

# **PROFILE OF DR. K. SOMAIAH**



Name & Designation : **Dr. K. SOMAIAH**  
**Assistant Professor of Mathematics,**  
**Kakatiya University, Warangal,**  
**Telangana State-506 009. India.**  
**Mobile Number: +91 9849571898.**  
**E-mail: [somaiah.maths.ku@kakatiya.ac.in](mailto:somaiah.maths.ku@kakatiya.ac.in) (Official)**  
**[ms.somumaths@gmail.com](mailto:ms.somumaths@gmail.com) (Personal)**  
**ORCID: <https://orcid.org/0000-0003-0515-9005>**

Father's Name : **Sri. K. ISTHARI (Late)**

Date of Birth : **05-05-1972**

Sex ( M/F) : **Male**

Nationality : **Indian**

Educational Qualifications : **M.Sc., Ph.D.**

Broad Subject : **Mathematics**

## **Details of Educational Qualifications :**

**(i)**

<b>Examination/ Degree</b>	<b>Name of the Board/University</b>	<b>Month &amp; year of award of the degree</b>	<b>Division</b>	<b>% of Marks</b>
SSC	Board of Secondary Education, Hyderabad.	April, 1987.	First	<b>73.66%</b>
Intermediate	Board of Intermediate Education Hyderabad.	March, 1989	First	<b>67.6%</b>
B.Sc. (Mathematics, Physics, Chemistry)	Kakatiya University, Warangal.	Annual, 1992	First with Distinction	<b>74.22%</b>
M.Sc. (Mathematics)	Kakatiya University, Warangal.	April, 1994.	First with Distinction	<b>84.33%</b>

**(ii) Research Degree:**

<b>Name of the Degree</b>	<b>Title of Thesis</b>	<b>Details of Admission and Awarded</b>	<b>Name of the Supervisor</b>	<b>Name of the Institution</b>
<b>Ph.D.</b>	<b>Wave Propagation in Micro-elastic Solids</b>	<b>Admitted: 2004 Awarded on: 02-07-2009</b>	<b>Prof. K. Sambaiah</b>	<b>Department of Mathematics, Kakatiya University, Warangal, INDIA</b>

**Teaching Experience: 31 years (UG: 15 years, PG: 16 years)**

- i)** Part-time Lecturer in Univ. Arts and Science College, [KU], Subedari, Hanamkonda, Warangal, from **1994-1997**.
- ii)** Lecturer in Master's Degree & PG College, Hanamkonda, Affiliated to Kakatiya University, Warangal, from **1997-2006**.
- iii)** Contractual Lecturer in Univ. Arts and Science College, [KU], Subedari, Hanamkonda, from **2006 to 30-04-2010**.
- iv)** Assistant Professor in Kakatiya University, Warangal, from **01-05-2010 to till date**.

**Subjects Taught for B.Sc. Mathematics:**

\*Differential Equations \*Analytical Solid Geometry \*Vector Calculus \*Abstract Algebra  
\*Linear Algebra \*Real Analysis \*Numerical Analysis

**Subjects Taught for B. Pharmacy**

\*Remedial Mathematics

**Subjects Taught for M.Sc.(5YDC, Integrated Chemistry & Bio-technology):**

\*Mathematics-I (Algebra, Trigonometry, Fundamentals of Statistics)  
\*Mathematics-II (Differential & Integral Calculus and Coordinate Geometry)  
\*Mathematics-III (Group Theory and Three-Dimensional Geometry)

**Subjects Taught for M.Sc. Mathematics:**

\*Ordinary Differential Equations \*Topology \*Complex Analysis \*Special Functions  
\*Measure Theory \*Advanced Linear Algebra \*Advanced Complex Analysis  
\*Laplace and Integral Transforms

**Subjects Taught for M.Sc. Zoology:**

\*Bio-Statistics

## **Research Credentials:**

Research experience in years	: <b>20 years</b> (Citations: 47, h-index:04; i10-index:02)
Research Area	: <b>Solid Mechanics</b> (Micropolar elasticity, Orthotropic elasticity, Thermo elasticity, Microstretch elasticity & Visco-elasticity)
Number of Ph. D's awarded	: <b>03 (Annexure–A)</b>
Number of Research Scholars working	: <b>04</b>
Total Number of Research Papers Published	: <b>43 (Annexure–B, Only Latest SCIE, Scopus, WoS &amp; UGC-Approved Publications)</b>
Number of Research Papers accepted	: <b>02</b>
Number of Research Papers Communicated	: <b>03</b>
Number of Seminars, Conferences, FDP's Organized	: <b>04 (Annexure–C)</b>
Number of Talks given in Conferences , Workshops, Orientation Courses and Chaired Sessions	: <b>12 (Annexure–D)</b>
Number of Research Papers Presented in the Conferences	: <b>35 (Annexure–E)</b>
Number of Orientation, Refresher Courses, FDP & Short-term Training Programs Participated	: <b>25 (Annexure–F)</b>
Number of Conferences , Workshops Attended [only]	: <b>11 (Annexure–G)</b>
Number of Extension Lectures, Seminars Delivered in KU Affiliated Colleges	: <b>10 (Annexure–H)</b>

## **Administration Credentials**

(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**

(iv) Member for Rectification of CPS issues of KU teaching and non-teaching employs, from 2019 to 2024.

(v) Board of Chair Person in Mathematics (UG & PG Courses), Kakatiya University, Warangal, from **06-09-2019 to 05-09-2021**.

(vi) Head, Department of Mathematics, University College, Kakatiya University Warangal, from **05-09-2021 to 30-10-2023**.

## **Academic Credentials**

- (i) B. O. S. Member for Department of Mathematics, KU, Warangal.
- (ii) B. O. S. External member of Chaitanya Degree College (Autonomous), Hanamkonda.
- (iii) D.C. Member for Department of Mathematics, KU
- (iv) Governing Body Member of Kakatiya University Affiliated Colleges.
- (v) B. O. S. External member of Satavahana University, Karimnagar, T.S.
- (vi) B.O.S. External member of National Sanskrit University, [Deemed University], Tirupati, A.P.
- (vii) Member of Ph.D. Admission Committee for Ph.D. Program (Category-I) in the Department of Mathematics, K.U. Warangal.
- (viii) Internal Expert of Ph.D. Admissions in the Department of Mathematics, KU. Warangal for the academic year 2021-22.
- (ix) Chairperson of 3 members Assessment Committee for the evaluation of research work of NFSC to upgrade from JRF to SRF in the Department of Mathematics, KU, Warangal.
- (x) B. O. S. Member-University nominee of UG-Mathematics & Statistics for S.R. R. Govt. Arts & Science College (A), Karimnagar, T.S.
- (xi) B.O.S. member of Engineering Mathematics for Vaagdevi College of Engineering (Autonomous), Bollikunta, Warangal. T. S.
- (xii) B. O. S. Member-University nominee of UG-Mathematics for Govt. Degree College for Women, Karimnagar, T.S.

## **Professional/Institutional Memberships**

- (i) Life member in A.P.T.S.M.S. (LM. No. 452)
- (ii) Life member in Indian Science Congress [ISC, No. L 34327].

## **Telangana State and Indian Government Assigned Duties**

- (i) Presiding Officer (PO) for General Elections to TSLA-2018
- (ii) Presiding Officer (PO) for General Elections to TSLA-2023
- (iii) Presiding Officer (PO) for General Elections to Lok Sabha (LS)-2019
- (iv) Presiding Officer (PO) for General Elections to House of Parliament (HOP)-2024
- (v) Micro-observer for 4<sup>th</sup> Ordinary Elections-2014 to Urban Local Bodies in Warangal District.
- (vi) Observer for TS-SET-2017, 2018.
- (vii) Observer for TS EAMCET-2016, 2017.
- (viii) Observer for TS PGCET-2016.

(ix) Observer for TSJLM-NP-Test-2018.

(x) Observer for TS ICET-2013, 2024

(xi) Observer for TG-Ed.CET-2025.

### **Annexure -A**

#### **Details of Ph. D's Awarded**

Sl. No.	Name of the Scholar	Title	Date & Year of Award	Name of the University
1	Aalla Ravikumar	<b>Some Problems of Wave Propagation in Microelastic Solids</b>	23-06-2023	Kakatiya University
2	Venkateswara Rao Burugu	<b>Studies of Wave Problems in Elastic Solids</b>	24-08-2024	Kakatiya University
3	Narsimha Rao Kandula	<b>Study of Dispersive Behaviour of Waves and Vibrations in Different Elastic Solids</b>	27-08-2024	Kakatiya University

### **Annexure -B**

**Latest Research Publications (Indexed in SCIE, Scopus, Web of Science & UGC Approved)**  
**(Citations: 47, h-index:04; i10-index:02)**

Sl. No.	Year	Title of Research Paper & Authors (*Corresponding Author)	Journal Details	Impact Factor (IF)
1	2025	<b>Effect of Surface Stress on Love Wave Propagation in a Rotating Initially Stressed Orthotropic Elastic Solid Half-Space with Impedance Boundary Conditions.</b> K. Somaiah, *B. Venkateswara Rao and R. Srinivas	<i>Baghdad Science Journal</i> : Vol. 22, Issue 6, Article 18. 2025, pp.1940-1948. ISSN: 24117986; and 20786665. <b>DOI: <a href="https://doi.org/10.21123/2411-7986.4968">https://doi.org/10.21123/2411-7986.4968</a></b> SCOPUS, UGC Care and Web of Science (ESCI) Indexed. Publishers: Univ. of Baghdad. Q 2- Journal	<b>1.2</b>
2	2025	<b>The propagation of Love waves in an initially stressed Voigt type viscoelastic layer sandwiched between an initially stressed orthotropic elastic solid half-space with finite sliding contact and a viscous liquid layer.</b> Somaiah Kamidi, *Rajkumar Gaddam, Srinivas Remidi, Narasimharao Kandula and Venkateswara Rao Burugu	<b>Physics of Fluids 37, 033135,(2025);</b> pp.1-9, <b>doi:10.1063/5.0262384</b> SCIE, SCOPUS Indexed Publisher: AIP  <b>Q1-Journal</b>	<b>4.1</b>
3	2024	<b>Rayleigh wave propagation in an Initially stressed orthotropic</b>	<b>Engineering Computations</b> Vol. 41 No. 10, 2024	<b>1.5</b>

		<b>elastic solid half-space lying under inviscid liquid and viscous liquid layers</b> *Rajkumar G, Somaiah K and Srinivas R	pp. 2659-2681 © Emerald Publishing Limited ISSN: 0264-4401 <b>DOI:10.1108/EC-06-2024-0484</b> <b>Publishers: Emerald Publishing Limited</b> SCIE, SCOPUS Indexed and Q2-Journal	
4	2024	<b>Propagation of Elastic Waves along a Cylindrical Rod of Micropolar Elastic Solid with Stretch under Impedance Boundary Conditions</b> *G Rajkumar, K Somaiah, K. Narasimharao, B. Venkateswararao	<b>Indian Journal of Science and Technology</b> 17(15): 1566-1576. <a href="https://doi.org/10.17485/IJST/v17i15.322">https://doi.org/10.17485/IJST/v17i15.322</a> ISSN: 0974-6846 Publisher: Indian Society for Education and Environment (iSee), <b>Web of Science (Zoological Record)</b>	0.16
5	2023	<b>Rayleigh Wave Propagation at Viscous Liquid/Micropolar Micro-stretch Elastic Solid</b> <b>K. Somaiah and</b> *A. Ravi Kumar	<b>Communications in Mathematics and Applications</b> , Vol. 14, No. 1, pp. 89–103, 2023 ISSN 0975-8607 (online); 0976-5905 (print) DOI: <a href="https://doi.org/10.26713/cma.v14i1.1935">10.26713/cma.v14i1.1935</a> Publisher: RGN Publications <b>Thomson Reuter, UGC Care and Web of Science (ESCI)</b>	0.2
6	2023	<b>Plane Wave Problem in a Generalized Thermo-elastic Solid in the Presence of Voids</b> *Rao BV, Somaiah K, Kumar AR Narasimharao K	<b>Indian Journal of Science and Technology</b> 16(19): 1422-1430. <a href="https://doi.org/10.17485/IJST/v16i19.196">https://doi.org/10.17485/IJST/v16i19.196</a> ISSN Print: 0974-6846 Electronic: 0974-5645 Publisher: Indian Society for Education and Environment (iSee), <b>Web of Science (Zoological Record)</b>	0.16
7	2022	<b>Free Vibrations in a Rotating Generalized Elastic Hollow Solid Sphere</b> <b>K Somaiah,</b> *K. Narasimharao, A Ravi Kumar, R Srinivas	<b>Indian Journal of Science and Technology</b> 15(42):pp.2252-2258. <a href="https://doi.org/10.17485/IJST/v15i42.1607">https://doi.org/10.17485/IJST/v15i42.1607</a> ISSN Print: 0974-6846 Electronic: 0974-5645 Publisher: Indian Society for Education and Environment (iSee), <b>Web of Science (Zoological Record)</b>	0.16
8	2021	<b>A study of Variational Iteration Method for Solving Various Types of Problems</b> *E. Rama , <b>K. Somaiah and K. Sambaiah</b>	<b>Malaya Journal of Matematik</b> , Vol. 9, No. 1, pp.701-708, (2021), Publisher : MKD Publishing House <a href="https://doi.org/10.26637/MJM0901/0123">https://doi.org/10.26637/MJM0901/0123</a> . (UGC Approved.), ISSN: 2319-3786 (Print); ISSN:2321-5666 (Online)	0.1
9	2021	<b>Investigation of Plane Longitudinal Waves in a Micro-isotropic, Micro-Elastic Solid</b> <b>K. Somaiah, and</b> *A. Ravi Kumar	<b>J. Math.Comput.Sci.</b> 11 (2021), No.1,pp. 380-391, ISSN: 1927-5307 <a href="https://doi.org/10.28919/jmcs/5124">https://doi.org/10.28919/jmcs/5124</a> , Available	0.49

			online at <a href="http://scik.org">http://scik.org</a> . Publisher: Scik Publications <b>Scopus Indexed</b>	
10	2021	<b>Effect of Rotation and Fluid on Radial Vibrations in a Micropolar Elastic Solid Having a Fluid-Loaded Spherical Cavity</b> * K. Somaiah	<b>Advances in Fluid Dynamics, Lecture Notes in Mechanical Engineering,</b> <a href="https://doi.org/10.1007/978-981-15-4308-1_13">https://doi.org/10.1007/978-981-15-4308-1_13</a> , Springer Nature Singapore Pte Ltd. 2021, pp.171-180. ISSN:21954356,21954364 . Publisher: Springer, Scopus Indexed, Q 4 Journal	<b>0.52</b>
11	2020	<b>Rayleigh Waves In An Incompressible Non-Local Elastic Medium Under Gravity Effect</b> * A. Chandual, and K. Somaiah	AIP Conf .Proc. 2246,020011-1–020014-5; <a href="https://doi.org/10.1063/5.0014555">https://doi.org/10.1063/5.0014555</a> . Published by AIP Publishing. 978-0-7354-2005-2/\$30.28 <sup>th</sup> , July-2020. ISSN: 0094243X, 15517616 <b>Scopus Indexed</b>  Publisher: AIP Publications	<b>0.40</b>
12	2020	<b>Studies of Rotation Effect on Inhomogeneous and Attenuation Wave Propagation in a Micropolar Elastic Solid</b> * K. Somaiah, and A. Chandual	AIP Conf. Proc.2246,020010-1–020010-11; <a href="https://doi.org/10.1063/5.0014536">https://doi.org/10.1063/5.0014536</a> . Publishedby AIP Publishing.978-0-7354-2005-2/\$30.28 <sup>th</sup> , July-2020 ISSN: 0094243X, 15517616 <b>Scopus Indexed</b> Publisher: AIP Publications.	<b>0.40</b>

### **Annexure - C**

#### **Details of Seminars, Conferences, Symposia, FDP Organized:**

- (i) Organizing Secretary for the “National Conference on Applications of Mathematics in Engineering and Industry [NCAMEI-2013]” in the Department of Mathematics, KU, Warangal from 26<sup>th</sup> to 28<sup>th</sup> March,2013.
- (ii) Coordinator for one week online Faculty Development Program on “Latex & Technical Report Writing” Organized by the Department of Mathematics, KU, Warangal in association with Spoken Tutorial, IIT Bombay, from 25<sup>th</sup> –30<sup>th</sup> May, 2020.
- (iii) Coordinator for one week online Faculty Development Program on “Real Analysis” Organized by the Department of Mathematics, KU, Warangal, from 05<sup>th</sup> –10<sup>th</sup> Sept. 2020.
- (iv) Coordinator for "3-Week Industrial Training Program for Government Polytechnic Teachers", Organized by the Department of Mathematics, KU, from 06-06-2022 to 25-06-2022.

## **Annexure -D**

### **Details of Talks given in Conferences, Workshops, Orientation Courses and Chaired Sessions:**

(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, T.S. from 10-12-2015 to 12-12-2015.

(iii) 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) Delivered a Talk as Resource Person in “**One Day Departmental Conference for UG Teachers**” Organized by the 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 the 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, Organized by the Department of Mathematics, Kakatiya University, Warangal from 5th - 10th September, 2020.

(viii) Delivered a Lecture on “**Linear Algebra**” as Resource Person in “**3-Week Industrial Training Program for Government Polytechnic Teachers**”, Organized by the Department of Mathematics, KU, from 06-06-2022 to 25-06-2022.

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

(x) Delivered a Lecture on “**MATLAB**” as Resource Person in “**3-Week Industrial Training Program for Government Polytechnic Teachers**”, Organized by the Department of Mathematics, KU, Warangal, from 27-05-2024 to 15-06-2024.

#### **Chaired Sessions:**

(xi) Chaired a Session in “**International Conference on Mathematical Sciences and Emerging Applications in Technology (ICAMSEAT-2022)**”. Organized by the Department of Mathematics, School of Science GITAM (Deemed to be University), Hyderabad, T.S. India from 09-09-2022 to 11-09-2022.

(xii) Chaired a Session in “**National Seminar on Mathematical Techniques and Application**”. Organized by the Department of Mathematics, Mahatma Gandhi University, Nalgonda, T.S. from 03-03-2023 to 04-03-2023.



## **Annexure -E**

### **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 the 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 the 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 the 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 Fluid Dynamics (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 20<sup>th</sup> 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 62<sup>nd</sup> Congress of Indian Society of Theoretical and Applied Mechanics (ISTAM-2017), organized by the 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, Tiruchirappalli 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)” organized by the Department of Mathematics, Mahatma Gandhi University, Nalgonda, T.S, during December 3<sup>rd</sup> - 5<sup>th</sup>, 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  $(\alpha, \beta)$  of Some Fundamental Functions"** 27<sup>th</sup> 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) "Investigation of Reflection and Refraction Phenomena of SH-wave Propagation at an Interface of two Micropolar Elastic Solid Interfaces"** in XXX Congress of APTSMS and International Conference on Mathematics & Its Relevance to Science and Engineering (ICMRSE-2022). Organized by Department of Mathematics, Osmania University, Hyderabad, T.S., India, from 12-03-2022 to 14-03-2022.

**(24) "Studies of Free Vibrations on a Rotating Generalized Elastic Hollow Sphere"** in the International Conference on Dynamical Systems and Numerical Methods (**online**), (ICDSNM-22) Organized by the Department of Mathematics, Jamia Millia Islamia, New Delhi, India from 20-05-2022 to 21-05-2022.

**(25) "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, VIT AP University, Amaravati held during July 16-18, 2022.

**(26) " Longitudinal Vibrations in a Rotating Micropolar Elastic Solid having a Cylindrical Hole"** in the International Conference on Mathematical Sciences and Emerging Applications in Technology (ICAMSEAT-2022), Organized by the Department of Mathematics, School of Science GITAM (Deemed to be University), Hyderabad, T.S. India from 09-09-2022 to 11-09-2022

**(27) "Effect of Surface Stress on Wave Propagation in a Rotating Generalized Elastic Plate"** in the National Seminar on Mathematical Techniques and Application. Organized by the Department of Mathematics, Mahatma Gandhi University, Nalgonda, T.S. from 03-03-2023 to 04-03-2023.

**(28) "longitudinal Wave Propagation in an incompressible surface stressed micropolar microstretch elastic solid having a cylindrical hole"** in the International Conference on Mathematical Modelling & Emerging Trends in Computing (ICMMETC-2023), Organized by School of Technology, Worsen University, Hyderabad, T. S. India from 23-06-2023 to 25-06-2023.

**(29) “ Effect of Rotation on Propagation of Surface Waves at an Interface of Microplar Elastic Solid with Stretch and Inviscid Liquid Layer”** in the 4<sup>th</sup> Online/Offline International Conference on Continuity, Constancy and Innovation in Applied Sciences and Humanities (ICCIASH-2023), Organized by Department of Science and Humanities of St. Martin’s Engineering College, Secunderabad , T.S. India. From 18-08-2023 to 19-08-2023.

**(30) “Effect of surface stress on Rayleigh type Wave Propagation in a rotating initially stressed Voigt-type viscoelastic layer”** in the 4<sup>th</sup> Online/Offline International Conference on Continuity, Constancy and Innovation in Applied Sciences and Humanities (ICCIASH-2023), Organized by Department of Science and Humanities of St. Martin’s Engineering College, Secunderabad , T.S. India. From 18-08-2023 to 19-08-2023.

**(31) “Effect of Rotation on Rayleigh Wave Propagation in an initially stressed Voigt-type viscoelastic layer in the gravity field”** in the International Conference on Computational Modelling in Science and Engineering & 32<sup>nd</sup> Congress of APTSMS. Organized by the Department of Mathematics, NIT Warangal from 28-10-2023 to 30-10-2023.

**(32) “ Plane waves in a rotating magneto-thermo elastic solid”** in the International Conference on Computational Modelling in Science and Engineering & 32<sup>nd</sup> Congress of APTSMS. Organized by the Department of Mathematics, NIT Warangal from 28-10-2023 to 30-10-2023.

**(33) Online** presented a research paper on “Effect of Surface Stress on Love Wave Propagation in Rotating, Initially Stressed Orthotropic Elastic Solid Half-Space with Impedance Boundary Conditions“ at International Conference on Computing and Data Analytics (ICCD’23), organized by College of Computing and Information Sciences University of Technology and Applied Sciences (UTAS)-Ibri Sultanate of Oman, from 10-12-2023 to 12-12-2023.

**(34) “Study of Surface Wave Propagation in an initially stressed Orthotropic elastic solid half-space lying under inviscid liquid layer”** in the National Seminar on Applications of Statistics and Mathematics. Organized by Department of Statistics and Mathematics, TSWRDCW-Khammam, T.S from 15-02-2024 to 16-02-2024.

**(35) “Study the effect of surface stress on the propagation of Love wave in rotating, initially stress orthotropic elastic solid half-space with impedance boundary conditions”** in the International Conference on Applied Mathematics and Advanced Data Analytics for Industry 5.0 (ICAMADA-2024). Organized by VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad, T.S. India in association with ISRS, APTSMS and CCoE from 25-04-2024 to 27-04-2024.

### **Annexure -F**

#### **Details of Orientation, Refresher Courses, FDP & Short-Term Training Programs Participated:**

**(1)** 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.

**(2)** UGC Sponsored **“Orientation Course”** held in UGC Academic Staff College, Osmania University, Hyderabad, from 28-09-2012 to 31-10-2012.

- (3) 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.
- (4) 10-Days Training Programme on **“Saksham- IT Champion Training Programe”** conducted by Microsoft in KU. Warangal from 01-04-2014 to 10-04-2014.
- (5) 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.
- (6) 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.
- (7) 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.
- (8) Short Term Training Program on **“ Numerical an Symbolic Computing (NSC)”** held at NIT, Warangal, from 27-05-2019 to 31-05-2019.
- (9) One week online Faculty Development Program 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.
- (10) 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.
- (11) Five Day FDP on **“Applications of Mathematics in Engineering”** Organized by Department of Mathematics, KPR Institute of Engineering & Technology, Arasur, Coimbatore, Tamilnadu, India, from 27-07-2020 to 31-07-2020.
- (12) 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.
- (13) 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.
- (14) One Week (Online )Faculty Development Program on **" Real Analysis"**, Organized by Department of Mathematics, Kakatiya University, Warangal, T.S. from 5th - 10th September, 2020.
- (15) 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.
- (16) 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.

(17) 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.

(18) 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.

(19) Online Short Term Course on “**Data Analytics using Python**” conducted by Department of Computer Science and Engineering & Department of Mathematics, Centre for Continuing Education, NIT, Warangal, from 08-02-2021 to 12-02-2021.

(20) 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.

(21) Online Short Term Course on “**Machine Learning for Data Science using Python**” conducted by Department of Computer Science and Engineering, Centre for Continuing Education, NIT, Warangal, from 01-03-2021 to 10- 03-2021.

(22) **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.

(23) 9-Day National Level Online Faculty Development Program on “**Foregrounding the Spectrum of Character Building in Modern Human Life**” organized by the Department of Humanities & Sciences, BITS, Laknepally, Narsampet, Warangal Rural-506331, Telangana, from 25 June - 03 July, 2021.

(24) Five Day National Level Online FDP on “**Effective Pedagogy for Science**” from 29-1-.2022 to 03-12-2022 jointly organized by Departments of Physics and Mathematics, JMJ College for Women (Autonomous), Tenali.

(25) Online Faculty Development Program on “**Empowering Research Innovations through Mathematical Modelling**” jointly organized by Central University of Kashmir and Vishwakarma Institute of Technology (VIT), Pune from 09-06-2025 to 10-05-2025.

## **Annexure -G**

### **Details of only Attended Conferences, Workshops:**

(1) “**XV CONGRESS**” Organized by Department of Mathematics, Kakatiya University, Warangal from 11-08-2006 to 13-08-2006.

(2) “**5<sup>th</sup> 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 the Department of Mathematics, Jyothishmathi Institute of Technology & Science, Karimnagar, from 12-11-2010 to 14-11-2010.

(5) **“National Workshop on Research Methodology in Sciences”** Organized by the 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 the Department of Computer Science, Kakatiya University, Warangal, on 5<sup>th</sup> 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 the Department of Mathematics, N.B.K.R. Institute of Science and Technology, Nellore, from 09-12-2016 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.

### **Annexure -H**

#### **Details of Extension Lectures, Seminars Delivered in KU Affiliated Colleges:**

(1) Extension Lecture on **“Bessel Functions”** for M.Sc. (Mathematics) students from 2<sup>nd</sup> to 4<sup>th</sup> September, 2010, in Masterji Degree & PG College, Hanamkonda.

(2) Extension Lecture on **“Calculus Variations”** for M.Sc. (Mathematics) students from 18<sup>th</sup> to 21<sup>st</sup> November, 2013, in Masterji Degree & PG College, Hanamkonda.

(3) Extension Lecture on **“The Concept of Multiple Integrals”** for B.Sc. (Mathematics) students on 23<sup>rd</sup> and 24<sup>th</sup> January 2015 in Kakatiya Mahila Degree College, Hanamkonda.

(4) Extension Lecture on **“ Absolute Continuity”** M.Sc.(Mathematics) students on 14<sup>th</sup> and 15<sup>th</sup> December, 2015 in Masterji Degree & PG College, Hanamkonda.

(5) Extension Lecture on **“ Riemann Integration”** for B.Sc. (MPC, MPC'S & MStc's) students on 23<sup>rd</sup> January 2016 in Lal Bahadur Degree College, Warangal.

(6) Extension Lecture on **“ Vector Calculus”** for B.Sc.(Mathematics) students on 11<sup>th</sup> January 2017 in 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 18<sup>th</sup> October 2018, in Lal Bahadur Degree College, Warangal.

(8) Extension Lecture on “ **Linear Algebra**” for B.Sc. (Mathematics) V-Semester students on 20<sup>th</sup> September, 2018 in Nalanda Degree College, Mahabubabad.

(9) Seminar on “**Measure Integration**” on 4<sup>th</sup> November, 2018, in Vignana Bharathi Degree & PG College, Mahabubabad.

(10) Extension Lecture on “**Numerical Solutions to Ordinary Differential Equations**” to B.Sc. (MPC’S), VI-Semester students on 07-04-2025 in Lal Bahadur Degree College, Warangal.

**Address:**

Department of Mathematics,  
University College,  
Kakatiya University,  
Vidyaranyaपुरi,  
Warangal.  
Telangana State-506 009. India.