

Dr. Shaileshkumar Sumantrai Patel

M.Sc. (Gold-Medalist) , Ph. D.

Professor of Mathematics

Head of Applied Sciences and Humanities Department

GIDC Degree Engineering College, Abrama, Navsari-396 406

Email: hod_ash@gdec.in; chintshail@yahoo.com;(Mob.) - [9427583211](tel:9427583211), [9687690671](tel:9687690671)**DOCTORAL DEGREE:**

Title	AN APPROXIMATE SOLUTION OF DISPLACEMENT PROCESSES IN POROUS MEDIA
Guide	Dr. M.N.Mehta, S.V.R. College of Eng. and Tech (Now S.V.N.I.T), Surat,
University	Awarded in June 1998, V.N. S. G. University, Surat

TEACHING EXPERIENCE:

TOTAL EXPERIENCE		28 YEARS		
Name of the Institution where Employed	Designation (Type of Work)	PERIOD	Govt./GIA/SF/PPP	Job Type
B.K.M. Science College, Valsad	Visiting Lecturer	Academic Year 1994-95	GIA	Honorary
S.V.N.I.T, Surat, Gujarat	Lecturer	27-02-1996 to 31-01-1998	Govt.	Adhoc (Full Time)
S.V.M. Institute of Technology, Bharuch, Gujarat	Lecturer	02-02-1998 to 01-02-2002	SF	Full Time (Permanent)
-do-	Lecturer (Senior Scale)	02-02-2002 to 31-12-2005	SF	Full Time (Permanent)
-do-	(Lecturer, Senior Scale upto 01-02-2007, Selection Grade from 02-02-2007 to 21-10-2007 as per 5 th Pay) Assistant Professor as per 6 th Pay	01-01-2006 to 21-10-2007	SF	Full Time (Permanent)
-do-	Associate Professor	22-10-2007 to 31-08-2013	SF	Full Time (Permanent)
GIDC Degree Engineering College, Abrama, Navsari, Gujarat	Associate Professor	01-09-2013 to 01-01-2017	PPP	Full Time (Permanent)
-do-	Professor	02-01-2017	PPP	Full Time (Permanent)

POST GRADUATE EXPERIENCE:

M.Sc.	Elements of P.D.E. at M.Sc. –I Sem.-II at B.K.M. Science College, Valsad from to April'2011 Nov.'2010	Total P.G. Teaching Experience: 2.5 Years.
M.E.	Numerical Methods at M.E. Sem-II at S.V.M.Institute of Technology, Bharuch since February'2011	

OTHER ACHIEVEMENTS:

Gold Medal	SHRI VRAJLAL SHROFF Gold Medal	First rank in the B.K.M. Science College, Valsad	M.Sc. April'94
Uni. Rank	Second rank	V.N.S.G.University, Surat	M.Sc. April'94
Post Graduate Teacher	V.N.S.G. University, Surat since Nov.'1998		Letter No./PG/PGT/Recog./1011/1999
CERTIFICATE OF MERIT	National Service Scheme	V.N.S.G.U.,Surat	

RESEARCH INTEREST and AREA OF SPECIALIZATION:

Interested research fields are: **Mathematical modelling and analysis of the problems on Fluid flow through porous media which covers area of oil reservoir engineering. Image processing is also an emerging problem. Also the most advanced techniques such as Numerical methods, Fuzzy logic and control, Optimization techniques, Linear algebra, Nonlinear differential equations and other mathematical tools that can be applied in such problems by which we can predict about the results and suggest it to the related fields.**

SUBJECTS OF KNOWLEDGE:

Teaching and taught **Calculus, Linear algebra, Differential Equations, Transformations, Numerical Techniques, Complex Analysis, Optimization Techniques, Discrete Mathematics, Probability and Statistics.**

Also **Functional Analysis, Real Analysis, Topology, Abstract Algebra, Operations Research, Differential Equations, Fuzzy logic** are the subjects of my keen interest.

ADMINISTRATIVE INTEREST:

Apart from teaching during my career I worked as an exam superintendent, coordinator of assessment centre, Hostel committee member, senior supervisor, coordinator of GTU, admission committee on MQ and NRI quota, Nodal officer for admission(ACPC), HOD, In charge Principal, etc.

RESEARCH GUIDE:

M.PHIL.	Guided one student in the Veer Narmad South Gujarat University, Surat, Rajesh A. Jadav: STUDY OF DIGITAL IMAGE PROCESSING THROUGH LINEAR FUZZY ALGEBRA AND ENHANCEMENT SEGMENTATION TECHNIQUES (Awarded on 08-02-2011)
Ph.D.	Supervisor for Ph.D. in Gujarat technological University, Ahmedabad, Gujarat. Two students have been awarded Ph.D. by GTU. 1. Mansi Desai: Mathematical Approach in Different Phenomena Arising in Multiphase Flow in Porous Media(04-07-2020) 2. Megha Tailor: Modeling the Problem of Multifluid Flow in Porous Media and Their Solution by Computational Techniques (05-09-2020).

ACADEMIC, ADMINISTRATIVE CONTRIBUTION:

Co-ordinator	Central Assessment of External Examinations	Bharuch Centre	V.N.S.G.U, Surat	3 Years
Exam Superintendent	University Examinations	Bharuch Centre	V.N.S.G.U, Surat	8 Years
Hostel Committee member	Boy's Hostel	S'ad Vidya Mandal College Campus		3 Years
Paper Setter/Evaluator	University Examinations	V.N.S.G.U, Surat and GTU, Ahmedabad		Since 1998
Senior Supervisor	External exams	SVMIT centre, Bharuch	GTU	Since 4 Years
Co-coordinator	External exams	SVMIT centre, Bharuch	GTU	2 Years
Students Discipline Programmes	Attendance Regulation	Created online entry System	SVMIT , Bharuch	
	Continuous Evaluation Scheme	Designed the Format of Transparency	SVMIT , Bharuch	
GTU Coordinator	External Exams, and other college related issues	GTU	GDEC , Navsari	From 18-02-2014 to 13-07-2020
Committee Member	Stock and File arrangement		GDEC , Navsari	
Teacher's Subject File Preparation	Designed common format for all Teachers in the Institute	Made easy for screening the performance report	SVMIT , Bharuch	
Head of the Department	Department of Mathematics and Department of Applied Sciences and Humanities		SVMIT , Bharuch	Feb' 1998 to Aug'2013
Cultural Programs	To manage in Disciplinary Environment			
Admission Committee Member	Admissions on Management quota And NRI quota		SVMIT , Bharuch	3 Years
Nodal officer	ACPC		SVMIT , Bharuch	1 year
Head of the Department	Department of Applied Sciences and Humanities		GDEC, Navsari	Since Sept'2013
Coordinator	GTU Exam Centre		GDEC, Navsari	2014 to 2020
Fee Regularity Committee issues	Fee Revision from 2014		At GDEC, Navsari	2014
Chair Person	Pedagogy Workshop on Calculus		At GTU, Ahmedabad	June 2012
Chief Editor	Souvenir-Profusion'15 and 16		GDEC, Navsari	Feb-2015, March-2016
Editor	Souvenir-Profusion'15 and 16		GDEC, Navsari	Feb-2017, March-2018,2019
Editor	GDEC News Letter		Resonance@GDEC	Edited five news letters
Coordinator	AISHE		Gujarat	2014-2022
Coordinator	Affiliation Procedure to GTU		GDEC, Abrama with GTU	2014-2020
Program Organizer	Republic day and Independent day		GDEC, Abrama	Since 2014
Coordinator	KYC procedure		GDEC, Abrama	For three years

Coordinator	Fee Revision Committee (FRC)	GDEC, Abrama	2014-17, 2017-20
Coordinator	Sports Committee	GDEC, Abrama	March-2015
Coordinator	Cultural Committee	GDEC, Abrama	March-2016
Coordinator	Bridge Course	GDEC, Abrama	2014 to 2018
Coordinator	Orientation Programme	GDEC, Abrama	Since 2014
Coordinator	Design Lab	GDEC, Abrama	Since 01-08- 2017
Co-ordinator	Advertisement and Branding of GDEC	GDEC, Abrama	2018
Advisor	Admission Committee	GDEC, Abrama	2021-22
Principal In-charge	After relieving Dr. K. N. Mistry and before joining of Dr. N. D. Sharma; And also many times when regular principal goes on leave.	GDEC, Abrama	19-06-2018 to 31-07-2018,
Convener	Admission Committee	GDEC, Abrama	2022-23
Convener	Science Fair “AAVISHKARAM”, Navsari and Valsad Districts Level	GDEC, Abrama	19-01-2018
Convener	Science Fair “AAVISHKARAM”, Navsari and Valsad Districts Level	GDEC, Abrama	06-10-2018
Convener	Navsari District Level Science Fair of “Science Maths and Environment”	GDEC, Abrama	29 th and 30 th December 2022
Coordinator/Member Secretary	IQAC (Internal Quality Assessment Cell)	GDEC, Abrama	Since 26-02- 2021
Translator and Reviewer	AICTE SCHEME FOR TRANSLATING TECHNICAL BOOKS IN GUJARATI LANGUAGE	Through GTU	2022, 2023

Organized STTP, Lecture Series, etc.:

TOPIC	SCHOOL/SYMPOSIUM	HELD AT	DURATION	PERIOD
Recent Trends of Mathematics in Science and Engineering	Short Term Training Programme	GIDC Degree Engineering College, Navsari	2 nd January 2017 to 6 th January 2017	1 WEEK
Research Methodology for Academia	Short Term Training Programme	Naran Lala MBA College, Eru, Navsari	10 th July 2017 to 14 th July 2017	1 WEEK
Designing of Mathematical Models in different fields of Engineering	Short Term Training Programme	GIDC Degree Engineering College, Navsari	19th March to 23rd March, 2018	1 WEEK
MATLAB Lectures series	For GDEC staff members	GIDC Degree Engineering College, Navsari	2016-17	1 day
Mathematics in Real Life	State Level Webinar	Online, GDEC, Abrama	24th May 2020	2 Hours

OTHER ACADEMIC ACTIVITIES, PRESENTATIONS:

Educational System Development, System Maintenance and System Regulation	05-10-2013 College Level	At GIDC Degree Engineering College, Navsari
Students Motivational Program	26-10-2013 For 3 rd Sem College Level	At GIDC Degree Engineering College, Navsari
Students Motivational Program	16-11-2013 For 1st Sem College Level	At GIDC Degree Engineering College, Navsari
Career and Admission Guidance after 12	03-04-2014 And 03-05-2014, April-2015, April-2016 For Navsari District Students	At GIDC Degree Engineering College, Navsari
Golden ratio and its Applications	Jan'2012 at Science Exhibition in the 19 th Annual Science festival	by NCSC at Sports and Recreation Club, GNFC
Expert Lecture	National Level Workshop on CFD for Scientist and Engineers	20-06-2014 at S.V.N.I.T., Surat
Paper Setter	UPL Universty end semester exams	2019
Paper Setter	Ganpat University for Ph.D. Entrance Test	2017
Expert Lecture	Mathematical Modelling Designing and Solution Approach through Various Problems in Real Life	STTP at GDEC on 21-03-2018
Expert Lecture (Webinar)	Mathematics in Real Life	24 th May 2020 at GDEC, Abrama
Expert Lecture (Webinar)	Algebraic Structures	18 th April 2020 at RNGPIT, Bardoli

Other Special Academia Involvements:

Title	Institution	
Expert in the team of Research Advisory Committee (RAC) of Mathematics for Ph.D. related procedures	VNSGU, Surat	15-06-2021 to 22-05-2024
External member of Board of Studies of Department of Mathematics	Indus University, Ahmedabad	Since 10-06-2021
External Referee for assessing Ph.D. Thesis of Research Scholars	VNSGU, Surat; RAI University, Ahmedabad; Indus University, Ahmedabad	06 Thesis
Expert in Viva-voce examination of Ph.D. Scholars	VNSGU, Surat; RAI University, Ahmedabad	04 Students
External Referee for assessing M.Phil. Dissertition	VNSGU, Surat	One Student(2019)
Expert in Viva-voce examination of M.Phil. Scholars	VNSGU, Surat	15-07-2020, One Student
Member of Academic Inspection Committee (AIC) appointed by GTU, Ahmedabad	Bhagwan Mahavir Education Foundation, GEC, Daman, GEC, Valsad. SS Agrawal Inst of Eng. And Tech, Navsari	21-05-2019 16-10-2021 01-06-2022 15-06-2022
Subject Expert for the Conduction of Interview	Various Degree engineering and Polytechnic Colleges affiliated by GTU, Ahmedabad	

DPC Expert to review the work of external Ph.D. Scholars during their tenure	GTU, Ahmedabad	Three Scholars
Expert to review doctoral candidates at Research Week	GTU, Ahmedabad	22-02-2016
Member of Scientific Committee	International Conference on Efficient Engineering Systems	2020
Reviewer of Research Papers	International Conference on “Research and Innovations in Science, Engineering & Technology”	2017
	For different Journals	04

OTHER SOCIAL ACTIVITIES:

Jury member	Science Exhibition in the 20 th Annual Science festival	9 th and 10 th Feb 2013 by NCSC at Sports and Recreation Club, GNFC
Career and Admission Guidance after 12	On 04-05-2014 and 03-05-2016 For Kantha Vistar Navsari District Students	At Agriculture University, Navsari
Nodal Officer	Swachh Bharat Summer Internship, MHRD	At GDEC:: May 2018
Coordinator	International Yoga Day	21-06-2016,2017,2018
Coordinator	Yoga Program, Tree Plantation	22,23-08-2016
Programme coordinator	Kanuni Shibir, Through District Legislative Authority	At GDEC::18-09-2017
Induction Training	Training of Trainers(ToT)	At SPIPA, Ahmedabad on 18 th 19 th July 2016
Expert Lecture	Problem Solving and Decision Making, Induction training to the Class 3 employees through SPIPA Regional Training Centre, Surat, Navsari	At Vyara, 12-04-2018 At Navsari 24-11-2016/09-12-2016
Expert Lecture	Conflict Management, Induction training to the Class 3 employees through SPIPA Regional Training Centre, Surat, Navsari	At Vyara, 12-04-2018 At Navsari 24-11-2016/09-12-2016
Expert Lecture	Explanation of Structure of Education Department, Induction training to the Class 3 employees through SPIPA Regional Training Centre, Surat, Navsari	At Navsari 03-12-2016/20-12-2016
Expert Lecture	Gender Awareness, Induction training to the Class 3 employees through SPIPA Regional Training Centre, Surat, Navsari	At Navsari 05-12-2016
Expert Lecture	Test and Opinion of Students, Induction training to the Class 3 employees through SPIPA Regional Training Centre, Surat, Navsari	At Navsari 20-12-2016

MEMBERSHIPS:

Indian Society for Technical Education	LIFE MEMBER	LM – 28400
Gujarat Ganita Mandal	LIFE MEMBER	904/L602
The Mathematics Education, Siwan	ANNUAL MEMBER	
B.K.M. Science College Past Students Association (Alumni), Tithal Road, Valsad	ALUMNI	No. 550 12-02-2012

PUBLICATION OF THE TEXTBOOKS:

TITLE OF THE BOOK	EDITION (Year)	ISBN	PUBLISHER	REMARKS
HIGHER ENGINEERING MATHEMATICS – I	First Edition (2006)	81-89736-12-4	Atul Prakashan, Ahmedabad	As per V.N.S.G.U., Surat syllabus
HIGHER ENGINEERING MATHEMATICS – II	First Edition (2007)	81-89736-18-3	Atul Prakashan, Ahmedabad	As per V.N.S.G.U., Surat syllabus
HIGHER ENGINEERING MATHEMATICS – III	Second Revised Edition(2007) (2006-1 st Edition)		Atul Prakashan, Ahmedabad	As per V.N.S.G.U., Surat syllabus
ENGINEERING MATHEMATICS – I (Calculus and Analytic Geometry)	Third Revised Edition(2010) (2008-1 st Edition)		Atul Prakashan, Ahmedabad	As per Gujarat Technological University, Ahmedabad syllabus
ENGINEERING MATHEMATICS – II (Linear Algebra)	Third Revised Edition(2011) (2009-1 st Edition)		Atul Prakashan, Ahmedabad	As per Gujarat Technological University, Ahmedabad syllabus
ENGINEERING MATHEMATICS – III (Differential Equations and Integral transforms)	Third Revised Edition(2011) (2009-1 st Edition)		Atul Prakashan, Ahmedabad	As per Gujarat Technological University, Ahmedabad syllabus
ENGINEERING MATHEMATICS – IV (Complex Analysis and Numerical Techniques)	Second Revised Edition(2011) (2010-1 st Edition)		Atul Prakashan, Ahmedabad	As per Gujarat Technological University, Ahmedabad syllabus
CALCULUS(VOLUME-I)	FIRST EDITION (2011), Sixth revised edition(2016)	978-93-81518-39-7	Atul Prakashan, Ahmedabad	As per Gujarat Technological University, Ahmedabad syllabus
VECTOR CALULUS AND LINEAR ALGEBRA (VOLUME-II)	FIRST EDITION (2012), Sixth revised edition(2017)	978-93-81518-10-6	Atul Prakashan, Ahmedabad	As per Gujarat Technological University, Ahmedabad syllabus
COMPLEX ANALYSIS AND NUMERICAL TECHNIQUES (VOLUME-IV)	FIRST EDITION (2012), Sixth revised edition(2017)	978-93-81518-11-3	Atul Prakashan, Ahmedabad	As per Gujarat Technological University, Ahmedabad syllabus
DIFFERENTIAL EQUATIONS AND INTEGRAL TRANSFORMS	FIRST EDITION (2012)	978-93-81518-37-3	Atul Prakashan, Ahmedabad	As per Gujarat Technological University, Ahmedabad syllabus
ADVANCED ENGINEERING MATHEMATICS – VOLUME III	FIRST EDITION (2012), Fifth revised edition (2016)	978-93-81518-46-5	Atul Prakashan, Ahmedabad	As per Gujarat Technological University, Ahmedabad syllabus
Numerical Methods and Statistics for Computer Engineering	First Edition (2015), Third revised edition(2018)	978-93-85138-12-6	Atul Prakashan, Ahmedabad	As per Gujarat Technological University, Ahmedabad syllabus
Numerical Methods and Statistics for Civil Engineering	First Edition (2015), Third revised edition(2018)	978-93-85138-11-9	Atul Prakashan, Ahmedabad	As per Gujarat Technological University, Ahmedabad syllabus
Mathematics-III for Engineers(AEM)	First Edition (2017)	978-93-85138-92-8	Atul Prakashan, Ahmedabad	As per Gujarat Technological University, Ahmedabad syllabus

Mathematics-I for Engineers(Calculus)	First Edition (2017)	978-93-85173-04-9	Atul Prakashan, Ahmedabad	As per Gujarat Technological University, Ahmedabad syllabus
Mathematics-I for B.E. Semester-I	First Edition (2018) , Fourth edition(2022)	978-93-85173-41-7	Atul Prakashan, Ahmedabad	As per Gujarat Technological University, Ahmedabad syllabus
Mathematics-II for B.E. Semester-2	Third Edition (2023)	978-93-85173-72-1	Atul Prakashan, Ahmedabad	As per Gujarat Technological University, Ahmedabad syllabus
Complex Variables and Partial Differential Equations (Semester III)	First Edition (2019) , Second edition (2020)	978-93-85173-87-5	Atul Prakashan, Ahmedabad	As per Gujarat Technological University, Ahmedabad syllabus
Probability and Statistics	First Edition (2019) , Third edition (2022)	978-93-85173-89-9	Atul Prakashan, Ahmedabad	As per Gujarat Technological University, Ahmedabad syllabus
Applied Mathematics for Electrical Engineering	First Edition (2019), Second Edition (2021)	978-93-85173-90-5	Atul Prakashan, Ahmedabad	As per Gujarat Technological University, Ahmedabad syllabus
Discrete Mathematics	First Edition (2020) , Third edition (2023)	978-93-85138-11-9	Atul Prakashan, Ahmedabad	As per Gujarat Technological University, Ahmedabad syllabus
Complex Variables and Partial Differential Equations (Civil-Semester-IV)	First Edition (2020) , Third edition (2022)	978-93-85138-09-6	Atul Prakashan, Ahmedabad	As per Gujarat Technological University, Ahmedabad syllabus

RESEARCH PAPERS PUBLISHED:

TITLE OF THE PAPER	JOURNAL	ISSUE NO.	NATIONAL/ INTERNATIONAL	ISSN/ISBN No.
AN EXACT SOLUTION OF IMBIBITION PHENOMENON IN TWO PHASE FLOW THROUGH POROUS MEDIA	Mathematics Education, Siwan	Vol. XXXIV, No. 1, March 2000, p. 30-32	National	ISSN:0047-6269
PERTURBATION SOLUTION OF IMBIBITION PHENOMENON IN FLUID FLOW THROUGH POROUS MEDIA WITH MAGNETIC EFFECT	Indian Journal of Petroleum Geology, Dehradun	Vol.11, No.1, July'02, p. 37-42	National	ISBN: 0871-2542
NUMERICAL SOLUTION OF THE SINGULAR PERTURBATION PROBLEM ARISING IN MULTIFLUID IMMISCIBLE FLOW	Mathematics Education, Siwan	Vol. XLII, No. 4, Dec'2008 p. 247-254	National	ISSN:0047-6269
APPLICATION OF SINGULAR VALUE DECOMPOSITION IN IMAGE PROCESSING	Indian Journal of Science and Technology	Vol.3, No.2, Feb'2010 p. 148-150	International	I. ISSN: 0974-6846
SINGULAR PERTURBATION PROBLEM OF THE PHENOMENON OF LONGITUDINAL DISPERSION IN THE FLOW OF TWO IMMISCIBLE FLUIDS THROUGH POROUS MEDIA	International Journal of Dynamics of Fluids, Research India Publications	Volume 6, Number 2, 2010, pp. 247-252	International	ISSN: 0973-1784
UNI-DIMENSIONAL FLOW THROUGH UNSATURATED POROUS MEDIA: A PROBLEM OF GROUNDWATER RECHARGE WITH PERTURBATION TECHNIQUE	International Journal of Computational and Applied Mathematics	VOLUME 2, NUMBER 1, 2010, PP. 123-128	International	ISSN: 0974-3189
NUMERICAL SOLUTION OF THE PROBLEM OF FINGERING PHENOMENON ARISING IN MULTIFLUID FLOW THROUGH POROUS MEDIA	Journal of Applied Mathematics and Fluid Mechanics	VOLUME 2, NOVEMBER 1, 2010, PP. 129-134	International	ISSN 0974-3170
The study of image processing through fuzzy logic morphological approach	International Journal of Mathematics Research	VOLUME 2, NUMBER 1, 2010, PP. 159-167	International	ISSN 0976-5840

A Comparative Study of Different Techniques in Image Inpainting	Indian Journal of Engineering	VOLUME 3, NO. 7, MAY-2013, PP 41-44	National	ISSN 2319-7757 EISSN 2319-7765
Image Segmentation Based on Chan-Vese Active Contours using Finite Different Scheme	International Journal for Scientific Research and Development	VOLUME 1, ISSUE 6, 2013. PP.1280-1284	International	ISSN (online) 2321-0613
A Problem Arising in Viscous Fingering Phenomenon in Two Phase Immiscible Flow with Singular Perturbation Technique	International Journal for Scientific Research and Development	VOLUME 1, ISSUE 4, 2013, PP.1005-1007	International	ISSN (online) 2321-0613
An Approximate solution of miscible fluid flow through porous media by using similarity transformation	International journal of science engineering and technology	VOLUME 1, ISSUE 10, APRIL 2015, 66-67	International	ISSN (online) 2349-784X
THE STUDY OF LONGITUDE DISPERSION PHENOMENON IN FLOW PROBLEMS THROUGH LAPLACE TRANSFORM TECHNIQUE	International Journal of Research & Development Organisation- Journal Of Mathematics	VOLUME-2, ISSUE 7, JULY 2016, PP. 48-52	International	ISSN: 2455-9210
A Solution of Fluid flow through Porous medium Equation by Homotopy Perturbation Transform Method	International Research Journal of Engineering and Technology (IRJET)	VOLUME-3, ISSUE 7, JULY 2016, PP. 1848-1852	International	E-ISSN: 2395 - 0056 P-ISSN: 2395-0072
AN ANALYTICAL SOLUTION OF POROUS MEDIUM EQUATION BY SIMILARITY TRANSFORMATION	International Research Journal of Engineering and Technology (IRJET)	VOLUME-3, ISSUE 7, JULY 2016, PP. 2125-2128	International	E-ISSN: 2395 - 0056 P-ISSN: 2395-0072
SINGULAR PERTURBATION SOLUTION OF THE PROBLEM VISCOUS FINGERING PHENOMENON IN MULTIFLUID IMMISCIBLE FLOW	International Journal of Engineering Technologies and Management Research	VOLUME-5, ISSUE 4, APRIL 2018, PP. 57-61	International	ISSN: 2454-1907
An Analytical Solution of Non Linear One Dimensional Diffusion Equation by Homotopy Perturbation Method	JOURNAL OF APPLIED SCIENCE AND COMPUTATIONS	VOLUME 5, ISSUE 6, JUNE-2018, PP. 328-333	International	ISSN NO: 0076-5131
Study of Imbibition Phenomenon in Homogenous Porous Medium Using Finite Difference Method	Journal of Applied Science and Computations	Volume 5, Issue 9, September-2018, PP. 565-569	International	ISSN NO: 1076-5131
Solving Berger's Equation Arising in Fingering Phenomenon by Laplace Transform Method	International Journal of Management, Technology And Engineering	Volume 8, Issue XI, NOVEMBER-2018, PP. 1311-1317	International	ISSN NO : 2249-7455
A STUDY OF LINEAR AND NON LINEAR DIFFUSION EQUATIONS ARISING IN FLUID FLOW THROUGH POROUS MEDIA BY HOMOTOPY PERTURBATION METHOD	Journal of Emerging Technologies and Innovative Research	Volume 5, Issue 12, DECEMBER-2018, PP. 650-659	International	ISSN-2349-5162

Instability Phenomenon Arising in Homogeneous Porous Media by Crank-Nicolson Finite Difference Method	Journal of Emerging Technologies and Innovative Research	Volume 6, Issue 2, FEBRUARY- 2019, PP. 501- 507	International	ISSN-2349-5162
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RESEARCH PAPERS PRESENTED IN CONFERENCES:

TITLE OF THE PAPER	CONFERENCE	PLACE	YEAR
A NUMERICAL SOLUTION OF SINGULARITY PERTURBED PROBLEM OF IMBIBITION PHENOMENON IN TWO IMMISCIBLE FLUID FLOW THROUGH POROUS MEDIA	41 st Indian Society for Theoretical and Applied Mechanics (ISTAM)	Cochin University of Science and Technology, Kochi	17 th -20 th Dec.'96
A NUMERICAL ANALYSIS OF INSTABILITY PHENOMENON WITH SINGULARITY WHICH ARISES IN POROUS MEDIA	9 th Annual Conference of Rajasthan Ganita Parishad	Banasthali Vidyapith, Rajasthan	8 th -9 th Feb.'97
PERTURBATION SOLUTION OF IMBIBITION PHENOMENON IN TWO PHASE FLOW THROUGH POROUS MEDIA	Symposium on Recent Trends in Science and Technology of Magnetic Fluids	Narmada College of Science and Commerce, Bharuch	16 th -18 th Oct.'97
A NUMERICAL ANALYSIS OF SINGULARITY PERTURBED PROBLEM OF FINGERO-IMBIBITION PHENOMENON IN TWO IMMISCIBLE FLUID FLOW THROUGH POROUS MEDIA	42 nd Indian Society for Theoretical and Applied Mechanics (ISTAM)	S.V.N.I.T., Surat	28 th -31 st Dec.'97
HISTOGRAM LINEAR CONTRAST STRETCHING FOR IMAGE ENHANCEMENT	IETE (NTPC-2010)	Vadodara	7 th March, 2010
NUMERICAL SOLUTION OF NONLINEAR PARTIAL DIFFERENTIAL EQUATION ARISING IN MULTIFLUID IMMISCIBLE FLOW BY FINITE DIFFERENCE METHOD	22 nd National cum 6 th International Conference of the Gwalior Academy of Mathematical Sciences	Mehsana Urban Institute of Sciences, Ganpat University	22 nd to 24 th December 2017
A STUDY OF NONLINEAR DIFFUSION EQUATION ARISING IN FLUID FLOW THROUGH POROUS MEDIA BY HOMOTOPY PERTURBATION METHOD	22 nd National cum 6 th International Conference of the Gwalior Academy of Mathematical Sciences	Mehsana Urban Institute of Sciences, Ganpat University	22 nd to 24 th December 2017

WINTER SCHOOL / SYMPOSIUM etc. Attended:

TOPIC	SCHOOL/SYMPOSIUM	HELD AT	DURATION	PERIOD
Discrete Mathematics	Winter School	Indian Statistical Institute, Kolkata	19 th Dec'94 to 8 th Jan'1995	3 WEEKS
Demands from Mathematician in Present Day Technology and Society	Symposium	Rajasthan Ganita Parishad, Banasthali, Rajasthan	8 th and 9 th Feb'1997	2 DAYS
Examination Reforms	Online Course	AICTE, New Delhi	29 th April to 2 nd May 2020	4 Days
Orientation Training Program for Mentors	Online Orientation Program	NITTR, Bhopal under AICTE, New Delhi	3 rd to 10 th June 2020	8 Days (Registration No.1-2331297075)

STTP/FDP/CONFERENCES/WORKSHOPS ATTENDED:

TOPIC	STTP/CONFERENCE/WORKSHOP/SEMINAR	Held At	DURATION	PERIOD
WOMENS IN DEVELOPMENT	ISTE Surat Chapter Seminar	S.V.N.I.T., Surat	22 nd and 23 rd Nov.'1997	2 DAYS
SCOPE OF RESEARCH, TESTING AND CONSULTATION IN PROFESSIONAL EDUCATION INSTITUTES	VI Annual Convention of ISTE-Gujarat Section	S.V.M. Institute of Technology, Bharuch	23 rd Sept.'2001	1 DAY
ROLE OF TECHNICAL EDUCATION FOR SUSTAINABLE DEVELOPMENT	VII Annual Convection and One Day Seminar	A.D.Patel Institute of Technology, New Vallabh Vidya Nagar	13 th Oct.'2002	1 DAY
APPLICATIONS OF INTEGRAL TRANSFORM TECHNIQUES IN SCIENCES AND ENGINEERING	STTP-ISTE Approved	Babasaheb Ambedkar Technological University, Lonere, Raigadh	17 th Nov.'2003 to 28 th Nov.'2003	2 WEEKS
FUZZY NEURAL NETWORK	STTP-ISTE Approved	Kongu Engineering College, Perundurai, Erode	28 th Nov.2004 to 11 th Dec'2004	2 WEEKS
Current Trends in Industrial and Applied Mathematics	International Conference	Faculty of Technology, M.S. Uni., Baroda	16 th to 18 th Jan'2007	3 DAYS
Workshop on Course of Engineering Mathematics	Workshop	GEC, Patan	28-01-2009	1 Day
MATHEMATICS IN INDUSTRY, MEDICINE, COMMERCE AND PLANT SCIENCES STUDY GROUP MEETING	International Conference	Faculty of Technology, M.S. Uni., Baroda	24 th to 28 th March'2009	1 WEEK
WORKSHOP ON COURSE OF ENGINEERING MATHEMATICS	Workshop	Government Engineering College, Patan	28 th Jan.'2009	1 DAY
Indian Society for Theoretical and Applied Mechanics(ISTAM)	International Conference	S.V.N. Institute of Technology, Surat	19 th Dec.'2011 to 22 nd Dec.'2011	1 WEEK
FACULTY DEVELOPMENT PROGRAM	Workshop	S.V.M. Institute of Technology, Bharuch		1 DAY
PATENT SEARCH METHODOLOGY	Workshop	Gujarat Technology University, Centre: SVMIT Bharuch	6 th October 2012	1 DAY
Fundamentals of Tribology	Seminar	GIDC Degree Engineering College, Navsari, Gujarat	4 th October 2013	1 DAY
Training of Trainers	Workshop	SPIPA, Ahmedabad	18-19 July 2016	2 Days

Decision Making	Webinar	Sunshine Group of Institutions, Rajkot	1st June 2021	1 Day
NAAC Accreditation Data System	E-conference	Inpods, USA	4th January 2022	1 Day
Environment and Sustainable Development	E-conference	Sardar Patel College of Engineering (SPCE), Bakrol	5th June 2021	1 Day
NBA Awareness Webinar on Outcome Based Education and Accreditation	Webinar	National Board of Accreditation, New Delhi and Education Department, Government of Gujarat	6th March 2021	1 Day
Advanced Concepts of Outcome Based Education	E-conference	Inpods, USA	7th October 2021	1 Day
Vaccine & Youth	Webinar	SPIAS and SPCE, S.P. University	21st May 2021	1 Day
Faculty Enrichment webinar for Mathematics Teachers in Higher Education	Webinar	National Institute of Education Planning and Administration, New Delhi	24th March 2021	1 Day
Augmenting Writing Skills for Articulating Research	Webinar	DST, Govt. of India and Vigyan Prasar	24th July 2020	1 Day
Augmenting Writing Skills for Articulating Research	Webinar	DST, Govt. of India and Vigyan Prasar	27th July 2020	1 Day
Augmenting Writing Skills for Articulating Research	Webinar	DST, Govt. of India and Vigyan Prasar	7th August 2020 2020	1 Day
Augmenting Writing Skills for Articulating Research	Webinar	DST, Govt. of India and Vigyan Prasar	1st September 2020	1 Day
Digital Transformation Fundamentals	Webinar	GTU	29th May 2020	1 Day
Advance Design of Turbo Charger Turbine	National Webinar	GTU	24th July 2020	1 Day
Employability Post COVID Era: Expectation of Industry vs. Education Syatems	National Webinar	ASSOCHAM, India	10th July 2020	1 Day
Energy Conservation Awareness	Workshop	GDEC, Abrama	20th February 2021	1 Day
Data Sciences	FDP (Online)	AICTE Training And Learning (ATAL) Academy, University of Hyderabad	7 th to 11 th September 2020	5 Days
Data Sciences	FDP (Online)	AICTE Training And	24 th to 28 th August 2020	5 Days

		Learning (ATAL) Academy, NIT, Srinagar		
Improved Power Quality Converters	Webinar	GDEC, Abrama	6th June 2020	1 Day
Roll of Teachers in Implementation of NEP-2020	Webinar	GTU, Ahmedabad	19th February 2021	1 Day
STI Connect Forum at University for R & D Proposals on State Priority areas of S & T	Workshop	SVNIT, Surat under DST	7th July 2020	1 Day
Intellectual Property Rights Awareness Program	Workshop	GDEC, Abrama under GTU, Ahmedabad	11th April 2020	1 Day
Intellectual Property for New India	National Webinar	GTU, Ahmedabad	16th May 2020	1 Day
NAAC Assessment and Accreditation Process	Webinar	GTU, Ahmedabad	5th August 2020	1 Day
Five Essential Elements of Science and Technology (PANCHTATVAM)	International Webinar	Shri Satsangi Saketdham Group of Institutions, Vadasma	23rd May 2020	1 Day
TRAINING OF TRAINERS (TOT) FOR TEACHER EDUCATORS	STTP (Online)	NITTTR, Bhopal	21st to 25th September 2020	5 Days
Yoga for Concentration and Usefulness	Workshop	GTU, Ahmedabad	24th to 26th August 2020	3 Days