

PARTH MEHTA

Curriculum Vitae

PERSONAL PROFILE

Date of Birth	February 13, 1990
Nationality	Indian
Address	A/102, Saraswat Apartment, Hirabaug Society, Ambawadi, Ahmedabad - 380006, Gujarat, India.
Phone	+91-8140558925
Email ID	mehtaparths@gmail.com
Languages known	English, Hindi and Gujarati.
ORCID ID	https://orcid.org/0000-0002-9530-6138
Webpage	https://sites.google.com/view/parthmehta
Scopus Author ID	https://scopus.com/authid/detail.uri?authorId=57196151942

EDUCATION

Doctor of Philosophy (Ph.D.) in Mathematics	2015 - 2020
Thesis Title: Analysis of Innovative Composite Materials Using Analytical and Numerical Methods.	
Supervisor: Dr. Manoj Sahni	
Pandit Deendayal Petroleum University, Gandhinagar.	
Master of Science (M.Sc.) in Mathematics	2013 - 2015
Kadi Sarva Vishwavidyalaya, Gandhinagar.	
Bachelor of Science (B.Sc.) in Mathematics	2008 - 2011
M.G. Science Institute, Ahmedabad.	

AREA OF RESEARCH INTEREST

Mathematical Modelling | Continuum Mechanics | Functionally Graded Materials | Topology | Global Positioning System and Celestial Mechanics | Applied Mathematics

TECHNICAL SKILLS

Analysis	COMSOL Multiphysics, Mathematica, MatLab, Python, VBA, SQL, OOP and C/C++
Tools	LaTeX, GeoGebra, Desmos, Tecplot and MS Office.

LIST OF RESEARCH PUBLICATIONS

- Sahni, M., **Mehta, P.**, Sahni, R., León-Castro, E., Espinoza-Audelo, L.F. (2022). Secondary Creep Analysis of FG Rotating Cylinder with Exponential, Linear and Quadratic Volume Reinforcement. **Accepted in Materials, MDPI**. [Indexed in SCOPUS, UGC, SCIE, IF: 3.623]
- Mehta, P.**, Kumar, S. and Sahni, M. (2021). Comparison of Material Response for Thermo-Mechanical Stresses in Functionally Graded Rotating Cylinders. **Structural Integrity and Life**, 21(3):259-265. [Indexed in SCOPUS, UGC, ESCI.]
- Kumar, S., **Mehta, P.** and Sahni, M. Analysis of Functionally Graded Cylinder Using Iterative Technique and Finite Element Method. **Under Review in Journal of Interdisciplinary Mathematics, Taylor Francis**. [Indexed in SCOPUS, UGC, ESCI.]
- Mehta, P.** and Sahni, M. (2020). Thermo-Mechanical Analysis for an Axisymmetric Functionally Graded Rotating Disc Under Linear and Quadratic Thermal Loading. **International Journal of Mathematical, Engineering and Management Sciences**, 5(4):744-757. [Indexed in SCOPUS, UGC, ESCI.]

5. Sahni, M. and **Mehta, P.** (2020). Thermomechanical Analysis of Functionally Graded Sandwich Cylinder with Middle FGM and Boundary Composite Layers. **Structural Integrity and Life**, 20(3): 313-318. [Indexed in SCOPUS, UGC, ESCI.]
6. **Mehta, P.**, Mishra, L. and Sahni, M. (2019). Thermo-mechanical Stress Analysis of Thick-Walled Cylinder with Inner FGM Layer. **Structural Integrity and Life**, 19(3): 211-223. [Indexed in SCOPUS, UGC, ESCI.]
7. **Mehta, P.**, Sahni, M. and Thakur, P. (2019). Strength Analysis of Functionally Graded Rotating Disc under Temperature Loading. **Structural Integrity and Life**, 19(2): 95-101. [Indexed in SCOPUS, UGC, ESCI.]
8. Sahni, M. and **Mehta, P.** (2018). Numerical Solution for FGM Disk with Variable Thickness in a Quadratic and Cubic Form. **AIP: Conference Proceedings**, 2009(1): p. 020059-1 - 020059-3. [Indexed in SCOPUS, UGC, WoS.]
9. Sahni, M., Sahni, R. and **Mehta, P.** (2017). Creep Behaviour under SiC_p Exponential Volume Reinforcement in FGM Composite Rotating Cylinders. **Material's Today: Proceedings**, 4(19): 9529-9533. [Indexed in SCOPUS, UGC, WoS.]

PROFESSIONAL EXPERIENCE

Visiting Faculty

2015, July - Present

Department of Mathematics,

Pandit Deendayal Energy University (formerly, Pandit Deendayal Petroleum University), Gandhinagar, Gujarat, India.

Courses Undertaken: Graph Theory, Linear Algebra, Calculus - I, Elementary Algebra, Complex Analysis, Programming in Python, Statics and Dynamics, Introduction to Computer Science (ICT) to students of Bachelor of Science (B.Sc.).

Introduction to Computer Science (ICT), Algorithm and Flowcharts, Visual Basic Application and Structured Query Language to students of Bachelor of Commerce and Business Administration (B.COM/BA/BBA).

Visiting Faculty

2021, August - 2021, October

Institute of Technology,

Nirma University, Ahmedabad, Gujarat, India.

Taught Probability and Statistics with Python Programming to students of Integrated B.Tech-MBA (Computer Science) program.

Assistant Professor [on Contract]

2016, September - 2019, May

Department of Mathematics,

Indian Institute of Teacher Education, Gandhinagar, Gujarat, India.

Taught various courses in Mathematics to students of Bachelor of Science (B.Sc.).

RESEARCH PROJECTS AT MASTER'S LEVEL

1. Topology - http://youtu.be/1j7Q_0tCoXk, <http://youtu.be/tozbKdyeK4g> 2014
2. Global Positioning System and Celestial Mechanics 2015

Supervisor: Dr. Deepti Modi
Institute: Kadi Sarva Vishwavidyalaya, Gandhinagar

CONTRIBUTORY/EXPERT TALK DELIVERED/PAPERS PRESENTED

1. Delivered a Contributory Talk on Co-ordinate Transformation Matrix and Tensors in a regional symposium on Recent Advances in Mathematics (6 November, 2015) at Kadi Sarva Vishwavidyalaya, Gandhinagar, Gujarat.
2. Presented a Technical Paper on Creep Behaviour under SiC_p Exponential Volume Reinforcement in FGM Composite Rotating Cylinders at ICEMS – 2016, Jaipur National University, Jaipur.
3. Delivered a Contributory Talk on Creep Analysis of FG Cylinder with Varying SiC_p Volume Reinforcement in a national seminar on World of Mathematical Modelling at Institute of Advanced Research (12-13 April, 2017), Gandhinagar, Gujarat.
4. Delivered a Presentation on Application of FEM in Solid Mechanics in National Seminar on Advanced Numerical Methods (NSANM-2017) at Pandit Deendayal Petroleum University Gandhinagar, Gujarat.
5. Conducted MatLab workshop and delivered a lecture on Numerical Methods and its Implementation in MatLab (10 Feb. 2018), at Pandit Deendayal Petroleum University Gandhinagar, Gujarat.
6. Presented a Technical Paper on Numerical Solution for FGM Disk with Variable Thickness in a Quadratic and Cubic Form at AMN – 2018, IIIT, Noida.
7. Presented a Technical Paper on Stress Analysis of a Rotating Functionally Graded Disk at NCAMS – 2018, Gujarat University, Ahmedabad.
8. Delivered an expert talk in the National Webinar on "Mathematicians Career Dimensions and their Impact on Society" organized on July 25, 2021 by the Department of Mathematics, School of Technology, Pandit Deendayal Energy University, Gandhinagar, Gujarat, India.

CONFERENCES/WORKSHOP/TALKS ATTENDED/WEBINARS

1. Attended One Week Workshop on "FINITE ELEMENT METHODS FOR ENGINEERING APPLICATIONS (FEMEA 2015)", at Department of Mechanical Engineering, SVNIT, Surat.
2. Actively Participated in One Day National Seminar on "Mathematics and Its Application", 2016, at Department of Mathematics Computer Science, PDPU, Gandhinagar.
3. Attended Continuing Education Program (CEP) on "Finite Element Method: A Universal Tool for Engineering Analysis", 2017, at Department of Mechanical Engineering, SVNIT, Surat.
4. Participated in One Day National Seminar on "Applications of Mathematics in Engineering", 2019, at Adani Institute of Infrastructure.
5. Participated in Applications of Linear Algebra in Real World Problems, (May 30, 2020) organized by Dept. of Mathematical Sciences, NVPAS, Vallabh Vidhyanagar, Gujarat, India.
6. Attended One Week STTP on Solution of Differential Equations and its Applications (SDEA) (January 04-08, 2021), at PDPU, Gandhinagar, Gujarat, India.
7. Participated in National Webina on Role of Mathematics in Real World Problems (May 01- 02, 2021) organized by Dept. of Mathematics, School of Technology, PDEU, Gandhinagar, Gujarat, India.
8. Participated in the webinar on "Applications of Boundary Element Methods to Water Wave Problems organized (October 23, 2021) by Dept. of Mathematics, School of Technology, PDEU, Gandhinagar, Gujarat, India.

SOCIAL WORK CONTRIBUTION TOWARDS SOCIETY

Conducted Basic Computer Workshop for Children under community development initiative with PDEU.

ACADEMIC AWARDS

1. Awarded Academic Excellence by Kadi Sarva Vishwavidyalaya, Gandhinagar, 2019.
2. Awarded Academic Excellence by Kadi Sarva Vishwavidyalaya, Gandhinagar, 2020.

PROFESSIONAL ASSOCIATIONS

1. Life Member of Forum for Interdisciplinary Mathematics (FIM).
2. Life Member of International Association of Engineers (IAENG).

DECLARATION

I hereby declare that above provided information is true to best of my knowledge.

Place: Ahmedabad, Gujarat, India

Date: February 23, 2022