



Sri SAI RAM INSTITUTE OF TECHNOLOGY

An ISO 9001 : 2008 Certified Institution

Sai Leo Nagar, West Tambaram, Chennai - 44. www.sairamit.edu.in

DEPARTMENT OF MATHEMATICS

Name : **Dr. YUVARAJ. V**

Designation : **ASSOCIATE PROFESSOR**

Email : **yuvaraj.maths@sairamit.edu.in**

Qualification : **M.Sc., M.Phil., Ph.D., TNSET**

Specialization : **Mathematical Modelling**

Research Interest : **Fuzzy, Fluid Dynamics, OR**



Experience in years : **Teaching UG** **PG** **Industry**

No. of Workshop/Conferences/
FDP attended : **Workshop** **Conferences** **FDP**

No. of Workshop/Conferences/
FDP Organized : **Workshop** **Conferences** **FDP**

Professional Membership	<p>Affiliated to “THE ASSOCIATION OF MATHEMATICS TEACHERS OF INDIA (REGD)” L10084– Life member since 2010.</p> <p>Affiliated to “ALL INDIA COUNCIL FOR TECHNICAL SKILL DEVELOPMENT (REGD)” AICTSD/PROFESSOR/03941 – Life member since 2019.</p> <p>Affiliated to “INTERNATION ASSOCIATION OF ENGINEERS (REGD)”Member Number: 205230– Life member since 2019.</p> <p>Affiliated to “THE INDIAN SOCIETY FOR TECHNICAL EDUCATION (REGD)” LM128032 – Life member since 2019.</p> <p>Affiliated to “INTERNATIONAL ASSOCIATION OF ACADEMIC PLUS CORPORATE (REGD)” FRTJQC-CE002770– ANNUAL member since 2022.</p> <p>IEEE MEMBERSHIP – Membership No. 98101358</p>
Publications	<p>International Journals: 13</p> <p>Books Published: 2</p>

Research Funded Projects	
Patents	Patent Published :2
Achievements	<p><u>ACHIEVEMENTS</u></p> <p>College Topper in UG (2002) & PG (2004).</p> <p><u>HONOURS AND AWARDS</u></p> <p>NITTR Achiever Award (2022) – Sairam Institutions</p>
Any Other Information	<p><u>COURSES COMPLETED:</u></p> <ul style="list-style-type: none"> • 3 Months Certified Course on “PANCHAYAT RAJ ADMINISTRATION AND RURAL DEVELOPMENT” Conducted by State Rural Institute of Rural Development and Panchayat Raj, Government of Tamil Nadu, Maraimalai Nagar, 603209. Reg.No. CC2022.B8.01- May 2023. • Completed all 8 Models in NITTTR (National initiative for Technical Teachers Training) conducted by AICTE(All India Council for Technical Education). <ul style="list-style-type: none"> ➤ Module 1: Orientation Towards Technical Education and Curriculum Aspects ➤ Module 2: Professional Ethics and Sustainability ➤ Module 3: Communication Skills, Modes and Knowledge Dissemination ➤ Module 4: Instructional Planning and Delivery ➤ Module 5: Technology Enabled learning and Life-long self-Learning ➤ Module 6: Students Assessment and Evaluation ➤ Module 7: Creative Problem solving, innovation and Meaningful R&D ➤ Module 8: Institutional management and Administrative Procedures. • Completed 4 NPTEL Courses <ul style="list-style-type: none"> ❖ A short Lecture Series on Contour integration in the Complex plane ❖ (Elite + Silver) ❖ Descriptive Statistics with R software(Elite + Silver) ❖ Discrete Mathematics (Elite) ❖ Introduction to Abstract and Linear Algebra (Elite)

List of Publications:-

INTERNATIONAL PUBLICATIONS

1. Yuvaraj V, S Rajasekaran, Modeling of Tsunami wave Propagation on the time grounded, International Journal of Applied Engineering Research ISSN 0973-4562 Volume 10, Number 16 (2015) pp 37961-37964. **(SCOPUS INDEXED JOURNAL)**
2. Yuvaraj V, S Rajasekaran, E. Syed Mohamed, An Alternative Analytical Model for Propagation of Tsunami Waves, International Journal of Pure and Applied Mathematics, ISSN 1311-8080 Volume 113, Number 06 (2017) pp 29-37.
3. Yuvaraj V, S Rajasekaran, E. Syed Mohamed, Complex Solutions for Tsunami Ascending into a River as a Bore, International Journal of Pure and Applied Mathematics, ISSN 1311-8080 Volume 114, Number 06 (2017) pp 99-107.
4. Yuvaraj V, S Rajasekaran, D. Nagarajan, Analytical and Numerical Modeling of Tsunami Wave Propagation for double layer state in Bore, Journal of Physics: conference Series 1000 (2018) 012113. **(SCOPUS INDEXED JOURNAL & Web of Science)**
5. Yuvaraj V, S Rajasekaran, D. Nagarajan, Tsunami Wave Propagation by Voronoi diagram, International of Engineering and Technology, 7(3) (2018) 1233-1235. doi:10.14419/ijet.v7i3.12486 **(SCOPUS INDEXED JOURNAL)**
6. [J. Charles Prem Anand](#), [V. Yuvaraj](#), [R. Delhi Babu](#), Magnetohydrodynamic effects on steady blood flow in a stenosis under angular velocity, AIP Conference Proceedings, Volume 2112, Issue 1, (2019), 020093 <https://doi.org/10.1063/1.5112278> **(SCOPUS INDEXED JOURNAL)**
7. [R. Delhi Babu](#), [V. Yuvaraj](#), [S. Hemanth Kumar](#), Magnetohydrodynamic Viscous Fluid Flow Between Parallel Plates with Base Injection and Top Suction with an Angular Velocity, International Journal of Innovative Technology and Exploring Engineering, Volume 9, Issue 1, (2019), Page No. 1528-1530. <https://DOI:10.35940/ijitee.A4383.119119> **(SCOPUS INDEXED JOURNAL)**
8. [R. Delhi Babu](#), S. Ganesh, [V. Yuvaraj](#), Magnetohydrodynamic Steady Flow Between Two Parallel Porous Plates of a Viscous Fluid Under Angular Velocity with Inclined Magnetic Field, International Journal of Recent Technology and Engineering, Volume 8, Issue 4, (2019), pp. 615-619. <https://DOI:10.35940/ijrte.B1863.118419> **(SCOPUS INDEXED JOURNAL)**.
9. R. Delhi Babu, S. Ganesh, S. Vaithyasubramanian, C. K. Kirubhashankar, V. Yuvaraj, Investigation on Steady Magnetohydrodynamic flow of Dusty fluid between parallel plates with an angular velocity, International Journal of Advanced Science and Technology, Volume. 29, No. 9s, (2020), pp. 3056-3069.
10. C. Chan Teck Loon, J. Kavikumar, D. Nagarajan, and V. Yuvaraj, A comprehensive study of personalized garment design using fuzzy logic, AIP Conference Proceedings, Volume 2282, 020002, Issue 1, (2020), <https://doi.org/10.1063/5.0028279> **(SCOPUS INDEXED JOURNAL)**.
11. [R. Delhi Babu](#), [S. Ganesh](#) and [V. Yuvaraj](#), Investigation on steady MHD stokes flow with angular velocity of dusty fluid between parallel porous plates, AIP Conference Proceedings, Volume 2311, 090006, Issue 1, (2020); <https://doi.org/10.1063/5.0034118>. **(SCOPUS INDEXED JOURNAL)**.

12. R. Delhi Babu, and V. Yuvaraj, Magnetohydrodynamic steady stokes flow by Navier-Stokes equations as numerical analysis and parallel porous plates with an angular velocity, Materials Today: Proceedings, Article in Press (2021); <https://doi.org/10.1016/j.matpr.2021.01.810> (**SCOPUS INDEXED JOURNAL**).

13. Delhibabu, R., Yuvaraj, V., Antony Nisha, J., Karthik Vendhan, K., Analytical Study of Steady Magneto hydrodynamic Two-Dimensional flow between parallel porous plates with an angular velocity to an inclined magnetic field, AIP Conference Proceedings 2464, 050001 (2022);. <https://doi.org/10.1063/5.0082326> (**SCOPUS INDEXED JOURNAL**).

BOOK PUBLICATIONS

1. Yuvaraj V, Book Titled “Analytical and Geometric Models for Tsunami Wave Propagation”, LAP LAMBERT Academic Publishing, ISBN: 978-620-2-78678-2, September (2020)

2. M. Sheeba, YUVARAJ V, Book Titled “Zestful Phrasal Verbs Scoop-up” LAP LAMBERT Academic publishing, ISBN: 978-620-3-923322, June (2021)

List of Patent :

PATENT PUBLICATIONS

1. Yuvaraj V, titled “A system and Method for Detecting coronary heart disease from medical history” Application No. 202141025832, July (2021)
2. Yuvaraj V, Titled , Design and Method of Retinal Blood Vessel Segmentation in Retinal Images Using Forward Backward Filtering and Global Thresholding ”Application No. 202341005005 A , **Publication date: 03/02/2023**

Workshop / Conferences / FDP Attended:-

WORKSHOPS / CONFERENCES/FDP (ATTENDED) OFFLINE

(Attended Many FDP's , Workshops, Webinars Online courses during **COVID19**)

QUARANTINE SESSION(More 90 FDPS, 130 Webinars, 30 Quizzes and also More than 80 Online Courses) till date(19.08.21)

Attended the International conference & presented a paper in “**National Conference on Modern Functional Materials (NCMFM-2023)**” (**FAME 2020**)” held 23.03.2023

&24.03.2023 organized by Functional materials Research Laboratory (FMRL), Sri Sairam Engineering College, Chennai.

Attended the five Days FDP on the Theme “**inculcating Universal Human values in Technical education**” organized by All India Council for Technical Education(AICTE) from 19 April 2021 to 23 April 2021.

Attended the International conference & presented a paper in “**3rd International Conference on Frontiers in Automobile and Mechanical Engineering (FAME 2020)**” held on 7th to 9th August 2020 in Sathyabama Institute of Science and Technology, Chennai.

Attended the Teachers Enrichment Workshop on “**Algebra, Linear Algebra and Cryptography**” from 25th to 30th November 2019 at The Institute of Mathematical Science, Chennai.

Attended the Faculty Development Program on “**Algebra and Number Theory**” from 10th to 16th June 2019 at Sri Sairam institute of Technology, Chennai.

Attended the Faculty Development Program on “**Entrepreneurship Carrier Development Program**” from 8th to 12th April 2019 at Sri Sairam institute of Management Studies, Chennai.

Attended the National conference & Presented a paper in “**National Conference on Mathematical Techniques and their Applications (NCMTA'18)**” held on 5th & 6th January 2018 in SRM University, Potheri, Chennai.

Attended the National Workshop on “**Programming Technique in MATLAB**” on 22rd & 23rd August 2017 at Hindustan Institute of technology and Science, Chennai.

Attended the National conference & Presented a paper in “**National Conference on Recent Trends in Mathematics and its Applications (NCRTMA'17)**” held on 24th & 25th February 2017 in SRM University, Vadapalani, Chennai.

Attended the National conference & Presented a paper in “**National Conference on Mathematical Techniques and their Applications (NCMTA'17)**” held on 27th & 28th January 2017 in SRM University, Potheri, Chennai.

Attended the National level Workshop on “**Advancements in Chemical Sciences**” held on 18th July 2016, in Sri Sairam Institute of Technology, Chennai.

Attended the Two days Workshop on **“NUMERICAL COMPUTATION, OPTIMIZATION OF FUNCTIONS AND DIFFERENTIAL EQUATIONS”** held on JULY 29-30 2016, in Hindustan University, Chennai.

Attended the **Faculty Development Program** conducted on 20.06.2016 & 21.06.2016 at Sri Sairam Institute of Management Studies, Tambaram, Chennai.

Attended the Two days' Workshop on **“Instructional Workshop on Graph Theory and Discrete Mathematics”** held on August 20-21 2015, in Sri Sairam Institute of Technology, Chennai.

Attended the Workshop & Presented a paper on **“Mathematical Approach to Physical Science”** held on 14th & 15th February 2013 in SSN College of Engineering, Chennai.

Attended the National Workshop on **“Differential Equations”** held on 28-29, September 2012 at Indian Institute of Information Technology and Management-Kerala, Trivandrum.

Selected for a National level Workshop conducted in LSR, New Delhi **National Workshop and Training Program** on "Differential Equations and Mathematical Modeling" from 09.02.2012 to 11.02.2012.

Attended the National Seminar on **“Defense Education for 21st Century”** on 28th&29th November 2011 at Hindustan Institute of technology and Science, Chennai.

Attended the National Workshop on **“Applications of Fuzzy Theory”** on 10th& 11th August 2011 at Hindustan Institute of technology and Science, Chennai.

Attended the National Workshop on **“Applications of Mathematics in Engineering”** conducted at Hindustan Institute of technology and Science on 23rd& 24th September 2010.

Attended the **Faculty Enrichment Program** conducted on 30.06.2010, 01.07.2010 & 27.08.2010 at Hindustan Institute of Technology and Science, Chennai.

Participated in National symposium on “**Mathematical Methods and Applications**” held on 22.12.2009 in IIT, Madras

Participated in Faculty Development Program on “**Soft Skills and Class Room Dynamics**” conducted from 04.08.2008 to 06.08.2008 at Hindustan Institute of Technology and Science, Chennai.

Attended the Faculty Development Program on “**Applied Dynamic Programming**” on 6th February 2008 at M.N.M Engineering college, Chennai.

Participated in National Level Conference of “**Mathematical and computational Models**” during December 13th -15th 2007 at PSG College of Engineering and Technology, Coimbatore.

Attended the Faculty Development Program on “**Probability and Statistics**” from 12th to 24th November 2007 at MepcoSchlenck Engineering College, Sivakasi.

Workshop / Conferences / FDP Organized:-

Organized and Conducted the Workshop on “**Discrete Mathematics and its Applications**” held on 09.08.2012 in Asan Memorial College of Engineering and Technology, Chengalpattu.

Organized and Conducted Five days International Faculty Development Program on “**Applications and Techniques in Mathematics**” during 20.07.2020 to 24.07.2020 in Sri Sairam Institute of Technology, Chennai-44.

GUEST LECTURES DELIVERED AS RESOURCE PERSON

- Invited as resource person for Tamil Nadu State Council for Science and Technology sponsored Seminar on conducting an **In-service training program for secondary grade teachers** by Kanchi Sri Krishna College, Kanchipuram, funded by during 20.12.2010 to 24.12.2010.
- Delivered a Guest lecture on “**Aptitude Skills**” at Anna Adarsh college for Women on 30.7.2016.

- Delivered a Guest lecture on “**Aptitude Skills**” at Anna Adarsh college for Women on 20.7.2018.
- Delivered a Lecture for the Lecture Series in Commemoration of Golden Jubilee Celebrations of the Dept of Mathematics, on “**Number Theory and Cryptography**” at Bharathi Women’s College, Chennai on 29.01.2020.
- Invited as resource person for Six Days Faculty Development Programme on Applications of Mathematics in Diverse Fields organized by the Department of Mathematics on the topic “**Applications of Mathematics in online Security**” by Anand Institute of Technology, OMR Chennai on 29.06.2020.
- Delivered a Guest lecture on “**Discrete Mathematics**” at SRM Valliammai Engineering College, Potheri, on 18.10.2020.
- Delivered an Adroit Talk on “**Career Guidance Programme**” at St. Pious X Degree & PG College for Women, Nacharam, Hyderabad-67, on 18.12.2021.
- Resource person for one Day Workshop on “**Applications of Mathematics in Cyber Security**” organized by the Department of Mathematics, Meenakshi Academy of Higher Education & Research (Deemed to be University), K.K Nagar, Chennai on 20.04.2022.
- Resource person for Five Days Faculty Development Program on “**ICT Tools for Teaching Learning Pedagogy**” organized by the Department of Electronics and Communication Engineering ,GMR Institute of Technology Rajam, Andhra Pradesh & Sri Sairam institute of technology, Chennai, between 23rd to 27th August 2022.
- Resource person, delivered a Lecture on the topic “**Test of Hypothesis**” for Five Days Faculty Development Program on “**Mathematical Foundations for Data Science**” organized by the Department of Mathematics ,Jerusalem College of Engineering, Chennai, between 31.10.2022 to 04.11.2022.