



DESHBANDHU COLLEGE
(UNIVERSITY OF DELHI)
KALKAJI, NEW DELHI - 110019
Faculty Details Proforma for College Website

Title	Dr.	First Name	Pankaj	Last Name	Mishra	Photograph
Designation	Assistant Professor					
Address	Sarita Vihar, New Delhi					
Phone No. Office	(+91) 9473937649					
Residence						
Mobile	(+91) 7007890548					
Email	pmishra@db.ac.in					
Web-Page						
Educational Qualifications						
Degree	Institution				Year	
Ph.D.	South Asian University, New Delhi				2013-2019	
M.Phil.						
PG	Indian Institute of Technology, Kanpur				2001	
UG	Purvanchal University, Jaunpur, U.P.				1999	
Any other qualification	CSIR-NET(JRF)				2001	
Career Profile						
GATE-2001						
Administrative Assignments						
Member, Proctorial Committee						
Areas of Interest/Specialization						
Numerical Analysis, Differential Equation						
Subjects Taught						
Numerical Analysis, Partial Differential Equations, Probability & Statistics, Calculus.						
Research Guidance						
List against each head (If applicable):						
<ol style="list-style-type: none"> 1. Supervision of awarded Doctoral Thesis 2. Supervision of Doctoral Thesis, under progress 3. Supervision of awarded M.Phil. dissertations 4. Supervision of M.Phil. dissertations, under progress 						
Publications Profile						

List against each head (If applicable) (as Illustrated with examples)

1. Books/Monographs (Authored/Edited) - NA
2. Research papers published in Refereed/Peer Reviewed Journals
 - a) Research papers published in Academic Journals other than Refereed/Peer Reviewed Journals - NA
 - b) Research papers published in Refereed/Peer Reviewed Conferences
 - c) Research papers Published in Conferences/Seminar other than Refereed/Peer Reviewed Conferences:NA
3. Other publications (Edited works, Book reviews,Festschrift volumes, etc.):NA

Note: See the Details in attached CV.

Conference Organization/ Presentations

List against each head(If applicable)

1. Organization of a Conference: None
2. *Participation as Paper/Poster Presenter*

Note: See the Details in attached CV.

Research Projects (Major Grants/Research Collaboration)

NA

Awards and Distinctions

NA

Association With Professional Bodies

NA

Other Activities

Note: See the Details in attached CV.



Signature of Faculty
Member

- You are also requested to give your complete resume as a Word or PDF file to be attached as a link on your department page.

Curriculum Vitae

Dr. Pankaj Mishra

Ph.D. (South Asian University, New Delhi)

Assistant Professor

Department of Mathematics, Deshbandhu College, University of Delhi

Cell: 9473937649

E-Mail: pmparasar@gmail.com



1 Education

1.1 Doctor of Philosophy (Ph.D.)

- i. **Thesis Title:** Orthogonal Spline Collocation Methods for Singularly Perturbed Reaction-Diffusion Problems
- ii. **University:** South Asian University, New Delhi.
- iii. **Duration:** 2013–2019.
- iv. **Registration No:** SAU/AM(P)/2013/002.
- v. **Supervisor:** Prof. Kapil K. Sharma, Professor, Department of Mathematics.

1.2 Academic Details

- i. Pre-Ph.D, South Asian University, New Delhi, **2013-2014, Mathematics, CPI 9.0**
- ii. Master in Science, Indian Institute of Technology, Kanpur, **1999-2001, Mathematics, CPI 7.2**
- iii. Bachelor in Science, Purvanchal University, Jaunpur, **1996-1999, Mathematics, Physics, 78.4 %**
- iv. Intermediate, U.P. Board, Allahabad, **1995-1996, Maths Group, 75.4 %**
- v. High School, U.P. Board, Allahabad, **1993-1994, Science Group, 78%**

1.3 Other Exams

- i. CSIR–NET, 2001, Mathematics, Roll No.: 400233, JRF
- ii. GATE, 2001, Mathematics, Roll No.: MA 460118, Percentile : 88.25

1.4 Programming Skills

MATLAB, MATHEMATICA, SCILAB, LATEX, Software R, MAXIMA, OCTAVE.

1.5 Area of Research

Singularly Perturbed Differential Equations, Orthogonal Spline Collocation Methods.

1.6 Courses Taught

Numerical Analysis & its Applications, Ordinary and Partial Differential Equations, Probability & Statistics.

1.7 Teaching Experience

- i. Deshbandh College, University of Delhi, **August 28, 2019–Till date**, Assistant Professor(Adhoc)
- ii. Hindustan College of Science & Technology, Mathura, **Sep 02, 2009–July 30, 2013**, Assistant Professor
- iii. Institute of Engineering, Jiwaji University, Gwalior, **May, 2005–May, 2006**, Lecturer

1.8 Research Publications

- i. **Pankaj Mishra**, Kapil K. Sharma, Amiya K. Pani and Graeme Fairweather. *Orthogonal spline collocation for a class of singularly perturbed reaction diffusion problems in one dimension: A Computational Study*, **Technical Report, November (2016), DOI: 10.13140/RG.2.2.15552.94726.**
- ii. **Pankaj Mishra**, Kapil K. Sharma, Amiya K. Pani and Graeme Fairweather. *Orthogonal spline collocation for singularly perturbed reaction diffusion problems in one dimension*, **Int. J. Numer. Anal. Model., 16(4), pp. 647-667, 2019.**
- iii. **Pankaj Mishra**, Kapil K. Sharma and Graeme Fairweather. *Orthogonal spline collocation for singularly perturbed semilinear reaction diffusion problems in one dimension*, **International Journal for Computational Methods in Engineering Science & Mechanics, 20(5), pp. 336–346 , 2019, Print ISSN: 1550-2287, Online ISSN: 1550-2295.**
- iv. **Pankaj Mishra**, Kapil K. Sharma, Amiya K. Pani and Graeme Fairweather. *High order discrete-time orthogonal spline collocation methods for singularly perturbed 1D parabolic reaction-diffusion problems*. **Numerical Methods for Partial Differential Equations, 2019, DOI: 10.1002/num.22438, Online ISSN:1098-2426.**
- v. Kapil K. Sharma, Pratima Ray, **Pankaj Mishra**. *A robust numerical scheme for singularly perturbed delay differential equations with turning point*. **International Journal for Computational Methods in Engineering Science & Mechanics, 20(5), pp. 423–433, 2019, Print ISSN: 1550-2287, Online ISSN: 1550-2295.**

1.9 Paper presentation in Conferences

- i. **Error estimate in the balanced norm of the orthogonal spline collocation methods for singularly perturbed reaction-diffusion problems in one dimension**, International Conference on Mathematical Analysis and Its Applications, **Dec 14– 16, 2019**, South Asian University, New Delhi
- ii. **A BDF2 orthogonal spline collocation methods for singularly perturbed reaction diffusion parabolic problems in one space dimension** , International Conference on Recent Developments in Theory, Computation & Application of Differential Equations, **January 21–23, 2019**, South Asian University, New Delhi
- iii. **A Robust numerical method for singularly perturbed semilinear boundary value problems in one dimension** , International Conference on Current Trends in Theoretical & Computational Differential Equations with Applications, **Dec 01– 05, 2017**, South Asian University, New Delhi
- iv. **A parameter uniform method for singularly perturbed reaction diffusion problem in 1D using C^1 spline**, International Conferences on Recent Advances in Theoretical & Computational Partial Differential Equations with Applications, **Dec 01–05, 2016**, UIET, Panjab University, Chandigarh.
- v. **Orthogonal spline collocation method for a class of singularly perturbed reaction diffusion problems in one dimension**, International Conferences on Current trends in PDEs: Theory & Computations **Dec 28–30, 2015**, South Asian University, New Delhi.

1.10 Workshops/Schools/Internship

- i. International Workshop on Numerical methods in Scientific Computing, **Feb 21–22, 2020**, South Asian University, New Delhi
- ii. Teacher's Enrichment Workshop on Differential Equations, Mathematical Modelling & Analysis, **July 24–29, 2018**, Deshbandhu College, New Delhi
- iii. Advanced Level Workshop on Diffusion and Sub-Diffusion Problems: Theory Numerics & Applications, **Jan 31– Feb 05, 2017**, The LNM Institute of Information Technology (LNMIIT), Jaipur
- iv. Singularly Perturbed Partial Differential Equations(SPPDEs) Theory, Computation and Application, **March 24–28, 2016**, Indian Institute of Technology, Kanpur.
- v. Summer Internship under Prof Amiya K. Pani, **June 14–July 11, 2016**, Indian Institute of Technology, Bombay.
- vi. CIMPA- Research School **July 6–17, 2015**, Indian Institute of Technology, Bomaby
- vii. Pre Research School for CIMPA, **June 24–July 4, 2015**, Indian Institute of Technology, Bomaby.
- viii. Advanced Workshop on Finite Difference Methods for Differential Equations, **March 13–17, 2015**, South Asian University, New Delhi

- ix. Advanced Level Training Programme on Differential Equations **May 26–June 13, 2014**, Indian Institute of Science Education Research, Trivendram.
- x. Orthogonal Spline Collocation Methods for PDEs, **March 21–24, 2014**, South Asian University, New Delhi.
- xi. Elliptic Equations: Variational Formulation & Numerics (EEVFN-2013), **Dec 09–20, 2013**, The LNM Institute of Information Technology (LNMIIT), Jaipur.
- xii. Discrete Mathematics & Discretization Process, **Oct 25–26, 2013**, South Asian University, New Delhi.
- xiii. Advanced Instructional School in Numerical Analysis, **June 18–July 7, 2012**, Panjab University, Chandigarh.
- xiv. Ramanujan's Mathematics, **Dec 22–24, 2010**, National Academy of Sciences, Allahabad, India (NASI).
- xv. LaTeX: The Language of Scientific Writing (LaTeX-2012), **March 17–18, 2010**, Hindustan Institute of Technology & Management (HITM), Agra.

1.11 Delivered Talk/Lecture

- i. **Orthogonal Spline collocation methods for singularly perturbed parabolic problems**, International Conference on Recent Advances in PDE: Theory, Computations and Applications, **June 08– 10, 2017**, Indian Institute of Technology, Bombay (IITB)
- ii. **A collocation approach for numerical solution of differential equations**, Research Scholar Meet, **May 8–9, 2015**, South Asian University, New Delhi.

1.12 Conference Attended

- i. International Conferences on Function Spaces and Inequalities, **Dec 8–12, 2015**, South Asian University, New Delhi.

1.13 Session Chaired in Conferences

- i. International Conference on Mathematical Analysis and Its Applications, **Dec 14– 16, 2019**, South Asian University, New Delhi

1.14 Reviewers

2 Personal Details

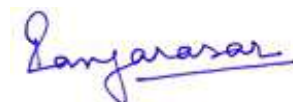
- i. **Name:** Pankaj Mishra
- ii. **Father's Name:** Shri Radhey Shyam Mishra

- iii. **Permanent Residence Address:** Village: Shripatti, Post: Mawaiya, Thana: Chilh, District: Mirzapur, Uttar Pradesh-231312.
- iv. **Local Residence Address:** Sarita Vihar, New Delhi-110076
- v. **Date of Birth:** October 20, 1979
- vi. **Marital Status:** Married.
- vii. **Cell No:** 7007890548, 09473937649
- viii. **E-Mail:** pmparasar@gmail.com, pankajm@iitkalumni.org
- ix. **Gender:** Male
- x. **Nationality:** Indian
- xi. **Language Known:** Hindi, English

3 Declaration

I, hereby, declare that the particulars furnished by me in this resume are true to the best of my knowledge and based on records.

Your sincerely



(Dr. Pankaj Mishra)

May 7, 2020, New Delhi