

CURRICULUM VITAE

Dr.K.RAVIKUMAR

Lecturer in Physics,

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PERSONAL DETAILS

Name : Dr.K.Ravikumar

Father's Name: Mr.N.Kumar (Late)

DOB: 13.10.1978

Address for communication

No.168,F2.Sambantham Nagar,

Kunrathur,Chennai. 600 069.

EDUCATIONAL QUALIFICATION

NAME OF THE UNIVERSITY	DEGREE	PERCENTAGE	YEAR OF PASSING
ANNA UNIVERSITY	Ph.D.	-	2017
UNIVERSITY OF MADRAS	B.Ed.	83.15	2007
PERIYAR UNIVERSITY	M.Phil.	63.50	2008
MADURAI KAMARAJ UNIVERSITY	M.Sc.	64.44	2006
UNIVERSITY OF MADRAS	B.Sc.	55.39	2000

COMPUTER AND TECHNICAL SKILLS

Computer skills Origin, MS Office, Internet

PROFESSIONAL EXPERIENCE

30th Sep'22– Till date -Lecturer in Physics, Department of Basics Engineering,
Institute of Printing Technology-IPT, Tharamani, Chennai- 600 113.

15th Apr' 22– 29th Sep 22 Subject Matter Expert (SME) in Science,
CHUDAR EDUCATION, Royapettah, Chennai - 600 014.

15thApr'10 – 1st Jan'18 Assistant Professor (Grade-III) in Department of Physics,
SRI SAIRAM INSTITUTE OF TECHNOLOGY, West Tambaram, Chennai-44.

8th Sep'08 – 13thApr'10, Lecturer in Department of Physics,
RRASECOLLEGE OF ENGINEERING, Paddappai, Kanchipuram -601301.

Tamilnadu State Principal investigator for the National Children's Science Congress (NCSC)-2018 and 2019. Conducted by National Council for Science and Technology Communication (NCSTC) and Department of Science and Technology (DST) for the Children in the age group of 10 to 17 years. The Focal Theme for 2018 and 2019 "*Science, Technology & Innovation for A Clean, Green and Healthy Nation*". Total Amount Sanctioned 22.5L per year.

PAPER PUBLISHED IN INTERNATIONAL JOURNAL :03

1. **Ravikumar, K**, Palanivelu, K & Ravichandran, K 2015, 'Vulcanization, Mechanical and Dielectric properties of Carbon black/nanoclay reinforced Natural Rubber hybrid composite', Applied Mechanics and Materials vol. 766-767, pp.377-382, ISSN NO:16609336 (**Annexure -II**).
2. **Ravikumar, K**, Reji Joseph & Ravichandran, K 2018, 'Effect of organo clay on curing, mechanical and dielectric properties of NR/SBR blends', **Journal of Physics: Conference Series**, Vol. 1000, conference 1, pp.1-9, ISSN NO: 1742-6596 (**Scopus indexed**).
3. **Ravikumar, K**, Palanivelu, K & Ravichandran, K 2017, 'Dielectric properties of Natural rubber composites filled with carbon black and graphite', Materials Today: Proceedings 16(2019) Vol. 766-767, pp.1338-1343, ISSN NO: 2214-7853 (**Scopus indexed**).

PAPER PRESENTED IN NATIONAL CONFERENCE: 04

1. **Ravikumar, K, Palanivelu, K&Ravichandran, K 2018,**‘Dielectric properties of Mechanical and Swelling properties of natural rubber nanocomposites reinforced with hybrid fillers’ in**National conference on Advances in Polymer Science and Technology (APST-2010)** 22-24 October, 2010, NIT Hamirpur, India.
2. **Ravikumar, K, Palanivelu, K&Ravichandran, K 2018, ‘** Presented a paper on the topic of Characterization of Polymers by Dielectric spectroscopy -A short review’ in UGC sponsored two day **National Conference on Advances in Plastics and Rubber Technology (APART-2015)** held on 10th& 11th April 2015 in dept of Rubber and Plastic Technology, MIT Campus, Anna university ,Chennai -600044.
3. **Ravikumar, K, Palanivelu, K&Ravichandran, K 2018, ‘Dielectric properties of Natural Rubber/OrgnaoclayNanocomposites in “Regional Conference of NAFEMS (NAFEMS-15)”** held on 8th March 2015 in Hilton hotel, Chennai -600032.
4. **Ravikumar, K, Reji Joseph &Ravichandran, K 2018, ‘Effect of organo clay on curing, mechanical and dielectric properties of NR/SBR blends’,National Conference on Mathematical Techniques and its Applications (NCMTA 18)** held on **January 5 & 6, 2018** at SRM Institute of Science and Technology, Chennai, Tamilnadu, India.

PAPER PRESENTED IN INTERNATIONAL CONFERENCE:03

- 1 **Ravikumar, K, Palanivelu, K&Ravichandran, K 2014, ‘Vulcanization,Mechanical and dielectric properties of Natural Rubber reinforced Carbon black/nanoclay hybrid composites’, 1st International Conference on Advances in Materials and Manufacturing Engineering (ICAMME – 2014)** held on December 19th& 20th, 2014, SrisairamEngineeringcollege, Chennai, Tamilnadu, India.
 2. **Ravikumar, K, RejiJoseph,Palanivelu, K &Ravichandran, K 2014, ‘Mechanical and Dielectric properties of NR/SBR Elastomeric blends’,Third International Conference on Polymer Processing and Characterization (ICPPC – 2014)**held on **October 11, 12 & 13, 2014 at School of Chemical Science, Mahatma Gandhi University, Kottayam, Kerala, India.**
 3. **Ravikumar, K,Palanivelu, K &Ravichandran, K 2017, ‘Dielectric properties of Natural rubber composites filled with carbon black and graphite’,InternationalConferenceonAdvancesinMaterials,ManufacturingandAppliedSciences(ICAMMAS – 2017)**held on **March 30 & 31, 2017 at Srisairam Engineering college, Chennai, Tamilnadu, India.**
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WORKSHOPS / CONFERENCES/FDP ATTENDED: 11

- 1 Attended Eight days **Faculty Development Program (FDP)** on “**Composites Materials**” held during 16th - 23nd May 2012 organized by Department of Rubber and Plastics Technology, Anna University, MIT Campus Chennai 600 044.
- 2 Participated one day UGC sponsored **short term course** on “**Research methodology, Technique of writing research articles Science Journals and Ph.D thesis preparation**” held on 7th March 2013 organized by Department of Automobile Engineering, Anna University, MIT Campus Chennai 600 044.
- 3 Attended one day Workshop on “**Role of Polymers in Modern Engineering Materials**” held on 12th April 2013 organized by Department of Science and Humanities, Srisairam Institute of Technology, Chennai.
- 4 Attended one day CSIR sponsored **National seminar** on “**Recent Trends in Laser Spectroscopy and Its Applications (RTILSA-13)**” held on 17th October 2013 organized by Department of Science and Humanities (Physics), Srisairam Engineering college, Chennai.
- 5 Attended two days UGC sponsored national level **workshop** on “**Emerging trends in Nanomaterials for Engineering Applications (ETNEA2014)**” held during 20st - 22nd February 2014 organized by Department of Production Technology Anna University, MIT Campus Chennai 600 044.
- 6 Attended Two days TEQIP **Workshop** on “**Dielectric Materials and Devices**” held on 25th – 26th July 2014 organized by Department of Electronics and Communication Engineering, Sri Jayachamarajendra College of Engineering, Mysore.
- 7 Participated one days National level **workshop** on “**Green Composites**” held on 27th August 2014 organized by Department of Mechanical Engineering, Srisairam Institute of Technology, Chennai.
- 8 Attended one days National level **workshop** on “**Advances in Chemical Sciences**” held on 18th July 2016 organized by Department of Chemistry, Srisairam Institute of Technology, Chennai.
- 9 Attended Two days **Faculty Development Program (FDP)** on “**Characterization of Materials**” held on 20th-21st July 2017 organized by Department of Physics, Srisairam Institute of Technology, Chennai.
- 10 Attended Two days **workshop** on textbook writing (Spell II – Phase I) for Higher Secondary Level conducted by State Council of Educational Research and Training (SCERT), Chennai at JeevanaJothi, ICSA Programme Centre, 107, Pantheon Road, Egmore, Chennai – 600008, during 9,10 & 11th of Nov 2017.

- 11 Attended Two days [Faculty Development Program \(FDP\)](#) on “**Creative Thinking**” held on 6& 7 May 2019 conducted by ICT Academy held at Srisairam Institute of Technology, Chennai
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WORKSHOPS / CONFERENCES/FDP CONDUCTED: 04

1. Coordinated a Two days national level workshop on the topic of “**Revealing The Advances In Material Science**” Conducted by Department of Physics, during 19th - 20th July 2016 held in Srisairam Institute of Technology, Chennai -600 044.
2. Conducted one day workshop for college students on the topic **Legacy Of Infinity-Life And Mathematics of Srinivasa Ramamanujam** on behalf of VIT Alumini Association (VIITA), Chennai Chapter and Tamil Nadu Science Forum (TNSF), Chennai District during the National Mathematic Year -2012. Held at Vellore Institute of Technology (VIT), Chennai campus on 4 August 2012.
3. Conducted one day workshop for college teachers on the topic **Legacy Of Infinity-Life And Mathematics of Srinivasa Ramamanujam** on behalf of VIT Alumini Association (VIITA), Chennai Chapter and Tamil Nadu Science Forum (TNSF), Chennai District during National Mathematic Year -2012. Held at Vellore Institute of Technology (VIT), Chennai campus on 10 August 2012.
4. Conducted one day National level technical symposium **SIT-SCIHUM_2018** for college students on behalf of Dept. of Science and Humanities & Association of Science and Humanities of Srisairam Institute of Technology, Chennai -600 044 on March 9 , 2018.

Guest Lectures/Demonstration given in Workshop / FDP/ Internship: -25

POPULARIZING SCIENCE AND MATHEMATICS:14

Through Tamilnadu Science Forum (TNSF) , A member organization of All India People Science Network-AIPSN. Giving lectures on Mathematics and Science in various topics such as *Legacy of infinity –life and Mathematics of Srinivasa Ramanujan, History of Mathematics, Life and Science of Sir C.V.Raman, Science and Society*, etc throughout Tamilnadu. **So far more than 100 popular science presentation were given various places including Institute of Mathematical Sciences (IMSC), Chennai, Chevalier T. Thomas Elizabeth College for Women, Chennai and Pie Mathematics Association .Chennai.**

1. Delivered an activity based guest lecture on the topic **Physics for Essential Engineer _An activity-based approach to solve societal problems through scientific principles.**conducted by Dept. of Physics, Hindustan Institute of Technology and Science (HITS) , Chennai on 19/05/2021.(MSTEEMS).
2. Attended as Chief guest and delivered a guest lecture in Science popularization program sponsored by State council for Science and Technology and conducted by Dept. Biotechnology, Prathyusha Engineering college, Chennai on 04/3/2021.
3. Delivered a guest lecture on the topic of **Essential engineer-An activity based approach to connecting Engineering with society** atSMK Fomra Institute of Technology, Chennai 603103 on 25/2/2021.
4. Delivered a guest lecture on the topic of **The pleasure of finding things out _An activity-based approach to bridge the gap between physics concept into innovative engineering**Srisairam Group of Institutions, Tambaram,Chennai 600044 on 30/1/2021.(ZOOM Meeting).
5. Attended as Chief guest and delivered a Guest lecture on the topic of **"Physics and Contemporary World"** in the inaugural function **"Science Fest 2019"** on 14.8.2019 conducted by Department of Physics Madras Christian College (Evening Shift), Chennai.
6. Delivered a guest lecture on the topic of **SrinivasaRamanujan-Life and Mathematics** at Nirmal High School, Ayanavaram, Chennai 600023.National Mathematic Day celebration on 21/12/2018.
7. A lecture given on **Scientific Attitude** in Joint meeting of Rotary Club and Angel of Thiruvallur on 28/08/2018 at GnanaVidhyalayaHr Sec School, Thiruvallur.
8. Delivered a Guest lecture on the topic of **"Astronomy-From Ancient to Modern"** in the internship program for the post graduate students on 17.05.2018 conducted by Pie Mathematics Association (PMA), Chennai.
9. Attended as Chief guest and delivered a Guest lecture on the topic of **"World of Physics"** in the Inter school competition **"Science Fest 2017"** on 23.8.2017 conducted by Chevalier T. Thomas Elizabeth College for Women, Chennai.
10. Delivered a Guest lecture on the topic of **"History of Mathematics"** in the Internship Program for the post graduate students on 25.05.2017 conducted by Pie Mathematics Association (PMA), Chennai.
11. Delivered a Guest lecture on the topic of **'Whether and Climate'** at the District level guide teacher training workshop for National Children's Science Congress (NCSC)held on 28.8.2015 at Institute of Mathematical Science (IMSC), Tharamani,Chennai .

12. Delivered a Guest lecture on the topic of **‘Libraries for the Community Development’** at the workshop for the public Librarians of Thiruvallur district held on 24.7.2015 at CRE NIEO, Muttukad, Chennai-603112.
13. Guest lecture given on the topic of **‘Theory of Relativity’** at State level book reading camp for teacher on **Bill Bryson’s book ‘Short history of Nearly Everything’** held on 4-6 May , 2015 at , Hosur, Tamil Nadu.
14. Chennai district Academic coordinator from 2013- till date for Children's Science Congress (NCSC) is an annual event of the National Council for Science and Technology Communication (NCSTC), Department of Science and Technology, New Delhi. In Tamil Nadu, NCSC is coordinated by Tamil Nadu Science Forum (TNSF).
15. Delivered a lecture on the topic of **“Legacy of infinity –life and Mathematics of Srinivasa Ramanujan”** in the workshop for teachers from schools of Chennai Corporation organized by Institute of Mathematical Science (IMSc) and Tamil Nadu Science Forum on 17 November 2012. Saturday.

DST/NCSTC MENTOR FOR LOW COST SCIENCE EXPERIMENTS PROGRAMME

SCHOOL CHILDREN: 8

Mentor for DST’s sponsored **INSPIRE-Innovation in Science Pursuit for Inspired Research (INSPIRE)** is an innovative program for school children to stimulate the science aspirant. Through INSPIRE program more than a dozen science demonstration sessions were conducted in various universities and colleges and some are listed below.

1. **Dept. Of Physics, SRM University**, Chennai, Tamilnadu.
2. **Dept. Of Geology, University Of Madras**, Guindy Campus, Chennai. Tamilnadu.
3. **Srisastha Institute Of Science And Technology**, Chennai.
4. **IFET College Of Engineering, Villupuram**, Tamilnadu.
5. **Vemu Institute Of Technology**, Chittoor, Andhrapradesh.
6. **Narayana Engineering College**, Gudur, Andhrapradesh.
7. **Chennai Institute Of Technology**, Chennai. Tamilnadu.

RESOURCE PERSON FOR SCHOOL TEACHERS :05

1. Guest lecture given to science teacher on the topic of **“Pleasure of science Teaching to children”** organized by Zion matriculation higher secondary school Chennai on 27 September 2017.
2. Attended as Resource Person one day workshop On **“Joy of learning –activity based science teaching”** to teachers of Sriram school Chennai on 25 May 2018.
3. Attended as Resource Person and delivered lectures on the topics of Gravitation and Space and Solarsystem during **Training session to Science Teachers ”** organized by SRV Higher Secondary School, Samayapuram, Trichy on 27 May 2019.

4. Attended as Resource Person for **DST-NCSTC** approved two days workshop On “*Teacher Training Using Low Cost Teaching Aids for Teaching Science*” organized by Vemu Institute of Technology, Chittoor on 10 and 11 February 2020.
 5. Attended as subject matter expert for Physics teachers Demo class organized by SRV Higher Secondary School, Samayapuram, Trichy on 30 October 2020.(Zoom link)
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MEMBERSHIP OF PROFESSIONAL BODY

1. Life member of the INDIAN SOCIETY FOR TECHNICAL EDUCATION (ISTE-LM187137).
2. Adviser , Tamilnadu Astronomical Science Society (TASS).
3. Life member, Tamilnadu Science Forum (Member organization of All India People Science Network-AIPSN).
4. Member of Pie Mathematics Association (PMA) , a Chennai based volunteer organization which promotes Mathematics to Publics and college and school students.