

## Dr. Amit Kumar Verma

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Dr. Amit K. Verma is currently working as an Assistant Professor in the Department of Mathematics at IIT Patna. Dr. Verma has earned his Ph.D. from IIT Kharagpur in 2009. In his Ph.D. thesis, he studied existence and uniqueness results for a class of nonlinear singular two-point boundary value problems. Later he explored various other research areas related to both theory and computations. Working on entirely different research areas simultaneously is one of his hobbies. His current expertise includes the following diverse research areas.

- Existence and Uniqueness
- Monotone Iterative Technique: Upper and Lower Solutions
- Green's Function
- Nonlinear Singular Boundary Value Problems
- Multi-Point Boundary Value Problems
- Epitaxial Growth Problems
- Finite Difference Schemes, Homotopy Perturbation, Variation Iteration Scheme
- Non-Standard Finite Difference Schemes: Theory and Computation
- Numerical Solutions of Nonlinear Partial Differential Equations
- Theory and computation with the aide Wavelets
- Integral Transforms

Dr. Verma has published more than 50 research papers in peer-reviewed journals of International repute. He is collaborating with some of the internationally renowned highly cited authors. Three of his scholars have completed their Ph.D. under his guidance and 5 are currently working. Along with these, he is also guiding MTech and MSc students at IIT Patna. He is reviewing articles for AMS MathSciNet and also working as a regular reviewer for various journals of international repute. He is a member of various internationally renowned mathematical societies.