

### ***Personal Information***

Name	Dr. J Manoj Kumar
Years of Experience	Teaching: 26 Years 3 Months Research: 5 years
Email Id	manojkumar.j@bvrithyderabad.edu.in
Areas of Specialization	Wave propagation in poroelastic solids



### ***Educational Qualifications***

Doctoral Degree	Ph.D.	Mathematics
PG Degree	M.Sc.	Mathematics
UG Degree	B.Sc.	Mathematics, Physics, Chemistry

### ***Papers Published***

#### ***International Journal Publications***

1. A paper titled '**Effect of viscosity on waves propagating in a liquid loaded on poroelastic layered half-space**' has been published in the open journal of Advanced Mathematical Model & Applications, vol.2, 144-154, 2017 (ISSN 2519-4445)
2. A paper titled '**A study on Propagation on love waves in viscous liquid layer bounded between poroelastic solids**' has been published in the open journal of Applied & Theoretical Mathematics(OJATM), vol.2, 806-819, 2016 (ISSN 2455-7102)
3. A paper titled '**Analysis of flexural wave propagation in poroelastic composite hollow cylinder**' has been published in the journal *International Journal of Engineering, Science and Technology*, vol. 8, 13-33, 2016. (ISSN: 2141-2820)
4. A paper titled '**A study on vibrations in a composite poroelastic concentric cylinder**' has been published in the journal *Caribbean Journal of Science and Technology*, vol.3, 805-831, 2015 (ISSN 0799-3757)
5. A paper titled '**Vibration analysis of a poroelastic composite hollow sphere**' has been published in the journal *Acta Mechanica*, vol.224, 327-341, 2013.(ISSN: 0001-5970)
6. A paper titled '**A Study on Plane-Strain Vibrations in a Poroelastic Composite Hollow Cylinder**' has been published in the **Journal of vibration analysis, measurement, and control**, vol. 1, 1-28, 2013.(ISSN:2162-9854)
7. A paper titled '**Free vibrations of a fluid-loaded poroelastic hollow Sphere surrounded by a fluid**' has been published in the journal *International Journal of Applied Mathematics and Mechanics*, vol. 9, 14-34, 2013.(ISSN:0973-0184)
8. A paper titled '**On the parametric model of loose bonding between two poroelastic half spaces**' has been published by *Journal of Vibration and Control*, vol.18, 1261-1274, 2012. (ISSN: 1077-5463)

9. A paper titled '**Radial vibrations of an infinitely long poroelastic composite hollow circular cylinder**' has been published in the journal *International Journal of Engineering, Science and Technology*, vol.4, 17-33, 2012. (ISSN: 2141-2820)
10. A paper titled '**Axial-shear vibrations in an infinitely long composite poroelastic circular cylinder**', has been published in the journal *Special Topics and Reviews in Porous Media*, vol.2, 133-143, 2011.( ISSN: 2151-4798)

### *International Conference Publications*

#### **Conference series:**

1. A paper titled '**On propagation of Love waves in an infinite transversely isotropic poroelastic layer**' has been published in International Conference on Vibration Problems (ICOVP-2015), **Journal of Physics: Conference Series 662** (2015) 012004. (doi:10.1088/1742-6596/662/1/012004)

#### **Paper presentations:**

1. **Attended an International conference on “Innovation and Sustainable Development in Science, Social Science, Management & Technology” (ISDSSMT-19) and presented a paper entitled ‘Radial Vibrations in a Fluid – Loaded two Layered Poroelastic Cylindrical shell surrounded by a Fluid’ conducted by DMI-ST.EUGENE University ,Lusaka,Zambia on 8<sup>th</sup> April 2019.**
2. **Attended an International conference on Recent inventions and innovations in Mathematical sciences(ICRIIMS-2019) and presented a paper entitled ‘Love wave propagation in a viscous liquid bounded by transversely isotropic poroelastic solids’ conducted by Dept of Applied Mathematics, VIZAC on 28th February and 1st March 2019.**
3. **Attended an International conference on ‘Computational fluid flow and Heat Transfer and presented a Wave propagation in layered poroelastic cylinder in contact with fluid’ conducted by Dept. of Mathematics, Osmania University on 28-29 March 2018**
4. **Attended an national conference on Computational fluid flow and Heat Transfer and presented a conducted by Dept. of Mathematics, Kakatiya University on 11-13 August 2017**
5. **Attended an International conference on Mathematical science & engineering applications and presented a paper entitled ‘A study on Propagation on love waves in viscous liquid layer bounded between poroelastic solids’ conducted by BITS,VIZAC from 23<sup>rd</sup>-25<sup>th</sup> December2016.**
6. Attended a national conference on *Recent Advances in Fluid Mechanics* and presented a paper entitled *Analysis of Radial Vibrations in an infinitely long poroelastic*

*composite circular cylinder* conducted by Dept. of Mathematics, Osmania University from 30 to 31st, May,2016.

7. **Attended an International conference on Vibration Problems and presented a paper entitled Torsional Vibrations of Circular Poroelastic Plates conducted by Dept. of Mathematics, Kakatiya University ,from 18 to 20, February,2015.**

### ***National Journal Publications:***

1. C. Nageswaranath and J. Manoj Kumar, ‘A study on propagation of Love waves in viscous liquid bounded between poroelastic layers’ has been published in the journal *Open Journal of Applied and Theoretical Mathematics*, vol. 2, 806-819, 2016. (ISSN: 2455-7102).

### ***FDP's Attended / Conducted***

1. Attended FDP on “Entrepreneurship” organized by Centre for Entrepreneurship Development (CDE), Hyderabad from 18<sup>th</sup> March 2019 to 30<sup>th</sup> March 2019
2. Attended a workshop on “To train the trainers for implementation of "Induction Program" ” organized by JNTUH, Hyderabad from 17<sup>th</sup> May 2018 to 19<sup>th</sup> May 2018.
3. Three day workshop on “Inspire – Impact- Introspect – Leadership Program” at VEIDC, SVES from 30<sup>th</sup> October to 1<sup>st</sup> November 2017.
4. A one week refresher course on ‘Engineering Mathematics’ held from 12<sup>th</sup> to 17<sup>th</sup> June, 2017 at CMR Engineering College, Hyderabad.
5. A two day conference ‘Uses of Scientific and Technical Terminology in Hindi, Telugu in Science’ organized by Commission for Scientific and Technical Terminology,(MHRD) held on 3<sup>rd</sup> and 4<sup>th</sup> May, 2017 in Dept. of Physics, University College of Engineering, Osmania University, Hyderabad.
6. A one week faculty development program on `Data Science and Big Data Analytics” organized by E & ICT Academy, NIT, Warangal, at Department of IT,BVRIT Hyderabad College of Engineering for Women, Hyderabad from 6<sup>th</sup> March-11<sup>th</sup> March,2017.
7. A one week faculty development program on ‘Numerical methods and Optimization Techniques in Engineering Research’ held from 14<sup>th</sup> to 20<sup>th</sup> December, 2016 at CMR Engineering College, Hyderabad.
8. A one week faculty development program on `Open Source Software through Spoken Tutorials” IIT Bombay organized by Department of Information Technology, BVRIT Hyderabad College of Engineering for Women, Hyderabad, from 4<sup>th</sup> Nov to 10<sup>th</sup> NOV 2016.
9. A two day workshop on `Innovative Pedagogy for Teaching and Learning Mathematics “ organized by Dept. of Mathematics, JNTUH College of Engineering Hyderabad, on 29<sup>th</sup> and 30<sup>th</sup> June,2016

10. A one week faculty development programme on 'Numerical methods and Optimization Techniques in Engineering Research' held from 14<sup>th</sup> to 20<sup>th</sup> December, 2016 at CMR Engineering College, Hyderabad.
11. A workshop on "Use of Technologies for Teaching and Learning of Engineering Mathematics" organized by Dept. of Mathematics, JNTUH College of Engineering Hyderabad, on 24<sup>th</sup> and 25<sup>th</sup> July 2015.
12. A workshop on Mathematical Modelling and its applications for Engineers and Scientists conducted by Dept. of Mathematics, JNTUH College of Engineering Hyderabad, on 30<sup>th</sup> August, 2013.
13. Participated in a Mission 10X Workshop Conducted at CMR Institute of Technology, Medchal from 1st May to 5th May 2012
14. A workshop on 'Advanced Techniques in Computational Fluid Dynamics' organized by the Department of Mathematics, Osmania University on 24 & 25 February, 2012.
15. One day seminar on 'Mathematical Modelling in Fluid Mechanics' organized by Department of Mathematics, Osmania University on 30<sup>th</sup> November, 2011
16. A training programme 'Mathematical Programming and Advanced Analysis for Post Graduate Faculty of Affiliated Colleges' organized by the Department of Mathematics, Kakatiya University, Warangal on 8-11 April, 2011.
17. 'International Conference on Recent Advances in Fluid Mechanics', organized by Osmania University on 23 & 24 December 2010 held at Department of Mathematics, Osmania University, Hyderabad
18. 5<sup>th</sup> National Conference on 'Applicable Mathematics in Wave Mechanics and Vibrations' (5<sup>th</sup> WMVC-2010) held at Kakatiya University, Warangal (AP), India, from 13 to 15 March, 2010.
19. 'National Conference on Mathematical Modeling in Engineering and Technology', on 13 & 14 February, 2010 held at Stanly College of Engineering and Technology for women, Chapal road, Abids, Hyderabad (A.P), India.
20. A two day faculty development program on 'Engineering Mathematics' organized by the Department of Humanities and Sciences, CMR College of Engineering & Technology, Hyderabad, from 25<sup>th</sup> to 26<sup>th</sup> August 2010.
21. National Training Program on 'Matlab, Graphics an, Kakatiya d Latex', March 21 & 22, 2009 held at Department of Mathematics University, Warangal (A.P),India.
22. National Seminar on Numerical Techniques organized by the Department of Mathematics, University College of Engineering, Osmania University, from 3<sup>rd</sup> to 4<sup>th</sup>, August 2007.
23. 'National Conference on Number Theory, Fixed Point Theory and Their Applications' organized by the Department of Mathematics, Osmania University, Hyderabad, during 30-31 August, 2007
24. 'National Conference on New Trends in Functional Analysis and Operator Theory' organized by the Department of Mathematics, Osmania University, Hyderabad, from 11<sup>th</sup> to 12<sup>th</sup>. March, 2005

***Professional Memberships:***

Life time member in Andhra Pradesh State Mathematical Society.

Life membership in The Indian National Congress Association.

### ***Certifications***

- NPTEL online certified (12-week) course on '*Multivariable Calculus*' in ELITE, June 2018.
- NPTEL online certified (12-week) course on '*Numerical Linear Algebra*' on June 2018.
- COURSERA online certified course on "*Introduction to Mathematical Thinking*" by Stanford University on 02/11/2019

### ***Any Other Achievements***

1. Chaired a session in an International Conference on Mathematical Science and Applications Techniques(ICMSA-2019) conducted by Department of Mathematics, School of Technology GITAM University, Telangana, held from 9<sup>th</sup> to 11<sup>th</sup> August, 2019.
2. Chaired a session in a National Conference on Recent Advances of Mathematical Techniques in Science and Engineering, conducted by Department of Mathematics, Osmania University, Telangana, held from 30<sup>th</sup> & 31<sup>st</sup> July, 2017.
3. Delivered a guest lecture in a One Week Refresher Course on 'Engineering Mathematics' organized by CMR Engineering College, Hyderabad on 13<sup>th</sup> June 2017.
4. Delivered a guest lecture on the Mathematics subjects for B.Tech 1<sup>st</sup> year students held on April 11<sup>th</sup> 2017, in CMR Engineering college, Hyderabad.
5. Performed as subject expert in Institute of Aeronautical Engineering on 24<sup>th</sup> February, 2016.
6. Delivered a guest lecture in the Faculty Development Programme on 'Numerical Methods and Optimization Techniques in Engineering Research'. organized by Dept. of Mechanical Engineering and H & S held on 14-12-2016. in CMR Engineering college, Hyderabad.
7. Discharged duties as a coordinator for NBA Accreditation work for BS & H dept in the year 2016-17 in BVRIT, Hyderabad
8. Discharged duties as a coordinator for a program 'MATHEMATICS DAY' conducted on the occasion of Ramanujan's Birthday on 22<sup>nd</sup> December 2015 in BVRIT, Hyderabad.
9. Delivered guest lecture in Prof. G. Ram Reddy Centre for Distance Education for the year 2010-2011.