

Dr. Brijendra Paswan

CONTACT INFORMATION

Dr. Brijendra Paswan
Assistant Professor
Department of Mathematics,
Guru Ghasidas Vishwavidyalaya
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RESEARCH INTERESTS

Wave Propagation Aspects, Theoretical Seismology, Mathematical Geoscience, Elastodynamics.

EDUCATION

Indian Institute of Technology (Indian School of Mines) Dhanbad, INDIA

Ph.D., Applied Mathematics, **Year-2017**

- Research Topic: “Some Problems of Seismic Waves in Anisotropic Media”
- Advisor: Dr. Sanjeev A. Sahu

Banaras Hindu University Varanasi, INDIA

M.Sc., Mathematics, **Year-2012.**

- Dissertation Topic: “Modelling the Role of Bacteria on the Depletion of Dissolved Oxygen in Eutrophied Water Bodies”
- Advisor: Prof. Arvind K. Misra

Deen Dayal Upadhyay Gorakhpur University, Gorakhpur, INDIA

B.Sc., Mathematics & Physics, **Year-2010.**

Govt. Jubilee Inter College Gorakhpur, INDIA

Intermediate (12th), **Year-2006.**

Govt. Jubilee Inter College Gorakhpur, INDIA

High School (10th), **Year-2004.**

ACADEMIC EXPERIENCE

Guru Ghasidas Vishwavidyalaya (Central University), Bilaspur, Chhattisgarh, INDIA

- Assistant Professor in the Department of Mathematics.

24 Feb, 2020 - Till date.

Guru Ghasidas Vishwavidyalaya (Central University), Bilaspur, Chhattisgarh, INDIA

- Assistant Professor (Ad-hoc) in the Department of Mathematics.

9 July, 2018 - 23 Feb, 2020.

1. Deepak Kumar, **Brijendra Paswan**, *Mathematical investigation of reflection and transmission of plane wave at the corrugated interface of orthotropic layer sandwiched between two distinct monoclinic media*, *International Journal of Applied and Computational Mathematics*, **Scopus**[Accepted for Publication]-2024.
2. Deepak Kumar, **Brijendra Paswan**, Pooja Singh, Amares Chattopadhyay, *Reflection and transmission of plane wave at the interface between two distinct nonlocal triclinic micropolar generalized thermoelastic half spaces under DPL and LS theory*, *Acta Mechanica*, **Impact Factor-2.7**, , 2024-(SCI, Q2) [Accepted for Publication].
3. Deepak Kumar, **Brijendra Paswan**, Pooja Singh, *Reflection phenomena of plane wave at a nonlocal monoclinic micropolar generalized thermoelastic half-space*, *Mechanics of Advanced Materials and Structures*, **Impact Factor-3.338**, , 2024-(SCI, Q2).
4. **Brijendra Paswan**, Pooja Singh, Sanjeev Sahu, Amares Chattopadhyay, *Dynamic response of imperfect interfaces on the reflection and transmission of the waves in context of generalised thermo-elasticity*, *Acta mechanica*, 234 (12), 6041-6068, **Impact Factor-2.7**, 2023-(SCI, Q2).
5. **Brijendra Paswan**, Pooja Singh, Sanjeev Sahu, *Mathematical study for the Rayleigh wave propagation in a composite structure with piezoelectric material*, *Journal of Solid Mechanics*, 15 (2), 144-159, 2023, (Scopus).
6. Pooja Singh, Abhishek Kumar Singh, **Brijendra Paswan**, Amares Chattopadhyay, *Mathematical study on reflection and transmission of plane waves in a rotating piezothermo-elastic composite structure*, *Mechanics of Advanced Materials and Structures*, **Impact Factor-3.338**, 30 (14), 2941-2952, 2023-(SCI, Q2).
7. **Brijendra Paswan**, Deepak Kumar, Sanjeev A. Sahu, *Study on SH-wave propagation in a layered structure comprised of magneto-elastic orthotropic medium sandwiched between two semi-infinite media*, *Chhattisgarh Journal of Science and Technology*, 19 (1), 91-97, 2022.
8. Deepak Kumar, **Brijendra Paswan**, *Velocity profile of plane wave incident at the interface between monoclinic and self-reinforced medium under initial stress*, *Chhattisgarh Journal of Science and Technology*, 18(4),105-110, 2021.
9. Sanjeev A. Sahu, Soniya Chaudhary, **Brijendra Paswan.**, *Scattering phenomenon of qP wave at the interface of FGPM and piezoelectric medium*, *Waves in Random and Complex Media*, 29(3),435-455 (2019), **Impact Factor-4.853**-(SCI, Q2).
10. Soniya Chaudhary, Sanjeev A. Sahu, **Brijendra Paswan.**, *Transference of SH waves through Irregular Interface between Corrugated Piezoelectric Layer and Pre-Stressed Viscoelastic Substrate*, *Mechanics of advanced materials and structures*, 26(2),156-169,(2019), **Impact Factor-3.338**-(SCI, Q2).
11. **Brijendra Paswan**, Sanjeev A. Sahu, Pradeep K. Saroj.,*Dynamic response of heterogeneity and reinforcement on the propagation of torsional surface waves*, *Technische Mechanik*, 37(1),69-81(2017), (Scopus).
12. **Brijendra Paswan**, Sanjeev A. Sahu, Amares Chattopadhyay.,*Reflection and transmission of plane wave through fluid layer of finite width sandwiched between two monoclinic elastic half-spaces*. *Acta Mechanica.*, 227(12),3687-3701,(2016), **Impact Factor-2.7**-(SCI, Q2).
13. Sanjeev A. Sahu, **Brijendra Paswan**, Amares Chattopadhyay.,*Reflection and transmission of plane waves through isotropic medium sandwiched between two highly anisotropic half-space.*, *Waves in Random and Complex Media.*, 26(1),42-67 (2015), **Impact Factor-4.853**-(SCI, Q2).

14. Sanjeev A. Sahu, Pradeep K. Saroj, **Brijendra Paswan.**, *Shear waves in a heterogeneous fiber-reinforced layer over a half-space under gravity*. *International journal of Geomechanics.*,15(2),pp-04014048(2014), **Impact Factor-3.819**-(SCI, Q1).

CONFERENCE(S)/WORKSHOP(S)/FPD(S)

1. Participated in **NEP 2020 ORIENTATION & SENSITIZATION PROGRAMME** Organised by UGC- MMTTC, Guru Ghasidas Vishwavidyalaya, Bilaspur during **March 04-13, 2024**.
2. Presented a Paper in *ICRANFAA-2022* on **Mathematical Study of the polarized shear wave propagation in a layered structure** Organised by the Department of Mathematics, Andhra University, A.P during **Jan 29-30, 2022**.
3. Participated in the Seminar on **National Mathematics Day** Organised by the Department of Mathematics, GGV Bilaspur during **Dec 22-23, 2021**.
4. Participated in the **Refresher Course** on *Non-linear Analysis for the Development of Neural Network Systems* Organised by HRDC, GGV Bilaspur during **Sept 13-25, 2021**.
5. **Chaired & Judged** the Technical Session in the National Seminar on **Modeling and Simulation (MS-2021)** organised by Govt. Pt Shyamacharan Shukla College, Dharsiwa, Raipur on **July 3, 2021**.
6. Participated in an International Workshop on **SRINIVASA RAMANUJAN: THE MAN BEYOND INFINITY** at **Central University of Himanchal Pradesh** on **Dec 22, 2020**.
7. Participated in an Induction/Orientation Programme at **Ramanujan College, University of Delhi** from **June 26-July 24, 2020**.
8. *“Reflection and transmission of plane wave at the interface of monoclinic elastic half-space and fluid medium”* presented in the 6th International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics at **Indian Institute of Technology Roorkee, India** during **August 3-6, 2016**.
9. *“On velocity profile of surface wave in anisotropic heterogeneous layer”* presented in the International Conference on Current Trend in PDEs: Theory and Computation at **South Asian University, New Delhi, India** during **December 28-30, 2015**.
10. *“Scattering phenomenon of waves in a composite structure”* presented in the 7th National Conference on Wave Mechanics and Vibrations at **IIT Dhanbad India** during **December 21-23, 2015**.
11. *“Reflection and transmission phenomenon through isotropic layer”* presented in the 12th International Conference on Vibration Problems at **Indian Institute of Technology, Guwahati India** during **December 14-17, 2015**.
12. Participated in 80th annual conference of Indian Mathematical Society held at **IIT(ISM), Dhanbad** on **December 27-30, 2014**.
13. Participated in Science Academy’s Lecture Workshop on “Concept of Fluid Dynamics and its Applications” at **IIT Dhanbad** during **October 08-10, 2014**.

REFEREES

- Dr. Sanjeev A. Sahu (Ph.D supervisor)
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- Prof. Amares Chattopadhyay
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IIT Dhanbad-India.
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