




R L JALAPPA INSTITUTE OF TECHNOLOGY

(Affiliated to Visvesvaraya Technological University, & Approved by AICTE)

Doddaballapura - 561203, Bangalore Rural District

DEPARTMENT OF ALLIED SCIENCES

Faculty Name	THIRUMALESH	
Designation	Associate Professor & HOD	
Area of Interest	Physics, Shock waves, Electronics, Programing	
Email ID	thirumalesh.dbp@gmail.com thirumalesh@rljit.in	
Research Identity	Orcid Id: 0000-0002-4791-9749 Google Scholar Id: p2EoHaIAAAAJ Research gate Id: K-Thirumalesh-2 Vidwan Id: 356107	

EDUCATION: M.Sc., Ph.D

TECHNICAL SKILLS:

Programing – C, C++, VB, Python, HTML, CSS, JS, Bootstrap, NodeJS, REACT,
Electronics – Analog and Digital Electronics, Circuit design and Simulation, Embedded systems,
ARDUINO, RASPBERRY PI etc.

PROFESSIONAL WORK EXPERIENCE:

20 years of Teaching Experience of Physics
10 years of Research experience

PUBLICATIONS:

PEER REVIEWED JOURNAL;

- ❖ Thirumalesh, S P Raju, K Swaroop and H M Somashekharappa, “Study on effects of shockwave treatment on PVA films in view of electrical property changes” 2020 Mater. Res. Express 7 015344, <https://doi.org/10.1088/2053-1591/ab6ca1>
- ❖ Thirumalesh K, Raju SP, Somashekarappa HM, Swaroop K. Shock tube data processing tools using open source hardware and software platforms. *Engineering Reports*. 2020;e12353. <https://doi.org/10.1002/eng2.12353>
- ❖ Thirumalesh , S.P. Raju, H.M. Sosmashekharappa, “Shock wave treated PVA films as alternative bio degradable polymer for packaging industry” J. Nano- Electron. Phys. 12 No 2, 02034 (2020). DOI: [https://doi.org/10.21272/jnep.12\(2\).02034](https://doi.org/10.21272/jnep.12(2).02034)

- ❖ SP Raju, Ramaraja Varma, SN Chaitra, P Poornima, K Thirumalesh, Ganesh Sanjeev, *“Fluorescent sensitized irradiation sensing and recording hybrid quantum dot embedded polymer nanocomposites”* -, 2022, Physica Scripta, **97 (5), 055001**,

INTERNATIONAL CONFERENCE:

- Thirumalesh , S.P. Raju, H.M. Somashekharappa, ““Construction and optimization of modified Reddy Shock-tube using open source platforms”, at International conference on Recent Advances in Materials Science and Biophysics (RAMSB 2018), by Department of Studies in Physics Mangalore University, Mangalagangothri-574199. On January 23-25, 2018.
- Thirumalesh , S.P. Raju, H.M. Somashekharappa, *“Study of water resistance property of PVA films with shockwave treatment”*, at INTERNATIONALCONFERENCE ON RECENT ADVANCES IN APPLIED SCIENCES (ICRAAS – 2019), 17th-18th October 2019, Organised by School of Applied Sciences, REVA University, Bangalore.
- Thirumalesh , S.P. Raju, H.M. Somashekharappa, “Shock wave treated PVA films as alternative bio degradable polymer for packaging industry”, at International Conference on Smart Materials and Nanotechnology (ICSMN-2020), organised by DEPARTMENT OF ENGINEERING PHYSICS & CHEMISTRY SKN SINHGAD COLLEGE OF ENGINEERING, Pandharpur - 413304, Maharashtra, India.

NATIONAL CONFERENCE:

- ✓ Thirumalesh , S.P. Raju, H.M. Somashekharappa, *“Shock wave impact study on PVA films”* at **6th National Symposium on Shock Waves-IIT Madras**, Chennai (NSSW-2020), 26th to 28th Feb 2020.

TEXT BOOK AUTHORED:

Published a book named “Engineering Physics Objective Type Question-Answers”.

Publisher – Star Tech Publications, Bangalore.

The book is first of its kind, containing the materials required for the I/II semester engineering Students studying Engineering Physics (2011).

INVITED TALKS:

- Invited speaker and chief guest** for the Science day celebration on 06/03/2020 at Govt. First Grade College and PG Center, Chinthamani, Kolar Dist., Bangalore North University and Presented a talk on **“Shockwaves and its Applications”**
- Invited Speaker** for a ‘One Day National level Webinar’ on **“Shockwaves and its Applications”** Organized by Department of Physics (UG & PG) Government First Grade College and PG Center, Chinthamani, Bangalore North University, on 8th June 2020.

- c. **Invited speaker** for an online webinar on “**Recent Advances and Applications of Shockwaves**” organized by Vidhya Vardhaka College of Engineering, Mysore, on 14th July, 2020.
- d. **Invited speaker** for an online webinar on “**Recent Advances in Shockwaves and its Applications**” organized by Atria Institute of Technology, Bangalore, on 3rd Feb, 2021.
- e. Delivered an **Invited talk** on “**Shockwaves and their Applications**” organized by BMS Institute of Technology, Bangalore, on 9th July, 2021.
- f. Delivered an **Invited talk** on “**Recent Developments in Shockwaves and their Applications**” organized by Brindavan College of Engineering, Yelahanka, Bangalore, on 13th August, 2022.

FDP/WORKSHOP ATTENDED:

- ✓ Attended a QIP Short term course on “Smart Materials and Devices”, conducted by IIT Guwahati, from 9th 13th of August 2010.
- ✓ ☐ Attended a QIP Short term course on NANO MATERIALS: Characterization and applications, conducted by NITTTR (National Institute for Technical Teachers Training and Research), Chandigarh from 20-25, October, 2008.
- ✓ ☐ Attended three months course on “Introduction to Artificial Intelligence”, conducted by Center for Continuing Education, I.I.Sc., Bangalore, (PROFICIENCE).
- ✓ ☐ Attended FEEL(Facilitating Excellence in Effective Leadership) – a HRD program organized by College for Leadership and Human Resource Development, Mangalore at Jnanabharathi campus Bangalore University.
- ✓ ☐ Attended FEEL (Facilitating Excellence in Effective Leadership) – a HRD program organized by College for Leadership and Human Resource Development, Mangalore at Jnanabharathi campus Bangalore University.
- ✓ ☐ Attended Science Writers Training Camp, Organized by Karnataka Rajya Vijnana Parishath. Held at Kuvempu University, Shimoga.
- ✓ ☐ World Physics year celebration Symposium at Nitte Meenakshi Institute of Technology, Yalahanka, Bangalore. Nov 2005.
- ✓ ☐ Workshop on Nano Materials and Applications: conducted by NMAM IT, Nitte, Mangalore.
- ✓ ☐ Attended two day’s Seminar on “Understanding Our Universe” in commemoration of International Year of Astronomy(IYA)’ at Department of Physics, Kuvempu University, Shimoga on 8th and 9th Dec 2009.
- ✓ ☐ Attended One day workshop on Advanced Materials and their Applications” organized by Department of Physics, Chemistry and LSIKC on 26th March,2011 at BMS Institute of Technology.
- ✓ ☐ Attended a national seminar-cum-workshop on “How to Promote Applied (Basic) Sciences to Strengthen Technical Education”, at Govt. Engg. College for women, Ludhiana, Punjab on

23-24 February 2012.

- ✓ Prof. Thirumalesh Attended one week FDP on **“In Pursuit of Innovation, Product Development, IPR and EDC”**, from 20th to 25th January 2020. Organised by Sri Venkateshwara College of Engineering, Bangalore.
- ✓ Prof. Thirumalesh Attended five days FDP on **“Recent Advances in Smart Materials for Sensors and Energy Applications”**, from 6th to 10th July, 2020. Organised by BMS Institute of Technology, Yelahanka, Bangalore.
- ✓ Participated in a 5 days FDP on **“AICTE Incorporating Universal Human Values in Education (An AICTE Initiative)”** from 13/09/2021 to 17/09/2021, organized by AICTE, New Delhi.

UNIVERSITY RESPONSIBILITIES:

- ❖ Panel member for the Visveswaraya Technological University (VTU) Engg. Physics syllabus frame committee for 2018-19 scheme.

OTHER RESPONSIBILITIES:

COLLEGE LEVEL:

- Organized a two days **National Level Technical Symposium “Xibit – The Talent in you”** as Chief Coordinator at R L Jalappa Institute of Technology, for the year 2008.
- Guided a batch of students to participate in the ‘Mech-A-Boolean’ competition at “TECHFEST-08”. A technical fest organized by IIT Bombay in Jan 2008.
- Organized a two days **National Level Technical Symposium “Xibit – The Talent in you”** as Chief Coordinator at R L Jalappa Institute of Technology, for the year 2009.
- Conducted RLJT annual cultural fest **SANTHASA** for **2016** as college cultural secretary.
- Conducted RLJT annual cultural fest **SANTHASA** for **2017** as college cultural secretary.

PROFESSIONAL MEMBERSHIPS:

- ❖ Life Member of Indian Society for Technical Education, (I.S.T.E), New Delhi.
- ❖ Life member of Indian Association of Physics Teachers(I.A.P.T)
- ❖ Life Member of Society for Shock wave Research (SSWR)

HONORS/AWARDS:

- ✓ Participated in Inter college Lecture Competition Organized by Bangalore University Physics Teachers Forum at PES College Bangalore and **own Special Prize.**
- ✓ Participated in Inter college Lecture Competition Organized by Bangalore University Physics Teachers Forum at Rural College Kanakapura.
- ✓ Got special appreciation award for the paper titled “Shock wave impact Study on PVA thin films” presented at 6th National Symposium on Shock waves at IIT-Madras, held during 26th – 28th Feb 2020.

OTHER SIGNIFICANT ACHIEVEMENTS:

- ✓ **Designed and developed a Shock wave research facility – a Shock tube**, using open source development platforms. Which is of worth around 10 Laks. The work is published in a research journal called “Engineering Reports”.

Publication link: . <https://doi.org/10.1002/eng2.12353>

CONTACT DETAILS:

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