Joardar, A.K., Hoque, A. and Paul, G.C., 2019. Investigation of dynamics of nematicons in liquid crystals by extended sinh-Gordon equation expansion method. Optical and Quantum Electronics, 51(7), 212, Springer, https://doi.org/10.1007/s11082-019-1917-6
22. Al Woadud, K.A., **Kumar, D**., Islam, M.J., Kayes, M.I. and Kundu, A.K., 2019. Extraction of Solitary Wave Features to the Heisenberg Ferromagnetic Spin Chain and the Complex Klein–Gordon Equations. International Journal of Applied and Computational Mathematics, 5(3), 57. Springer
21. Rezazadeh, H., **Kumar, D**., Sulaiman, T.A. and Bulut, H., **2019**. New complex hyperbolic and trigonometric solutions for the generalized conformable fractional Gardner equation. Modern Physics Letters B, 33(17), 1950196. World Scientific Publishing Group. https://doi.org/10.1142/S0217984919501963
20. Zhou, Q., **Kumar, D.**, Mirzazadeh, M., Eslami, M. and Rezazadeh, H., **2018**. Optical Soliton in Nonlocal Nonlinear Medium with Cubic-Quintic Nonlinearities and Spatio-Temporal Dispersion. *Acta Physica Polonica A*, 134(6), 1204 – 1210. Polish Academy of Science, IF-0.891
19. **Kumar, D.**, Seadawy, A.R. and Haque, M.R., **2018**. Multiple soliton solutions of the nonlinear partial differential equations describing the wave propagation in nonlinear low–pass electrical transmission lines. *Chaos, Solitons & Fractals*, 115, 62 – 76. Elsevier, IF-2.213
18. Foroutan, M., **Kumar, D.**, Manafian, J. and Hoque, A., **2018**. New explicit soliton and other solutions for the conformable fractional Biswas–Milovic equation with Kerr and parabolic nonlinearity through an integration scheme. *Optik*, 170, 190 – 202. Elsevier, IF-1.191
17. **Kumar, D.** and Kaplan, M., **2018**. New analytical solutions of (2+1)-dimensional conformable time fractional Zoomeron equation via two distinct techniques. *Chinese Journal of Physics*, 56(5), 2173 – 2185. Elsevier, IF-1.051
16. **Kumar, D.** and Kaplan, M., **2018**. Application of the modified Kudryashov method to the generalized Schrödinger–Boussinesq equations. *Optical and Quantum Electronics*, 50(9), 329. Springer, IF-1.168
15. Seadawy, A.R., **Kumar, D.** and Chakrabarty, A.K., **2018**. Dispersive optical soliton solutions for the hyperbolic and cubic-quintic nonlinear Schrödinger equations via the extended sinh-Gordon equation expansion method. *The European Physical Journal Plus*, 133(5), 182. Springer, IF-2.240
14. **Kumar, D.**, Manafian, J., Hawlader, F. and Ranjbaran, A., **2018**. New closed form soliton and other solutions of the Kundu–Eckhaus equation via the extended sinh-Gordon equation expansion method.

Optik, 160, 159-167. Elsevier, IF-1.191

13. Seadawy, A.R., **Kumar, D.**, Hosseini, K. and Samadani, F., **2018**. The system of equations for the ion sound and Langmuir waves and its new exact solutions. *Results in Physics*, 9, 1631 – 1634. Elsevier, IF-2.147
12. Hosseini, K., Samadani, F., **Kumar, D.** and Faridi, M., **2018**. New optical solitons of cubic-quartic nonlinear Schrödinger equation. *Optik*, 157, 1101 – 1105. Elsevier, IF-1.191
11. **Kumar, D.**, Darvishi, M.T. and Joardar, A.K., **2018**. Modified Kudryashov method and its application to the fractional version of the variety of Boussinesq-like equations in shallow water. *Optical and Quantum Electronics*, 50(3), 128. Springer, IF-1.168
10. Joardar, A.K., **Kumar, D.** and Al Woadud, K.A., **2018**. New exact solutions of the combined and double combined sinh-cosh-Gordon equations via modified Kudryashov method. *International Journal of Physical Research*, 1, 25 – 30.
9. **Kumar, D.**, Seadawy, A.R. and Chowdhury, R., **2018**. On new complex soliton structures of the nonlinear partial differential equation describing the pulse narrowing nonlinear transmission lines. *Optical and Quantum Electronics*, 50(2), 108. Springer, IF-1.168
8. Hosseini, K., Mayeli, P. and **Kumar, D.**, **2018**. New exact solutions of the coupled sine-Gordon equations in nonlinear optics using the modified Kudryashov method. *Journal of Modern Optics*, 65(3), 361 – 364. Taylor and Francis, IF-1.269
7. **Kumar, D.**, Seadawy, A.R. and Joardar, A.K., **2018**. Modified Kudryashov method via new exact solutions for some conformable fractional differential equations arising in mathematical biology. *Chinese Journal of Physics*, 56(1), 75 – 85. Elsevier, IF-1.051
6. **Kumar, D.**, Hosseini, K. and Samadani, F., **2017**. The sine-Gordon expansion method to look for the traveling wave solutions of the Tzitzéica type equations in nonlinear optics. *Optik*, 149, 439 – 446. Elsevier, IF-1.191
5. Khater, M.M. and **Kumar, D.**, **2017**. Implementation of three reliable methods for finding the exact solutions of (2+1) dimensional generalized fractional evolution equations. *Optical and Quantum Electronics*, 49(12), 427. Springer, IF-1.168
4. Khater, M.M. and **Kumar, D.**, **2017**. New exact solutions for the time fractional coupled Boussinesq–Burger equation and approximate long water wave equation in shallow water. *Journal of Ocean Engineering and Science*, 2(3), 223-228. Elsevier, Scopus Indexed.
3. Hawlader, F. and **Kumar, D.**, **2017**. A variety of exact analytical solutions of extended shallow water wave equations via improved (G'/G)-expansion method. *International Journal of Physical Research*, 5(1), 21-27.
2. Hosseini, K., **Kumar, D.**, Kaplan, M. and Bejarbaneh, E.Y., **2017**. New exact traveling wave solutions of the unstable nonlinear Schrödinger equations. *Communications in Theoretical Physics*, 68(6), 761. IOP Science, IF-1.178
1. Paul, G.C., Rahman, M.M., **Kumar, D.** and Barman, M.C., **2013**. The radius spectrum of solid grains settling in gaseous giant protoplanets. *Earth Science Informatics*, 6(3),137 – 144. Springer, IF-1.628

CONFERENCE PAPERS

2. **Kumar, D**. and Takewaka, S., **2018**. Estimation of Shoreline Positions by Combining X-band Radar and SAR Observations. *Journal of Japan Society of Civil Engineers, Ser. B2 (Coastal Engineering)*, 74(2), 779 – 784.

1. Hoque, A., **Kumar, D.** and Paul, G.C., **2012.** Sedimentation Due to Dune Forests and CC Blocks During Floods**.** Proceedings of *International Conference on Statistical Data Mining for Bioinformatics Health Agriculture and Environment, University of Rajshahi, Bangladesh.*

REFERENCES

Prof. Dr. Satoshi TAKEWAKA
Faculty of Engineering,
Information and Systems,
University of Tsukuba, Tsukuba
305-8573, Ibaraki, Japan.
Email: takewaka@kz.tsukuba.ac.jp

Prof. Dr. Md. Ashabul Hoque
Department of Mathematics,
University of Rajshahi,
Rajshahi-6205, Bangladesh.
Cell Phone: +8801715587509
Email: ashabulh@yahoo.com

Prof. Dr. Gour Chandra Paul
Department of Mathematics,
University of Rajshahi,
Rajshahi-6205, Bangladesh.
Cell Phone: +8801712187595
Email: pcgour2001@yahoo.com

SIGNATURE

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(DIPANKAR KUMAR)