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

➢ 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

➢ 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

- ➢ 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 "2nd International Conference on Mathematical Modelling and Simulation in Physical Sciences" Organized by SVNIT, Surat. — 05/02/2022-06/02/2022

- ➢ Presented a paper in "1st 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

PORTFOLIOS:

- ➢ 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-2024 **(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 (3110014)
Mathematics II (3110015)
Complex Variables and Partial Differential Equations (313005, 3140610)
Applied Mathematics for Electrical Engineering (3130908)