Personal Details

Name: **Dr,Sidheswar Behera**
Date of Birth: 2nd january 1990
Place of Birth: Odisha, India
Gender: Male
Marital Status: Single
Nationality: Indian
Languages: English, Odiya (native), Hindi
E-mail: sbehera_phy@vssut.ac.in
Phone: +91-9776835364

Permanent Address:
At-Rishipur,po.-Gunthapada
Ps.-Aska**,**Dist.-Ganjam-761115
Odisha, India
Present Address:
Department of Physics
Veer Surendra Sai University of Technology , Burla
Sambalpur-768018
Odisha, India

Current Position Assistant Professor at the Department of Physics in Veer Surendra Sai University of Technology, Burla, Sambalpur-768018, Odisha, India (06.06.2014-present).

Educational Qualification

1. **Ph.D**. in Physics, VSSUT, Burla, India (2023).
2. **M. Sc. in Physics**, Berhampur University,Odisha, India (2013). Marks obtained 62% .
3. **B. Sc. in Physics (Honours)**, Science college hinjilicut, Hinjilicut, Berhampur University, Odisha, India (2011). Marks obtained 65.44%.
4. **Higher Secondary in Science Category**, CHSE, Odisha, India (2008). Marks obtained 45.55%.
5. **Secondary Education**, BSE,Odisha, India (2005). Marks obtained 71.86%.
6. **CSIR-NET(LS)** in Physical Sciences held on 23.12.2012.

Teaching Experiences

1. B. Tech. Physics, Department of Physics, Veer Surendra Sai University of Technology, Burla, Sambalpur-768018, Odisha, India from 2014 to present.
2. M. Sc. Physics-Mathematical physics and Basic electronics, Nuclear Physics, Department of Physics, Veer Surendra Sai University of Technology, Burla, Sambalpur-768018, Odisha, India from 2014 to present.
3. Integrated M.sc-Physics-Fundamental of electronics, Digital System and Applications, Waves and Optics, Veer Surendra Sai University of Technology, Burla, Sambalpur-768018, Odisha, India from 2014 to present.
4. Also handling B-tech, M.Sc. and Integrated M.Sc. Lab. Classes from 2014 to present.

Dr. Sidheswar Behera

Publication details(Journals)

1. Behera S, Aljahdaly NH, Virdi, JPS. On the modified $(\fr{G'}{G^2})$-expansion method for finding some analytical solutions of the traveling waves, J Ocean Eng Sci. 2022;7(4):313-320. https://doi.org/10.1016/j.joes.2021.08.013 **(SCIE, I/F-7.1, Cite Score-11.5)**
2. Yao, S.W., Behera, S., Inc, M., Rezazadeh, H., Virdi, J.P.S., Mahmoud, W., Arqub, O.A. and Osman, M.S.: Analytical solutions of conformable Drinfel'd–Sokolov–Wilson and Boiti Leon Pempinelli equations via sine–cosine method, Results Phys., 42 105990 (2022). https://doi.org/10.1016/j.rinp.2022.105990 **(SCI, I/F-5.3, Cite Score-8.7)**
3. Behera, S., Virdi, J.P.S., Analytical solutions of some fractional order nonlinear evolution equations by sine-cosine method, Discontinuity Nonlinearity Complex., 11(2) 275-286 (2023). https://doi.org/10.5890/DNC.2023.06.004 **(Scopus, I/F-0.49)**
4. Behera S, Virdi JPS, Some more solitary traveling wave solutions of nonlinear evolution equations, Discontinuity Nonlinearity Complex. 2023;12(1):75-85. http://dx.doi.org/10.5890/DNC.2023.03.006 **(Scopus, I/F-0.49)**
5. Behera S. Dynamical solutions and quadratic resonance of nonlinear perturbed Schr$\ddot{o}$dinger equation, Front Appl Math Stat., 2023;8:1086766. https://doi.org/10.3389/fams.2022.1086766 **(ESCI , Scopus, I/F-1.3, Cite Score-1.9)**
6. Behera, S., Analysis of travelling wave solutions of two space-time nonlinear fractional differential equations by the first-integral method, Mod. Phys. Lett. B,38 (4) 2350247 , 2023. https://doi.org/10.1142/S0217984923502470 **(SCI, I/F--1.8, Cite Score-3.7)**
7. Behera, S., and N. H. Aljahdaly. Nonlinear evolution equations and their traveling wave solutions in fluid media by modified analytical method. *Pramana* 97, no. 3 (2023): 130. https://doi.org/10.1007/s12043-023-02602-4 **(SCI, I/F-1.9)**
8. Behera, S., and J. P. Virdi. Generalized soliton solutions to Davey–Stewartson equation. *Nonlinear Opt Quantum Opt* 57, no. 3-4 (2023): 325-337. **(ESCI , Scopus, I/F-0.26)**
9. Behera, S, Mohanty , S, and Virdi, J, S. Analytical solutions and mathematical simulation of traveling wave solutions to fractional order nonlinear equations. *Partial Differential Equations in Applied Mathematics* 8 (2023): 100535. https://doi.org/10.1016/j.padiff.2023.100535 **(Scopus, Cite score-3.4)**
10. Behera S. Analytical Solutions In terms of Solitonic Wave Profiles of Phi-four Equation. Nonlinear Opt Quantum Opt 59, no. 3-4 (2023): 253-261. **(ESCI , Scopus, I/F-0.26)**
11. Behera, S., Aljahdaly, N.H. Soliton Solutions of Nonlinear Geophysical Kdv Equation Via Two Analytical Methods. *Int J Theor Phys* **63**, 107 (2024). https://doi.org/10.1007/s10773-024-05647-2 **(SCIE, I/F-1.3)**
12. Behera, S. Multiple soliton solutions of some conformable fractional nonlinear models using Sine–Cosine method. *Opt Quant Electron* **56**, 1235 (2024). https://doi.org/10.1007/s11082-024-06403-w **(SCI, I/F-3.3)**
13. Behera, S. Optical solitons for the Hirota-Ramnai eqution via improved (G'/G2)-expansion method, Mod. Phys. Lett. B, ,2450403 (2024). https://doi.org/10.1142/S0217984924504037 **(SCI, I/F-1.8, Cite Score-3.7)**
14. Behera, S, Mohanty , S, Rezazadeh, H, Akinyemi, L. Dynamical Properties and Novel Wave Solutions of Ion Sound Langmuir Wave Equation in Fluid Dynamics, *Nonlinear Opt Quantum Opt* (2024). **(ESCI , Scopus, I/F-0.26)**
15. Behera S, Virdi JPS, Analytical solutions fractional order partial differential equations arising in fluid dynamics, Applied Mathematics-A Journal of Chinese Universities,2024 . **(SCIE , I/F-1.2)**

Publication details(Conference)

1. Behera, S., Singh Virdi, J. (2022). Traveling Wave Solutions of Some Coupled Nonlinear Systems by Sine–Cosine Approach. In: Giri, D., Raymond Choo, KK., Ponnusamy, S., Meng, W., Akleylek, S., Prasad Maity, S. (eds) Proceedings of the Seventh International Conference on Mathematics and Computing . Advances in Intelligent Systems and Computing, vol 1412. Springer, Singapore. https://doi.org/10.1007/978-981-16-6890-6_66
2. Behera, S., Analytical solutions of fractional order Newell-Whitehead-Segel equation, Somnath Bhattacharyya and Hari Shankar Mahato, Proceedings of the International Conference on Modeling Analysis and Simulations of Multi-scale Transport Phenomena, Springer, Singapore