

Dr. RESHMA MALAN

DESIGNATION

Assistant Professor in Mathematics

RESEARCH INTEREST

Mathematical Modelling through porous media and simulation

EXPERIENCE

16 Years

CONTACT INFORMATION

Room No B-202, Admin Block,
Government Engineering College,
Near Sanskar Kendra, College Road,
Valsad-396001
E mail: rrmalan@gecv.ac.in

**APPOINTMENT:**

Government Engineering College, Valsad

Assistant Professor in Mathematics.

2009-Present

EDUCATION:

Ph. D in Mathematics

Gujarat Technological University, Ahmedabad

March-2024

B. Ed.

Veer Narmad South Gujarat University, Surat,
Gujarat

April-2006

M.Sc. in Mathematics

Veer Narmad South Gujarat University, Surat,
Gujarat

March-2005

B.Sc. in Mathematics

Veer Narmad South Gujarat University, Surat,
Gujarat

April-2003

SKILLS AND KNOWLEDGE:

- Maple, Mathematica, MATLAB, LaTeX

TRAINING / WORKSHOP /CONFERENCE ATTENDED:

Trainings/Workshops/FDPs

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| ➤ Online course on "LaTeX101x: LaTeX for Students, Engineers and Scientists, IIT Bombay. | 24/09/2019 to 02/12/2019 |
| ➤ STTP on “Mathematical Modelling and Simulation for Researchers, Engineers and Scientists” , SVNIT, SURAT. | 23/12/2019 to 27/12/2019 |
| ➤ National level FDP on “Mathematical Aspects of Fluid Dynamics” SVIT, Vasad. | 06/07/2020 to 11/07/2020 |
| ➤ National Level Workshop on “LaTex”, SVIT, Vasad. | 27/07/2020 to 01/08/2020 |
| ➤ STTP on Computational Software MATLAB & MATHEMATICA, SVNIT, Surat. | 05/10/2020 to 09/10/2020 |
| ➤ NPTEL-AICTE FDP on “Groundwater hydrology and Management” (12 weeks course). | Jan-Apr 2022 |
| ➤ Workshop on Finite Element Method: Theory, Computation, and Application (FEMTCA 2023) National Institute of Technology, Tiruchirappalli. (1-week training). | 04/12/2023 to 08/12/2023 |
| ➤ Internation workshop on Virtual Element Analysis: Scientific Computational and Applications, Vellore Institute of Technology, Vellore, India. | 10/01/2024 to 12/01/2024 |

Conferences

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| ➤ Presented a poster in “National Conference on Recent Advances in Material Science-202”, organized by the M. S. University, Vadodara. | 23/11/2018 -24/11/2018 |
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| ➤ Presented a poster in XXXIII Gujarat Science Congress-2019, “Teaching and Communicating Science: Improving the Landscape of Educational for Future Wellbeing”, Ahmedabad | 02/05/2019 - 03/05/2019 |
| ➤ Presented a paper in “International Conference on Integrated Interdisciplinary Innovations in Engineering” Organized by Panjab University, Chandigarh. | 28/08/2020 to 30/08/2020 |
| ➤ Attended the “International Conference on “Advances in Differential Equations and Numerical Analysis” Organized by IIT, Guwahati. | 12/10/2020 to 15/10/2020 |
| ➤ Presented a paper in “2 nd International Conference on Mathematical Modelling and Simulation in Physical Sciences” Organized by SVNIT, Surat. | 05/02/2022-06/02/2022 |
| ➤ Presented a paper in “1 st International Conference on “Advances in Water Treatment and Management Organized by PDEU, Gandhinagar. | 25/03/2022-26/02/2022 |
| ➤ Presented a paper in “10th International Conference on Mathematical Modelling, Simulation and Computational methods” | 11/12/2023-13/12/2023 |

PROFESSIONAL MEMBERSHIPS:

Life Member: Indian Society for a Technical Education, Indian Mathematical Society (IMS).

PORTFOLIOS:

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| ➤ GTU Team Member, GEC, Valsad. | 2015-Present |
| ➤ House Keeping Member, GEC, Valsad | 2018-Present |
| ➤ Fit India Youth Club Member, GEC, Valsad | 2020-Present |
| ➤ Sports Committee Member, GEC, Valsad | 2020-Present |
| ➤ Women Development Cell member, GEC, Valsad | 2021-Present |
| ➤ G20 Committee Member, GEC, Valsad | 2022-Present |

➤ Departmental Gem committee member	2021-Present
➤ Newsletter committee member	2021-Present
➤ Departmental Furniture Maintenance	2021-Present

PUBLICATION (PAPERS/BOOKS):

- Reshma R. Malan and Narendrasinh B. Desai, Two-dimensional mathematical modelling with continuously dumped pollutants in aquifer, *Mathematics in Engineering, Science and Aerospace*, 14(2), (2023), 527–551 (SCOPUS Indexed Journal).
- Reshma R. Malan and Narendrasinh B. Desai, Contaminant transportation modelling with time dependent dispersion, *Computational Methods for Differential Equations*, 11(3), (2023), 605–614 (Web of Science Journal).
- Reshma R. Malan and Narendrasinh B. Desai, An analytic solution of the one-dimensional solute transport equation for uniform unsteady flow in a homogeneous medium, *Advances and Applications in Mathematical Sciences*, 22(1), (2022), 25–42 (UGC Approved Journal).
- Reshma R. Malan and Narendrasinh B. Desai, Study of groundwater pollution: Non-uniform unsteady flow, CRC Press **(Book Chapter)** (In Press).
- Reshma R. Malan and Narendrasinh B. Desai, Groundwater contamination in heterogeneous semi-infinite aquifer for 1-D flow, De Gruyter **(Book Chapter)** (In Press).

PROJECT GUIDED:

Applied for a Startup-WeStart for the grant under ‘Westart -2021’

Applied for a Toy Innovation Challenge to develop a Toy under ‘M2M -2020’

SUBJECT TAUGHT:

Mathematics-I (BE01000041)

Mathematics II (BE02000011)

Mathematics I (3110014)

Mathematics II (3110015)

Complex Variables and Partial Differential Equations (313005, 3140610)

Applied Mathematics for Electrical Engineering (3130908)