PROFILE OF DR. K. SOMAIAH

1.	Name	:	Dr. K. Somaiah
2.	Father's name	:	Isthari
3.	Date of Birth	:	05-05-1972
4.	Sex (M/F)	:	Male
5.	Nationality	:	Indian
6.	Educational Qualifications	:	M.Sc., Ph.D.
7.	Broad Subject	:	Mathematics
8.	Area of Specialization	:	Elasticity

9. Details of Educational Qualifications :

(i)

Examination / Degree	Name of the Board/University	Month & year of award of the degree	Division	% of Marks
SSC	Board of Secondary Education, Andhra Pradesh	April, 1987.	First	73.66%
Intermediate	Board of Intermediate Education, Hyderabad (A.P.)	March, 1989	First	67.6%
Under Graduate	Kakatiya University, Warangal.	Annual, 1992	First with Distinction	74.22%
Post-Graduate	Kakatiya University, Warangal.	April, 1994.	First with Distinction	84.33%

(ii) Research Degree

Degree	Title	Date and Year of Award	Name of the University
Ph.D.	**Wave Propagation in Micro-elastic Solids.**	**02-07- 2009**.	Kakatiya University, Warangal, INDIA.

10. Name of the Research Supervisor   **:** **Dr. K. Sambaiah,**
                                           Professor of Mathematics,
                                           Kakatiya University, Warangal,
                                           T.S. India.

11. Teaching Experience:

i) Part-time Lecturer at Univ. Arts and Science College, [KU], Subedari, Hanamkonda, from 1994-1997.

ii) Lecturer at Masterji Degree & PG College, Hanamkonda, from 1997-2005

iii) Contractual Lecturer at Univ. Arts and Science College, [KU], Subedari, Hanamkonda, from 2005-2010.

iv) Assistant Professor at Kakatiya University, Warangal, from 2010 to till date.

12. Research experience in years   **:**   **13 years**

13. Number of Research Scholars Working   **:**   **05**

14. Number of Research Papers Published **:**   **34**

    [i] Accepted   **:**   **02**

    [ii] Communicated   **:**   **03**

15. Number of Seminars, Conferences, FDP Organized: **04**

16. Number of Talks given in Conferences , Workshops, Orientation Courses :   **09**

17. Number of Research Papers Presented in the Conferences: **25**

18. **Number of Extension Lectures , Seminars Delivered in KU Affiliated Colleges:**   **09**

19. **Number of orientation, Refresher Courses, FDP & Short-term Training Programmes Participated :**   **24**

20. **Number of Conferences , Workshops Participated [only]:**   **11**

21. Research Area:

Solid Mechanics [Micropolar elastic solids, Micro-stretch elastic solids, Micropolar void solids, Thermo elastic, solids**]**

22.   Subjects Taught:

PG Level :- Real Analysis, Complex Analysis, Advanced Linear Algebra, Measure Theory, Advanced Analysis, Ordinary Differential Equations, Partial Differential Equations, Topology, Integral Transforms.

UG Level:- Real Analysis, Abstract Algebra, Linear Algebra, Multiple Integrals, Solid Geometry, Vector Calculus, Numerical Analysis**.**

23.   Address   **:**   Department of Mathematics, University College, Kakatiya University, Warangal-506009. T.S. India.

24. **E-mail**   **:**   *ms.somumaths @gmail.com*

23. Mobile Number   **:**   **+91 9849571898**

24. Present Position   **:**   Assistant Professor.

➤ Positions held:

[i]   In charge Department of Mathematics, Univ. Arts & Science, [K.U], Subedari, Hanamkonda Warangal, from academic Year 2013-2016

[ii]   Joint Director for Pothana men's Hostel and Research Scholars Hostel, Kakatiya University, Warangal, from March 2017 to June 2020.

[iii]   Member for Advisory Committee of the KU Teachers & GO's Welfare Scheme, from July, 2019 to Present.

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[iv]   Board of Chair Person in Mathematics (UG & PG Courses), Kakatiya University, Warangal, from Sept. 2019 to Sept. 2021.

[v]   Head Department of Mathematics, University College, Kakatiya University Warangal, from 05-09-2020 to till date.

❖   Membership /Participation in Bodies/Committees on Education and National Development:

i.   B.O.S. Member for Department of Mathematics, KU andChaitanya Degree College (Autonomous), Hanamkonda.

ii.   D.C. Member for Department of Mathematics, KU

iii.   Governing Body Member of Kakatiya University Affiliated Colleges.

iv.   B.O.S. External member of Satavahana University, Karimnagar, T.S.

V.   B.O.S. External member of Rastriya Sanskrit Vidyapeetha, [Deemed University], Tirupati, A.P.

v.   Life member in A.P.T.S.M.S.

vi.   Life member in Indian Science Congress [ISC].

➤ Details of Seminars, Conferences, Symposia, FDP Organized:

i. Organizing Secretary for the "National Conference on Applications of Mathematics in Engineering and Industry [NCAMEI-2013]'' at the Department of Mathematics, KU, Warangal from 26th to 28th March, 2013.

ii. Coordinator for one week online Faculty Development Programe on" Latex & Technical Report Writing" Organized by the Department of Mathematics, KU, Warangal in association with Spoken Tutorial, IIT Bombay, from 25th –30th May, 2020.

iii. Coordinator for one week online Faculty Development Programe on "Real Analysis" Organized by the Department of Mathematics, KU, Warangal, from 05th –10th Sept. 2020.

iv. Coordinator for **"Three-Week Industrial Training Program for Mathematics Faculty of Government Polytechnic in Telangana State"** from 06-06-2022 to 25-06-2022, Organized by the Department of Mathematics, KU, Warangal, and Sponsored by TSHE, Hyderabad.

v. Took part in the Workshops, STP and Conferences which were organized by the Department in the capacity of organizing committeemember.

❖ Details of Talks given in Conferences, Workshops, Orientation Courses:

i) Delivered a Talk as Resource Person in APSCHE Sponsored "**Training Programme to PG Teachers of Affiliated Colleges"** in the Department of Mathematics, Kakatiya University, Warangal from 25-04-2012 to 01-05-2012.

ii) Delivered a Talk as Resource Person in **" 3-Days Orientation Programme to the Government and Aided College Junior Lecturers of Warangal and Karimnagar Districts"** Organized by Commissioner of Intermediate Education.

iii) T.S. from 10-12-2015 to 12-12-2015. Delivered a Talk as Resource Person in **"Phase-II District Level Seminar on New Quality Policy-2016"** at T.T.W.R. Junior College of Excellence, Warangal, on 17-09-2016.

iv) Organized by the Department of Mathematics, KU, Warangal, in **"One Day Departmental Conference for UG Teachers"** Organized by Department of Mathematics, Kakatiya University, Warangal, on 31-08-2019.

v) Delivered an Invited Talk in **"XXVIII Congress of APTSMS & National Conference on Recent Trends in Pure and Applied Mathematics"** Organized by Department of Mathematics, RSV, Tirupati, A.P. from 06-12-2019 to 08-12-2019.

vi) Delivered *online Video Lecture* on **''Romberg Integration''** in one- day webinar program, conducted by the Department of Mathematics, Lal Bahadur College, Warangal on 27-06-2020.

vii) Delivered a Lecture on ''**Sequences & Series**'' in One Week (Online)Faculty Development Program on Real Analysis, from 5th - 10th September, 2020.

viii) Delivered a Talk on "**Linear Algebra**'' as Resource Person in **"Three-Week Industrial Training Program for Mathematics Faculty of Government Polytechnic in Telangana State"** from 06-06-2022 to 25-06-2022, Organized by the Department of Mathematics, KU, Warangal, and Sponsored by TSHE, Hyderabad.

ix) Delivered an Invited Talk in **"XXXI Congress of APTSMS & International Conference on Relevancy on Ancient Mathematics to the Digital Trends"** Organized by the Department of Mathematics, National Sanskrit University, Tirupati, A.P. from 09-12-2022 to 11-12- 2022.

➢ Details of Orientation, Refresher Courses, FDP and Short-Term Training Programmes Participated:

i. APSHE Sponsored **"One week Training Programme to PG Teachers of Affiliated Colleges"** Conducted by Department of Mathematics, Kakatiya University, Warangal, A.P. from 25-04-2012 to 01-05-2012.

ii. UGC Sponsored **"Orientation Course"** held at UGC Academic Staff College, Osmania University, Hyderabad, from 28-09-2012 to 31-10-2012.

iii. UGC Sponsored **"Refresher Course on Mathematical Modeling and Simulation for Scientists and Engineers"** held at UGC Academic Staff College, JNTU Hyderabad, from 02-12-2013 to 21-12-2013.

iv. 10-Days Training Programme on " **Saksham- IT Champion Training Programe"**
conducted Microsoft, from 01-04-2014 to 10-04-2014..

v. UGC Sponsored **"Refresher Course in Mathematics"** held at H.R.D.C. (UGC Academic Staff College), University of Hyderabad, Hyderabad, from 03-09-2015 to 23-09-2015.

vi. UGC Sponsored one week **STC on "e-Learning and ICT for Teaching & Learning"** organized by UGC-Human Resource Development Centre, J.N.T. University Hyderabad from 06-03-2017 to 11-03-2017.

vii. PMMMNMTT, MHRD, Govt. of India Sponsored One Week Faculty Development Workshop on '' **Effective Teaching and Learning Practices for Design Operation on Water Supply System",** held at NIT, Warangal, from 20-05-2019 to 25-05-2019.

viii. Short Term Training Programe on " **Numerical an Symbolic Computing (NSC)"**held at NIT, Warangal, from 27-05-2019 to 31-05-2019.

ix. One week online Faculty Development Programe on **"Latex & Technical Report Writing"** Organized by the Department of Mathematics, KU, Warangal in Association with Spoken Tutorial, IIT Bombay, from 25-05-2020 to 30-05-2020.

x. International online FDP on '' **Mathematical Sciences"** Organized by Division of Mathematics, Department of Science & Humanities, VFSTR, Vadlamudi, Guntur Dist. A. P., India, from 18-07-2020 to 24-07-2020.

xi. Five Day FDP on **"Applications of Mathematics in Engineering"** Organized by Department of Mathematics, KPR Institute of Engineering & Technology, Arasur, Coimbatur, Tamilnadu, India, from 27-07-2020 to 31-07-2020.

xii. A one week online International FDP on **"Recent Advances in Mathematics & Statistics"** Organized by Department of Mathematics, Institute of Science and center for Learning & Sustainability, GITAM University, Visakhapatnam, A.P. India, from 03-08-2020 to 08-08- 2020.

xiii. Five Day National webinar on **"Fluid Dynamics for Mathematicians view point "** Organized by Department of Mathematics, School of Science, GITAM University, Hyderabad, from 09-08-2020 to 13-08-2020.

xiv. One Week (Online)Faculty Development Program on **" Real Analysis"**, Organized by Department of Mathematics, Kakatiya University, Warangal, T.S. from 5th - 10th September, 2020.

xv. Five Days International e-Seminar on **" Recent Research in Mathematics (ISRRM-2020)"**, Organized by Department of Mathematics, School of Science, GITAM, Bengaluru, from 11th to 15th September, 2020.

xvi. One-Week International Webinar/FDP on **"Relevance of Mathematics to Core Engineering Sciences"** organized by Mahatma Gandhi Institute of Technology, Hyderabad from 12 to 16 October 2020.

xvii. Five Day National Workshop on **"The Seven Assessment Criteria for NAAC Accreditation"** Organized by IQAC,V.S.R&N.V.R College, Tenali, in Collaboration with Government College for Women, Guntur from 27th to 31st October*, 2020.*

xviii. TEQIP-III sponsored Five Days Online Workshop on Application of **"MATLAB in Engineering",** Organized by National Institute of Technology, Srinagar (J&K) 190006, held from 26th to 30th November, 2020.

xix. Online Short Term Course on **"Data Analytics using Python"** conducted by Department of Computer Science and Engineering & Department of Mathematics, Center for Continuing Education, NIT, Warangal, from 08-02-2021 to 12-02-2021.

xx. National level Virtual Faculty Development Programme on **"Promising Success through Inclusive Development"** Organized by DWARAKA DOSS GOVERDHAN DOSS VAISHNAV COLLEGE, PG & Research Department of Mathematics, Chennai 600 106, from 15th February to 21st February 2021.

xxi. Online Short Term Course on **"Machine Learning for Data Science using Python"** conducted by Department of Computer Science and Engineering, Center for Continuing Education, NIT, Warangal, from 01-03-2021 to 10- 03-2021.

xxii. Two-Week Refresher Course in **"MATHEMATICS"** organized by "Department of Mathematics, Ramanujan College, TLC, University of Delhi, under the aegis of Ministry of Education from 16-30 March 2021.

xxiii. 9-Day National Level Online Faculty Development Program on **"Foregrounding the Spectrum of Character Building in Modern Human Life"** organized by Department of Humanities & Sciences, BITS, Laknepally, Narsampet, Warangal Rural-506331, Telangana, from 25 June - 03 July, 202l.

xxiv. **Five Day National Level Online FDP** on **Effective Pedagogy for Science** from **29.11.2022 to 03.12.2022** jointly organized by **Departments of Physics and Mathematics, JMJ College for Women (Autonomous), Tenali. A.P.**

LIST OF RESEARCH PUBLICATIONS:

1. B Venkateswara Rao, **K. Somaiah,** A. Ravi Kumar, and K. Narasimhara Rao " Plane Wave Problem in a Generalized Thermo-elastic Solid in the Presence of Voids " Indian Journal of Science and Technology (IJST), Vol. 16 (19): pp.1422-1430. **Web of Science.** *https://doi.org/10.17485/IJST/v16i19.196.*

2. T. Sree Lakshmi, **K. Somaiah,** A. Chandulal and K. Sambaiah, "Reflection and Refraction Phenomena of SH-Wave Propagation at an interface of two Micropolar Elastic Solid Half-Spaces" , Neuro Quantology, Vol.20, Issue 18, Nov.2022, pp.218-225. *doi.10.1470/nq.22.20.18.NQ 88026.* **Scopus Indexed.**

3. **K. Somaiah,** K. Narasimha Rao, A. Ravi Kumar and R. Srinivas, "Free Vibrations in a Rotating Generalized Hollow Sphere," Indian Journal of Science and Technology, 15 (42), 2022, pp. 2252-2258, *https://www.indjst.org/10.17485/IJST/v15i42.1607,* **Web of Science Indexed.**

4. **K. Somaiah,** "Effect of initial Compression on Love Wave Propagation in a Rotating Orthotropic Elastic Solid Half-space with Impedance Boundary Conditions," IOSR Journal of Engineering (IOSRJEN), Vol. 12, Issue 10, October 2022, Series -I, pp. 27-33

5. **K. Somaiah,** and A. Ravi Kumar " **Rayleigh Type Wave Propagation in a Rotating Micropolar Elastic Solid With Stretch in the Gravity Field** " Advances and Applications in Mathematical Sciences Volume 20, Issue 12, (**2021**), Pages: 3397-3412 © 2021 Mili Publications. **UGC Approved.**

6. **K. Somaiah, "S-Laplace Transform with Order** (α, β) **of Some Fundamental Functions",** Journal of Xi'an University of Architecture & Technology, Volume XIII, Issue 11, (**2021**), ISSN No :1006-7930, pp.75-83 **Scopus Indexed.**

7. E. Rama , **K. Somaiah** and K. Sambaiah, **"A study of Variational Iteration Method for Solving Various Types of Problems"** Malaya Journal of Matematik, Vol. 9, No. 1, pp.701-708, (**2021),** https://doi.org/10.26637/MJM0901/0123. **UGC Approved.**

8. **K. Somaiah,** and A. Ravi Kumar **" Investigation of Plane Longitudinal Waves in a Micro- isotropic, Micro-Elastic Solid ",**J. Math. Comput. Sci. 11 (2021), No. 1, pp. 380-391, ISSN: 1927-5307 https://doi.org/10.28919/jmcs/5124, Available online at *http://scik.org.* **Scopus Indexed.**

9. **K.Somaiah, " Effect of Rotation and Fluid on Radial Vibrations in a Micropolar Elastic Solid Having a Fluid-Loaded Spherical Cavity,**'' *Advances in Fluid Dynamics*, Lecture Notes in Mechanical Engineering, https://doi.org/10.1007/978-981-15-4308-1_13, Springer Nature Singapore Pte Ltd. **2021,** pp.171-180. **Scopus Indexed.**

10. A. Chandual, and **K. Somaiah, "Rayleigh Waves In An Incompressible Non–Local Elastic Medium Under Gravity Effect''** AIP Conf. Proc. 2246,020011-1–020014-5; https://doi.org/10.1063/5.0014555. Published by AIP Publishing. 978-0-7354-2005-2/$30.28[th] , **July-2020. Scopus Indexed.**

11. **K. Somaiah,** and A. Chandual, **"Studies of Rotation Effect on Inhomogeneous and Attenuation Wave Propagation in a Micropolar Elastic Solid,"** AIP Conf.Proc.2246, 020010-1–020010-11; https://doi.org/10.1063/5.0014536. Published by AIP Publishing. 978-0-7354-2005-2/$30. 28th , **July-2020. Scopus Indexed.**

12. **K. Somaiah**, and A. Ravi Kumar**, ''Studies of Radial Vibrations in a Non-homogeneous Orthotropic Hollow Solid Cylinder under the Gravity Field,"** "Journal of Xi'an University of Architecture and Technology" ISSN No : 1006-7930, Volume XII, Issue V, **2020,** pp.2702-2708. **Scopus Indexed.**

13. **K. Somaiah., ''Investigation of Inhomogeneous and Attenuation Wave Propagation in a Micropolar Elastic Medium, "** International Journal of Multidisciplinary Educational Research,**''** " ISSN: 2277-7881, UGC Approved, Vol. 9, Issue 2 (1), **Feb-2020,** pp.153-163.

14. **K. Somaiah.,** and R. Srinivas **"Radial Vibrations in an Unbounded Micropolar elastic solid having a Fluid Loaded Spherical Cavity,''** Applications of Fluid Dynamics,https://doi.org./10.1007/987-981-10-5329-0_31,**2018,**pp.431-438.Springer Publications, Scopus Indexed.

15. **K. Somaiah., '' Plane Wave Propagation in a rotating Microplar Micro-stretch Elastic Solid in Special Case,''** Applications of Fluid Dynamics, https://doi.org./10.1007/987-981- *10-5329-0_50,* **2018,** pp. 661-672. Springer Publications, **Scopus Indexed.**

16. **K. Somaiah, " Propagation of Plane Waves in Micro-stretch Elastic solid in special case,''** "Global Journal of Pure and Applied Mathematics," Vol.13, No.6, **2017,** pp.2143-2151. Research India, Publications.

17. **K. Somaiah.** **"Radial Vibrations Due The Effect of Gravity In a Microplar Elastic Medium having a Spherical Cavity.''** ''Asian Journal of Mathematics and Computer Research''Vol. 16(1): pp. 19-26, **2017.** *ISSN: 2395-4205 (P), ISSN: 2395-4213 (O).*

18. **K. Somaiah., " Effect of rotation on Radial Vibrations in an Unbounded Micro-isotropic, Micro- elastic Solid having a spherical cavity.''** ''Palastine Journal of Mathematics,'' Vol.6(1), pp.15-23, **(2017).**

19. **Dr. K. Somaiah., " Effect of Rotation and Micropolarity on Radial Vibrations in an Unbounded Micropolar elastic Solid having a Spherical cavity. ''** " Special Issue on Computational Science, Mathematics and Biology, IJCSME-SCSMB-16, **March-2016**.'' pp.47- 50. ISSN-2349-8439. [Available at www.ijcsme.com]

20. Sreelakshmi,T, Rama., E, and **Somaiah., K, ''Effect of Rotation on Longitudinal Wave Propagation in an Elastic Solid with a CylindricalHole.''** ''Science Direct, Procedia Engineering 127**,(2015)** pp. 660–664.'' Available online at www.sciencedirect.com **Scopus Indexed.**

21. **K. Somaiah** and R. Srinivas, **''Propagation of Waves in a Rotating Generalized Elastic Solid with a Cylindrical Hole. ''** Mathematical Sciences International Research Journal"Vol.4,Issue 2**, (2015),** pp.55-57. ISSN 2278 – 8697.

22. **K. Somaiah** and R. Srinivas, **'' Propagation of Plane Longitudinal Waves in MicroparElastic Solid with Voids ,''** '' Mathematical Sciences International Research Journal,**"** Vol. 4, Issue 2, **(2015),** pp. 61-64. ISSN 2278 – 8697.

23. **K. Somaiah,** and K. Sambaiah. **''Radial Vibrations Due to a Spherical Cavity in an Unbounded Micro-Isotropic, Micro-Elastic Solid in the Presence of Time Dependent Force and Couple.''** "International Journal of Scientific & Engineering Research" Volume 6, Issue 9, **September-2015**, pp.148-152.ISSN 2229-5518 .

24. **K. Somaiah,** and K.Sambaiah, **" Propagation of Plane Waves in a Generalized Micropolar Elastic Solid with Voids.''** "International Journal of Scientific and Innovative Mathematical Research (IJSIMR)" Vol.3, Special Issue 1, **July 2015**, pp.175-180, ISSN 2347-307X.

25. **K. Somaiah** and K. Sambaiah., **'' Elastic waves due to a time dependent force in an elastic Solid having a cylindrical hole.''** "Proceedings of National Conference on Recent Trends in Science and Technology, **(2015)"** Feb.25-26, pp.323- 325**.** ISBN 978-93-82570-52-3.

26. **Somaiah., K,** and Sambaiah., K**. '' Waves in Micro-isotropic,Micro-elastic Solid in case of Solenoidal Micro- rotation and Macro-displacements.''** "International Interdisciplinary Research Journal " Vol. V, Issue-I, **Jan-Feb.2015**, pp.102-108. ISSN 2249-9598.

27. **Somaiah., K,** and Sambaiah.,K**. '' Polynomial solution of one-dimensional elastic wave equation.''** " International Journal of Physics & Mathematical Sciences"Vol.4, (3) , **July- Sept 2014**, pp.74-77. ISSN 2277-2111.

28. **Somaiah., K***,* and Sambaiah., K**. '' Propagation of elastic waves in an infinite elastic solid with a cylindrical hole.''** "International Journal of Advances in Mathematics and Mathematical Sciences," Vol. 1, No.1, **Jan-June, 2012**, pp.49-52. ISSN-2278-0866.

29. E. Rama., **K. Somaiah** and K. Sambaiah**.,'' Radial Vibrations in an unbounded Micro- isotropic, Micro-elasticSolid having a Spherical Cavity.''** "International Journal of Math. Sci.& Engg. Applications. (IJMSEA)," Vol.5, No.III **(May 2011),** pp. 27-36. ISSN 0973-9424.Ascent Publications, INDIA.

30. **K. Somaiah .,** E. Anjan Rao., A. Chandulal, and K. Sambaiah., **" Wave Propagation in Micro-isotropic, Micro-elastic Solid in special case.''** International "e-Journal of Mathematics & Engineering 23" ISSN 0976- 1411**.(2010),** pp.234- 239.

31. **K. Somaiah .,** A. Chandulal, and K. Sambaiah., **" Wave Propagation in Micro-isotropic, Micro-elastic Solid, when Macro- rotation and Micro-rotation are zero.''** "International e -Journal of Mathematics & Engineering 15 " **(2010),** pp.156-162. ISSN 0976-1411.

32. A. Chandulal, **K. Somaiah** and K. Sambaiah., **''Propagation of SH waves in two Micro-morphic half spaces.''** "International e- Journal of Mathematics & Engineering6" **(2010**) pp.75- 85. ISSN: 0976- 1411.

33. **Somaiah., K,** and Sambaiah., K. **''Propagation of Waves at an unbounded interface between Micro-isotropic, Micro-elastic half spaces.''** " International Journal of Mathematics, Computer Sciences and Information Technology" **July-December 2009,** Vol.2, No.2, pp.171-179. ISSN: 0974-5580. International Science Press, New Delhi, INDIA.

34. **Somaiah., K,** Chandulal and Sambaiah., K. **"Propagation of Waves in an Infinite Micro-isotropic, Micro-elastic Solid.''** "International Journal of Applied Mathematical Analysis and Applications" **July-December 2008,** Vol.3, No.2,pp.179-187. ISSN: 0973-3868. Serials Publications, New Delhi, INDIA.

❖ Details of Research Papers Presented in the Conferences:

1] **"Polynomial Solution of One-dimensional Elastic Wave Equation"** in XX Congress and National Conference on Mathematical Modelling & Simulation, organized by Department of Humanities & Sciences, SBIT, Khammam, from 09-12-2011 to 11-12- 2011.

2] **"Elastic Waves Due to a Time Dependent Force in an Elastic Solid having a Cylindrical hole"** in a Two-Day National Conference on Recent Trends in Science and Technology, organized by JNTUH College of Engineering, Karimnagar from 25-02-2015 to 26-02-2015.

3] **"Radial Vibrations due to a Spherical cavity in an Unbounded Micro-isotropic, Micro-elastic Solid in the Presence of Time Dependent Force and Couple"** in National Conference on Recent Trends and Advances in Mathematics and its Applications, Sponsored by UGC and organized by Department of Mathematics, Sri Padmavati Mahila Visvavidyalayam Tirupati, A.P. from 12-03-2015 to 13-03-2015.

4] **"Propagation of Plane Waves in a Generalized Micropolar Elastic Solid with Voids"** in International Conference on Mathematical Sciences, organized by Department of Mathematics, Sri Venkateswara University, Tirupati, A.P.India,from 13-07-2015 to 15-07-2015.

5] **"Propagation of Waves in a Rotating Generalized Elastic Solid with a Cylindrical hole"** in International Conference on Mathematics 2015, organized by Department of Mathematics University of Kerala in collaboration with International Multidisciplinary Research Foundation (IMRF), at Thiruvananthapuram, Kerala, India from 26-11-2015 to 28-11-2015.

6] **"Effect of Rotation and Micropolarity on Radial Vibrations in an Unbounded Micropolar elastic Solid having a Spherical Cavity"** in International Conference on Computational, Mathematical and Biological Modeling (ICCMBM-2016), organized by Department of Computer Science, Applied Mathematics and Sericulture, at Sri Padmavati Mahila Visvavidyalayam Tirupati, A.P. from 25-03-2016 to 26-03-2016.

7] **"Plane Wave Propagation in a Rotating Micropolar Micro-Stretch Elastic Solid in Special Case"** in International Conference on Applications of FluidDynamics (ICAFD-2016), organized by Department of Mathematics, IIT, Dhanbad, Jarkhand State, India, from 19-12-2016 to 21-12-2016.

8]   **"Studies of Rotation Effect on Radial Vibrations in a Micro-isotropic, Micro-elastic Solid with a Spherical Cavity"** in International Conference on Mathematical Sciences and Engineering Applications (ICMSEA-2016), organized by Baba Institute of Technology and Science (BITS), VIZAG, A.P. India, from 23-12-2016 to 25-12-2016.

9]   **"Inhomogeneous Wave Propagation in a Pseudo-Cosserat Continuum"** in 20th International Conference of International Academy of Physical Sciences (CONIAPS XX) on Recent Advances in Physical Sciences and Future Challenges, organized by Faculty of Science (Department of Mathematics, Physics and Chemistry), Osmania University, Hyderabad, T.S. from 14-07-2017 to 16-07-2017.

10] **"Inhomogeneous Wave Propagation in a Micro-Stretch Elastic Solid"** in XXVI Congress of APSMS and National Conference on Recent Advances in Mathematics, organized by Department of Mathematics, Kakatiya University, Warangal, T.S,. from 11- 08-2017 to 13-08-2017.

11] **"Plane Wave Studies in Micro-Stretch Elastic Medium Under Some Special Cases"** in National Conference on Emerging Research Trends in Pure and Applied Mathematics (NCERPTAM-2017), organized by Department of Applied Mathematics, Sri Padmavati Mahila Visvavidyalayam Tirupati, A.P. from 29-08-2017 to 30-08-2017.

12] **"Studies of Inhomogeneous Waves in a Micropolar elastic Solid"** in 62nd Congress of Indian Society of Theoretical and Applied Mechanics (ISTAM-2017), organized by Department of Mathematics, Mechanical & Civil Engineering, University College of Engineering Osmania University, Hyderabad, T.S. India, from 15-12-2017 to 18-12-2017.

13] **"Effect of Rotation and Fluid on Radial Vibrations in a Micropolar Elastic Solid having a Fluid Loaded Spherical Cavity"** in International Conference on Applications of Fluid Dynamics (ICAFD-2018), organized by VIT Vellore, Taminadu in association with University of Botswana, USA, held at Tamilnadu, India, from 13-12-2018 to 15-12-2018.

14] **"Effect of Rotation on Inhomogeneous Wave Propagation in Micropolar Elastic Solid"** in International Conference on Mathematical Sciences and Applications (ICMSA-2019), organized by Department of Mathematics, School of Technology, GITAM University, Hyderabad, T.S. India, from 09-08-2019 to 11-08-2019.

15] **"Studies of Radial Vibrations in a Non-homogeneous Orthotropic Hollow Solid Cylinder Under the Gravity Field"** in XXVIII Congress of APTSMS & National Conference on Recent Trends in Pure and Applied Mathematics, organized by Department of Mathematics , RSV, Tirupati, A.P. from 06-12-2019 to 08-12-2019.

16] **"Investigation of Plane Longitudinal Waves in a Micro-isotropic, Micro-elastic Solid"** in International Conference on Advances in Science, Engineering & Mathematics (ICASEM-2020), organized by Annamacharya Institute of Technology & Sciences, Rajampet, A. P. India, in Association with APTSMS. from 07-08-2020 to 09-08-2020.

17] **"Rayleigh Wave Propagation in a Micropolar Elastic Solid with Stretch Under its Gravity"** International virtual conference on "Applied Physics, Mathematics and Statistics" conducted by Department of Mathematics, PRDS college of Arts and Science, Amara, Affiliated to MG University held on 5th and 6th October 2020.

18] *" Propagation Of Rayleigh Wave In A Rotating Micropolar Elastic Solid With Stretch Under The Effect Of Gravity"* International Conference on Recent Trends and Technology of Mathematics & Science (QIVCRTTMS 2020), Organized by Queens College of Arts & Science for Women, Punalkulam, Near Thanjavur, Tiruchirapalli Pudukkottai-613 303. Tamilnadu, India, held on 7th & 8th, October 2020 in virtual mode.

19] "*Effect of Surface Stress on Propagation of Rayleigh Waves in a Micropolar Elastic Solid with Stretch.*" in the "XXIX Congress of APTSMS & National Conference on Mathematics and its Applications (NCMA-2020)" at the Department of Mathematics, Mahatma Gandhi University, Nalgonda, T.S, during December **3rd - 5th**, 2020.

20] **"Studies of Rayleigh Waves in a Micro-polar Elastic Solid with Stretch in the Gravity Field "** in the "XXIX Congress of APTSMS & National Conference on Mathematics and its Applications (NCMA-2020)" held at the Department of Mathematics, Mahatma Gandhi University, Nalgonda, T.S, during December **3rd - 5th**, 2020.

21] "**Studies of Rotation Effect on Longitudinal Vibrations in a Micro-polar Elastic Solid a Cylindrical Hole"** International Conference on Applied Mathematics & Civil Structures ICAMCS 2021), jointly organised by the Department of Mathematics and Department of Civil Engineering, Sri Sivasubramaniya Nadar College of Engineering, Kalavakkam, Chennai - 603110, Tamilnadu, India on February 12 -13, 2021.

22] **" S-Laplace Transform with Order** (α, β) **of Some Fundamental Functions"** 27 th International Conference International Academy of Physical Sciences (CONIAPAS XXVII) on Fluid Mechanics & its industrial Applications, Jointly Organized by Dept. of P.G. Studies & Research in Mathematics, Kuvempu University & International Academy of Physical Sciences, Karnataka, India, from Oct. 26-28, 2021.

23] **" Studies of Free Vibrations in a Rotating Generalized Elastic Hollow Sphere "** in the International Conference on Dynamical Systems and Numerical Methods held during May 20-21, 2022 (**online**), organized the Department of Mathematics, Jamia Millia Islamia, New Delhi India.

24] **"Rayleigh Wave Propagation at Viscous Liquid/Micropolar Microstretch Elastic Solid"** in the "International Conference on Advances in Transport Phenomena (ICATP 2022) - **A Virtual Meet"** organized by the School of Advanced Sciences, VITAP University, Amaravati held during July 16-18, 2022.

25] **" Longitudinal Vibrations in a Rotating Micropolar Elastic Solid Having a Cylindrical Hole,"** International Conference on Mathematical Sciences and Engineering Applications in Technology during Sept. 9-11, 2022, Organized by Department of Mathematics, School of Science, GITAM University, Hyderabad, T.S.

• Details of Conferences, Workshops Participated:

1] **"XV CONGRESS"** Organized by Department of Mathematics, Kakatiya University, Warangal from 11-08-2006 to 13-08-2006.

2] **"5th National Conference on Applicable Mathematics in Wave Mechanics and Vibrations"** Organized by Department of Mathematics, Kakatiya University, Warangal from 13-03-2010 to 15-03-2010.

3] One Day Departmental Conference on **" Multiple Integrals for UG Faculty,"** Organized by the Department of Mathematics, KU, Warangal, on 31-07-2010.

4] **"XIX Congress and National Conference on Mathematical aspects of Cryptography and Network Security"** Organized by Department of Mathematics, Jyothishmathi Institute of Technology & Science, Karimnagar, from 12-11-2010 t o14-11-2010.

5] **"National Workshop on Research Methodology in Sciences"** Organized by Department of Zoology, Kakatiya University, Warangal from 26-07-2011 to 28-07-2011.

6] **"UGC Sponsored Two-Day National Workshop on Graph Theory and Statistics"** Organized by Department of Mathematics, Kakatiya University, Warangal from 28-02- 2012 to 29-02-2012.

7] **"One-Day Workshop on SPSS 22 Application''** Organized by Department of Computer Science, Kakatiya University, Warangal, on 5th July, 2014.

8] **"International Conference on Vibration Problems"** Organized by Department of Mathematics, Kakatiya University, Warangal, from 18-02-2015 to 20-02-2015.

9] **"Silver Jubilee Congress and National Conference,"** Organized by Department of Mathematics, N.B.K.R. Institute of Science and Technology, Nellore, from09-12-2016 to 11-12-2016.

10] **"Workshop on Vedic Science"** Organized by International Science Community, at RSV, Tirupati, A.P. from 05-05-2018 to 09-05-2018.

11] Two-Days National Workshop on **"Linear Algebra, Real Analysis and Algebra"** Organized by Department of Mathematics, Kakatiya University, Warangal from 28-09- 2018 to 29-09-2018.

Details of Extension Lectures, Seminars Delivered in Kakatiya University Affiliated Colleges:

1] Extension Lecture on **" Bessel Functions"** for M.Sc. (Mathematics) students from 2nd to 4th September, 2010, at Masterji Degree & PG College, Hanamkonda.

2] Extension Lecture on **" Calculus Variations"** for M.Sc. (Mathematics) students from 18th to 21st November, 2013, at Masterji Degree & PG College, Hanamkonda.

3] Extension Lecture on **"The Concept of Multiple Integrals"** for B.Sc. (Mathematics) students on 23rd and 24th January 2015 at Kakatiya Mahila Degree College, Hanamkonda.

4] Extension Lecture on ' **Absolute Continuity"** M.Sc.(Mathematics) students on 14th and 15th December, 2015 at Masterji Degree & PG College, Hanamkonda.

5] Extension Lecture on **" Riemann Integration"** for B.Sc. (MPC, MPC'S & MStc's) students on 23rd January 2016 at Lal Bahadur Degree College, Warangal.

6] Extension Lecture on **" Vector Calculus"** for B.Sc. (Mathematics) students on 11th January 2017 at Lal Bahadur Degree College, Warangal.

7] Extension Lecture on **" Uniform Convergence and More on Uniform Convergence"** in Real Analysis for B.Sc. (Mathematics) students on 18th October 2018, at Lal Bahadur Degree College, Warangal.

8] Extension Lecture on **" Linear Algebra"** for B.Sc. (Mathematics) V-Semester students on 20th September, 2018 at Nalanda Degree College, Mahabubabad.

9] Seminar on **" Measure Integration"** on 4th November, 2018, at Vignana Bharathi Degree & PG College, Mahabubabad.