# **CURRICULUM VITAE**

# PERSONAL PROFILE

Name : Ms. POOJA VARDHINI NATESAN

Current Position : Ph.D. Scholar (Prime Minister's Research Fellow)

Department of Applied Mechanics and Biomedical Engineering

Indian Institute of Technology Madras, Chennai, India

Date of Birth : 3<sup>rd</sup> September 1994

Nationality : Indian

Official E-Mail : am19d750@smail.iitm.ac.in

Personal E-Mail : pooja3994@yahoo.co.in; pooja3994@gmail.com

Homepage : https://poojavardhininatesan.in/

# **EDUCATIONAL QUALIFICATIONS**

DEGREE/ CLASS	MAJOR/ SUBJECTS	MARK/ GRADE	YEAR OF GRADUATION	NAME OF THE INSTITUTION	UNIVERSITY/ BOARD
Doctor of Philosophy	Biomedical Engineering	9.75/10	January 2020 - Till Date	Indian Institute of Technology Madras, Chennai, India	
Erasmus Mundus FAME	Functionalized Advanced	2.03 (German	2018 (Year II)	Grenoble Institute of Technology, Grenoble, France	
Double Master of Science	Materials Engineering	Grade; 81%)	2017 (Year I)	University of Augsburg, Augsburg, Germany	
Bachelor of Engineering	Materials Science and Engineering	8.07/10 I Class	2016	College of Engineering Guindy	Anna University, Chennai, India
Std. XII	Maths, Physics, Chemistry and Biology	1136/1200 (94.67%) I Class with Distinction	2012	D.A.V. Matric. Hr. Sec. School, Gopalapuram, Chennai, India	State Board of School Examinations (Hr. Sec.), Tamil Nadu
Std. X		10/10 I Class with Distinction	2010	D.A.V. Girls Sr. Sec. School, Gopalapuram, Chennai, India	Central Board of Secondary Education

#### TITLE OF DISSERTATIONS

- **Doctoral**: Design of Smart Hydrogel Dressings for Real-Time Monitoring and On-Demand Treatment of Infected Wounds (Indian Institute of Technology Madras, Chennai, India, January 2020-Till Date)
- Master : Selective Epitaxy of Gallium Phosphide (GaP) for Optimizing Orientation Patterned GaP (OP-GaP) Growth (KTH Royal Institute of Technology, Stockholm, Sweden, February-July 2018)
- **Bachelor**: Fabrication and Characterization of Polycaprolactone/Graphene Oxide Electrospun Scaffolds for Tissue Engineering Applications (University of Aveiro, Aveiro, Portugal, February-July 2016)

#### HONOURS AND AWARDS

## **International Recognitions**

- Reviewer of Journal of Drug Delivery Science and Technology (IF: 5), Elsevier (2023)
- Recipient of the **Best Poster Award** (3<sup>rd</sup> **Prize**) for presenting a poster titled "Development of a Smart System for the Design of Drug Encapsulated Hydrogel

- Dressings for Wound Healing Applications" at the IEEE EMBS NUS iHealthtech Forum for Data Science and Engineering in Healthcare, Medicine and Biology, National University of Singapore, Singapore with a Cash Prize of 30 SGD (2023)
- Recipient of the RMBS Contest Chairs' Award for presenting a paper titled "Effect of
  the Scale Factor of Free Volume Theory on the Diffusion Properties of Polyethylene
  Glycol Hydrogel" at the International Biomedical Sciences Instrumentation
  Symposium and Rocky Mountain Bioengineering Symposium, Translational
  Medicine Institute, Colorado State University, Fort Collins, United States of America
  with a Cash Prize of 200 USD (2023)
- Recipient of the Carolyn Leighton Scholarship to attend the WITI's 27<sup>th</sup> Annual Global Summit, Women in Technology International, Los Angeles, United States of America (2021)
- Selected for the **Advanced Research Opportunities Programme** to carry out a Research Project at **RWTH Aachen University, Aachen, Germany** with a **Scholarship of €11800** (2020) (Could not travel due to the COVID-19 pandemic)
- Pursued **Master Dissertation** at the Laboratory of Semiconductor Materials, **KTH Royal Institute of Technology, Stockholm, Sweden** (2018)
- Participant of the **PolyNano Summer School** at the Department of Micro- and Nanotechnology, **Technical University of Denmark**, **Copenhagen**, **Denmark** (2017)
- Completed the Erasmus Mundus FAME Double Master of Science Programme with a Scholarship of €47000 at the University of Augsburg, Augsburg, Germany (Year I) and Grenoble Institute of Technology, Grenoble, France (Year II) (2016-2018)
- Selected for the **Erasmus Mundus Master of Nanoscience and Nanotechnology Programme** (2016) (Did not accept the offer as FAME Programme was preferred)
- Selected for the **Erasmus Mundus Master Mamaself Programme** (2016) (Did not accept the offer as FAME Programme was preferred)
- Completed the Fully-Funded Erasmus Mundus Svaagata Exchange Programme at the University of Aveiro, Aveiro, Portugal inclusive of a Scholarship of €1000 per month (2016)
- Selected as an Exchange Student at KTH Royal Institute of Technology, Stockholm, Sweden (2015) (Did not accept the offer as Svaagata Programme was preferred)
- Secured an **Overall Band Score of 7.5** in the Academic Version of **International English Language Testing System (IELTS)** (2015)
- Obtained **Distinction in English** in the International Assessment conducted by the **University of New South Wales, Sydney, Australia** (2008)
- Secured the **First Runner Up Position in the International, National and State Levels** in the 5<sup>th</sup> International Abacus Competition conducted by the **SIP Academy, Malaysia** (2005)

# **National Recognitions**

- Recipient of the Prime Minister's Research Fellowship (PMRF), Ministry of Education, Government of India (2021)
- Selected for the **Ph.D. Programme** at **Indian Institute of Technology Madras, Chennai, India** (2020)
- Attended the **Summer Fellowship Programme** at the Department of Metallurgical and Materials Engineering, **Indian Institute of Technology Madras, Chennai, India** with a **Scholarship of ₹5000 per month** (2015)
- Awarded ₹25000 by the Centre for Technology Development and Transfer, Anna University, Chennai, India to carry out the Student Innovative Project (2015)
- Recipient of the **Arvind Mehta Memorial Prize for Proficiency in English** among all the branches at **Anna University, Chennai, India** (2014)

- Secured **III Place** in the Tamil Essay Writing Competition conducted by **Manavar Tamil Sangam, India** (2009)
- Secured **III Place** in the Essay Writing Competition organized by the **Science City**, **Government of Tamil Nadu**, **India** (2009)
- Recipient of the **Best Student Award** from **Bharat Vikas Parishad**, **India** (2006)
- Secured the National Second Runner Up and Regional Winner Positions in the All India Abacus and Brain Gym Competition conducted by the SIP Academy, Malaysia (2004)
- Secured **III Place** in the Tamil Nadu All Styles Martial Arts Championship conducted by the **Tamil Nadu Seven Martial Arts Association** (2003)

### TRAINING PROGRAMMES COMPLETED

- Virtual Startup School, **Google, Mountain View, United States of America** and **Startup India, Government of India** (11<sup>th</sup> July 1<sup>st</sup> September 2023)
- Startup India Online Learning Program, **Startup India**, **Government of India** (11<sup>th</sup> July 2023)
- Professional Development Programme on "Emerging Trends in 3D Printing", **National Institute of Technical Teachers Training and Research, Chennai, India** (3-7 July 2023)
- Online Course on "Introduction to 3D Printing and CAD Modeling", FutureSkills Prime
   NASSCOM and Ministry of Electronics and Information Technology, Government of India (27<sup>th</sup> June 2023)
- Online Course on "Getting Started with 3D Printing and Modeling", FutureSkills Prime NASSCOM and Ministry of Electronics and Information Technology, Government of India (27<sup>th</sup> June 2023)
- Online Course on "Solving Ordinary Differential Equations with MATLAB", **MathWorks, Natick, United States of America** (14<sup>th</sup> November 2021)
- Online Course on "MATLAB Onramp", **MathWorks, Natick, United States of America** (27<sup>th</sup> September 2021)
- Online Course on "Engineering Education 2.0 : Interviews in the Field", **IEEE** Continuing Education (27<sup>th</sup> August 2021)
- Online Course on "Engineering Education 2.0 : Digital Transformation of Teaching in a Post-Pandemic World", **IEEE Continuing Education** (27<sup>th</sup> August 2021)
- Online Course on "Engineering Education 2.0: Transformation in Practice Approaches to Innovative Instructional Design", **IEEE Continuing Education** (27<sup>th</sup> August 2021)
- Online Course on "Engineering Education 2.0 : Models, Methods and Techniques for Innovation", **IEEE Continuing Education** (27<sup>th</sup> August 2021)
- Online Training Programme on "Introduction to Finite Element Analysis (FEA) with COMSOL Multiphysics", **In Silico Science and Engineering, Medellin, Colombia** (2-13 August 2021)
- Online Training Programme on "Mathematical Modelling of Multiphysics Reality", **In Silico Science and Engineering, Medellin, Colombia** (19-30 July 2021)
- Online Course on "Biomedical Applications", **COMSOL Multiphysics, Stockholm**, **Sweden** (27<sup>th</sup> April 2021)
- Online Training Programme on "COMSOL Multiphysics", **COMSOL Multiphysics**, **Stockholm**, **Sweden** (18<sup>th</sup> March 2021)
- Online Course on "Peer Review and Publishing Ethics", **American Chemical Society Publications** (10<sup>th</sup> August 2020)
- Online Career Counselling Foundation Programme, World Book of Records Event India's Largest Career Guidance Digital Conference, 3G Institute of Research and Policy Studies, IIT Madras Research Park, Chennai, India (8-10 August 2020)

- Online Training Programme on "Drug Phytochemical Combination: A New Therapeutic Strategy", Indian Institute of Technology Madras Alumni Association, Chennai, India (8<sup>th</sup> August 2020)
- Online Training Programme on "Additive Manufacturing 3D Printing, Principles and Practices", Indian Institute of Technology Madras Alumni Association, Chennai, India (5<sup>th</sup> August 2020)
- Online Course on "Publishing Ethics", **Taylor and Francis Group** (4<sup>th</sup> August 2020)
- Online Course on "Student and Data Privacy when Offering Remote Instruction", **IEEE** Continuing Education (1<sup>st</sup> August 2020)
- Online Course on "Self-Assessing your Remote Teaching Methods", **IEEE Continuing Education** (31st July 2020)
- Online Course on "Student Assessments for Remote Delivery", **IEEE Continuing Education** (31st July 2020)
- Online Course on "Managing Remote Student Teams", **IEEE Continuing Education** (30<sup>th</sup> July 2020)
- Online Course on "Making Labs Effective with Remote Learning", **IEEE Continuing Education** (30<sup>th</sup> July 2020)
- Online Course on "Ditching the Traditional College Lecture in Remote Instruction", **IEEE Continuing Education** (28<sup>th</sup> July 2020)
- Online Course on "Excellence in Peer Review : How to be an Effective Peer Reviewer", **Taylor and Francis Reviewer Training Network** (27<sup>th</sup> July 2020)
- Online Course on "Atmanirbhar Bharat Role of Higher Education Institutions", The Associated Chambers of Commerce and Industry of India, New Delhi, India (20<sup>th</sup> July 2020)
- Online Course on "3D Printing and Biofabrication", **Utrecht University**, **Utrecht**, **Netherlands** (13-17 July 2020)
- Online Course on "Coatings for Anti-Virus, Bacteria and Fungus Applications", **ASM** International, Ohio, United States of America (18<sup>th</sup> June 2020)
- Online Course on "A Data-Driven Approach for Identification of Trends between Materials' Properties", **Springer Nature** (26<sup>th</sup> May 2020)
- Online Course on "AI in Healthcare", **Springer Nature** (5<sup>th</sup> May 2020)

# AREAS OF RESEARCH INTEREST

- Biomaterials
- Nanotechnology
- Polymer Science

### RESEARCH PUBLICATIONS AND REPORTS

Citations: 7; h-index: 2

#### **International Journals**

- **P.V.Natesan**, S.S.Banerjee, A.Arunachalakasi and R.Swaminathan, A Robust Theoretical Approach to Analyze the Diffusion of Natural and Synthetic Wound Antimicrobials through Polyethylene Glycol Hydrogel using Obstruction Theory, Journal of Drug Delivery Science and Technology, 88, 104952, 1-9, 2023 (Elsevier). https://doi.org/10.1016/j.jddst.2023.104952 (**IF**: 5)
- **P.V.Natesan**, S.S.Banerjee and R.Swaminathan, Effect of the Scale Factor of Free Volume Theory on the Diffusion Properties of Polyethylene Glycol Hydrogel, Biomedical Sciences Instrumentation, 59 (1), 15-21, 2023. <a href="https://doi.org/10.34107/YFMV730915">https://doi.org/10.34107/YFMV730915</a>

- **P.V.Natesan**, S.S.Banerjee, A.Arunachalakasi and R.Swaminathan, Analysis of Diffusion of Plant Metabolites from Polyethylene Glycol Hydrogels using Free Volume Theory, Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 237 (5), 542-551, 2023 (SAGE). <a href="https://doi.org/10.1177/09544119231162772">https://doi.org/10.1177/09544119231162772</a> (**IF: 1.8**)
- **4 P.V.Natesan**, S.S.Banerjee, A.Arunachalakasi and R.Swaminathan, Computational Analysis of the Release Kinetics of Natural Compounds from PEG/PVA Blended Hydrogels for Wound Healing Applications, Biomedical Engineering / Biomedizinische Technik, 67 (s1), 459, 2022 (De Gruyter). <a href="https://doi.org/10.1515/bmt-2022-2001">https://doi.org/10.1515/bmt-2022-2001</a> (**IF:1.7**)
- A.Strömberg, G.Omanakuttan, T.Mu, **P.V.Natesan**, T.S.Tofa, M.Bailly, A.Grisard, B.Gérard, H.Jang, V.Pasiskevicius, F.Laurell, S.Lourdudoss and Y.T.Sun, Direct Heteroepitaxy of Orientation-Patterned GaP on GaAs by Hydride Vapour Phase Epitaxy for Quasi-Phase-Matching Applications, Physica Status Solidi A Applications and Materials Science, 217 (3), 1900627, 1-11, 2020 (Wiley). https://doi.org/10.1002/pssa.201900627 (**IF**: 2)
- 6 T.S.S.Kumar, V.Y.Chakrapani, **P.V.Natesan**, D.K.Raj and T.V.Kumary, Effect of Molecular Weight on Electrospun PCL based Composite Fibrous Mats, Biomedical Journal of Scientific and Technical Research, 1 (4), 1-7, 2017. <a href="https://doi.org/10.26717/BJSTR.2017.01.000379">https://doi.org/10.26717/BJSTR.2017.01.000379</a>

## **Paper Presentations in International and National Conferences**

- 1 **P.V.Natesan**, S.S.Banerjee and R.Swaminathan, Investigation of the Effect of Swelling on the Diffusion Properties of Polyethylene Glycol Hydrogel for Wound Healing Applications, International Conference of the IEEE Engineering in Medicine and Biology Society, Sydney, Australia, 24-27 July 2023 (IEEE Xplore).
- S.S.Banerjee, **P.V.Natesan** and R.Swaminathan, Development of a Smart System for the Design of Drug Encapsulated Hydrogel Dressings for Wound Healing Applications, IEEE EMBS-NUS iHealthtech Forum for Data Science and Engineering in Healthcare, Medicine and Biology, National University of Singapore, Singapore, 30-31 May 2023.
- **P.V.Natesan** and R.Swaminathan, Effect of the Thickness of PEG Hydrogel Patch on the Diffusion of Wound Antimicrobials, International Symposium on Computer Methods in Biomechanics and Biomedical Engineering, Institut de Biomécanique Humaine Georges Charpak, Arts et Métiers Institute of Technology, Paris, France, 3-5 May 2023, 94. <a href="https://www.cmbbe-symposium.com/2023/wp-content/uploads/sites/14/2023/04/CMBBE23">https://www.cmbbe-symposium.com/2023/wp-content/uploads/sites/14/2023/04/CMBBE23</a> Abstract book posters small.pdf
- 4 P.V.Natesan, S.S.Baneriee and R.Swaminathan, Effect of the Scale Factor of Free Volume Theory on the Diffusion Properties of Polyethylene Glycol Hydrogel, International Biomedical Sciences Instrumentation Symposium and Rocky Mountain Bioengineering Symposium, Translational Medicine Institute, Colorado University. Fort Collins. Colorado. 13-16 April https://symposium.rmbs.org/assets/PDF/2023/2023-60th-IBSIS-RMBS-Proceedings.pdf
- **P.V.Natesan** and R.Swaminathan, Analysis of Diffusion of Synthetic Wound Antimicrobials from PVA Hydrogel using Free Volume Theory, Indian Conference on Applied Mechanics, National Institute of Technology Jamshedpur, Jamshedpur, India, 11-13 November 2022, INCAM\_2022\_paper\_50, 25.
- **P.V.Natesan**, S.S.Banerjee, A.Arunachalakasi and R.Swaminathan, Computational Analysis of the Release Kinetics of Natural Compounds from PEG/PVA Blended Hydrogels for Wound Healing Applications, Joint Annual Conference of the Austrian, German and Swiss Societies for Biomedical Engineering, Innsbruck, Austria, 28-30 September 2022.

- **7 P.V.Natesan**, Fabrication and Characterization of Polycaprolactone/Graphene Oxide Electrospun Scaffolds for Tissue Engineering Applications, Biomaterials Online Conclave, University of Madras, Chennai, India, 7-15 March 2022.
- 8 **P.V.Natesan**, Development of Injection Molded Nanofluidic Chips for the Sizing of the Genomic DNA Molecules, Biomaterials Online Conclave, University of Madras, Chennai, India, 7-15 March 2022.
- 9 A.Strömberg, G.Omanakuttan, H.Jang, T.Mu, P.V.Natesan, T.S.Tofa, M.Bailly, A.Grisard, B.Gérard, V.Pasiskevicius, F.Laurell, S.Lourdudoss and Y.T.Sun, Heteroepitaxy of Orientation-Patterned GaP on GaAs Templates for Frequency Conversion Applications, Optics and Photonics in Sweden, KTH Royal Institute of Technology, Stockholm, Sweden, 16-17 October 2019. <a href="https://photonicsweden.org/wp-content/uploads/OPS">https://photonicsweden.org/wp-content/uploads/OPS</a> 2019 poster-abstracts.pdf
- A.Strömberg, G.Omanakuttan, H.Jang, P.V.Natesan, T.S.Tofa, M.Bailly, A.Grisard, B.Gérard, V.Pasiskevicius, F.Laurell, S.Lourdudoss and Y.T.Sun, Development of Orientation-Patterned GaP Growth on GaAs for Nonlinear Frequency Conversion, Conference on Lasers and Electro-Optics Europe and European Quantum Electronics Conference, Munich, Germany, 23-27 June 2019, Paper ce\_1\_5 (IEEE Xplore). <a href="https://doi.org/10.1109/CLEOE-EQEC.2019.8873032">https://doi.org/10.1109/CLEOE-EQEC.2019.8873032</a>
- A.Strömberg, G.Omanakuttan, P.V.Natesan, T.S.Tofa, A.Grisard, B.Gérard, H.Jang, V.Pasiskevicius, F.Laurell, S.Lourdudoss and Y.T.Sun, Direct Heteroepitaxy of Orientation-Patterned GaP on GaAs by Hydride Vapour Phase Epitaxy for Quasi-Phase-Matching Applications, Compound Semiconductor Week, Nara, Japan, 19-23 May 2019, 1-2 (IEEE Xplore). https://doi.org/10.1109/ICIPRM.2019.8819110
- 12 S.Lourdudoss, G.Omanakuttan, A.Strömberg, **P.V.Natesan**, T.T.Syeed and Y.T.Sun, Advanced Photonic Devices Enabled by Hydride Vapour Phase Epitaxy, International Workshop on Crystalline Materials and Applications, Anna University, Chennai, India, 3-5 January 2019.
- **13 P.V.Natesan**, Sputtering, Quanta'14 National Level Technical Symposium, Anna University, Chennai, India, 24-27 March 2014.

### **Industrial Reports**

1 A.K.Ghosh, J.S.Mahajan, D.Banerjee and **P.V.Natesan**, Life Cycle Study of Flex Banner and its Impact on the Environment, Indian Institute of Technology Delhi, New Delhi, India, Sponsored by the All India Laminated Fabric Manufacturers Association, New Delhi, India, September 2018.

### PROJECT WORKS COMPLETED

- Research of an Alternative to Current Epoxy/Silica Systems in Medium Voltage Switchgears (M/S Schneider Electric, Grenoble, France, 2017)
- The Influence of Surface Preparation on the Performance of New Solar Receiver Materials (Grenoble Institute of Technology, Grenoble, France, 2017)
- Molecular Dynamics Study of the Fracture of Nanowires (Grenoble Institute of Technology, Grenoble, France, 2017)
- Development of Injection Molded Nanofluidic Chips for the Sizing of the Genomic DNA Molecules (Technical University of Denmark, Copenhagen, Denmark, 2017)
- **Development of a Wiki Website on Coatings for Glazings** (University of Augsburg, Augsburg, Germany, 2017)
- Detection of C-Reactive Protein (CRP) using Highly Luminescent Semiconductor CdSe and CdSe/ZnS Core-Shell Quantum Dots (Anna University, Chennai, India, 2015)
- Electrospinning of Low Molecular Weight Polycaprolactone (PCL) for Biomedical Applications (Indian Institute of Technology Madras, Chennai, India, 2015)

• Synthesis and Characterization of CdSe and CdSe/ZnS Core-Shell Quantum Dots for Solar Cell Applications (Anna University, Chennai, India, 2015)

## INTERNSHIPS AND PRACTICAL TRAINING

- PolyNano Summer School, Department of Micro- and Nanotechnology, **Technical University of Denmark, Copenhagen, Denmark** (August-September 2017)
- Summer Internship, Department of Metallurgical and Materials Engineering, Indian Institute of Technology Madras, Chennai, India (May-July 2015)
- Industrial Training, **Nuray Chemicals Private Limited, Thiruvallur, India** (November-December 2014 and April-May 2015)
- Summer Internship, Centre for Nanoscience and Technology, **Anna University, Chennai, India** (May-June 2014)
- Hands On Training, Materials Science Group, Indira Gandhi Centre for Atomic Research, Kalpakkam, India (December 2013)
- Industrial Training, Aryan Style Tex Private Limited, Karur, India (June 2013)

### **ORGANIZATIONS VISITED**

- Satish Dhawan Space Centre SHAR, Sriharikota, India (September 2023)
- Ashok Leyland, Chennai, India (August 2023)
- Kauvery Hospital, Chennai, India (February 2020)
- **Tekna Hyperbaric Chamber Manufacturing**, Chennai, India (June 2019)
- Schneider Electric, Grenoble, France (December 2017)
- MAN Diesel and Turbo SE, Augsburg, Germany (December 2016)
- Hospital Infante D. Pedro, Aveiro, Portugal (April 2016)
- Rail Wheel Factory, Bengaluru, India (August 2014)
- The Ramco Cements Limited, Mathodu, India (August 2014)
- **Hindhuja Foundries**, Chennai, India (October 2013)
- **Southern Alloy Foundries**, Chennai, India (August 2013)

## **COUNTRIES VISITED**

1	Austria	9	Hong Kong	17	Portugal
2	Belgium	10	Indonesia	18	Singapore
3	Cambodia	11	Italy	19	Spain
4	Denmark	12	Latvia	20	Sweden
5	Estonia	13	Luxembourg	21	Switzerland
6	Finland	14	Malaysia	22	Thailand
7	France	15	Norway	23	United States of America
8	Germany	16	Philippines		

## MEMBERSHIP IN PROFESSIONAL BODIES

## **International Organizations**

- Graduate Student Member (99306254), IEEE, Piscataway, United States of America
- Graduate Student Member (99306254), **IEEE Engineering in Medicine and Biology Society (EMBS)**, Piscataway, United States of America
- Graduate Student Member (99306254), **IEEE Computer Society**, Washington, D.C., United States of America
- Graduate Student Member (99306254), **IEEE Young Professionals**, Piscataway, United States of America
- Full Member (10541), **Organization for Women in Science for the Developing World** (**OWSD**), **UNESCO**, Trieste, Italy

- Member (60217), **Women in Technology International (WITI)**, Los Angeles, United States of America
- Member, Intercollegiate Engineering Alliance (IEA), United Kingdom

### **National Organizations**

- Life Member (L40967), **The Indian Science Congress Association (ISCA)**, **Ministry of Science and Technology, Government of India**, Kolkata, India
- Life Member (LMB3289), **Materials Research Society of India (MRSI)**, Indian Institute of Science, Bengaluru, India
- Life Member (647), **The Society for Polymer Science, India (SPSI)**, CSIR National Chemical Laboratory, Pune, India
- Life Member (58475), The Indian Institute of Metals (IIM), Kolkata, India
- Life Member (LM792), Society for Biomaterials and Artificial Organs (India) (SBAOI), Sree Chitra Tirunal Institute for Medical Sciences and Technology, Thiruvananthapuram, India
- Associate Member (AM1955975), **The Institution of Engineers (India) (IEI)**, Kolkata, India
- Associate Member (AM1004), **The Institution of Biomedical Engineers (India) (IBEI)**, Wayanad, India
- Member, **Society of Materials Science and Engineers (SMSE)**, College of Engineering Guindy, Anna University, Chennai, India
- Member, Madras Metallurgical Society (MMS) Students' Chapter, College of Engineering Guindy, Anna University, Chennai, India

#### **EXTRACURRICULAR ACTIVITIES**

- Completed the Personality Development Course, The World Community Service Centre, Chennai, India (2023)
- Completed the Kayakalpa Yoga Course, The World Community Service Centre, Chennai, India (2023)
- Secured **II Place** in Cliq, Online Photography Contest of Quanta'15 National Level Technical Symposium, **Anna University**, **Chennai**, **India** (2015)
- Active Member of the **Rotaract Club, Anna University, Chennai, India** (2012-2016)
- Active Member of the **National Sports Organization**, **India** (2012-2013)
- Completed the Level 1 Course in French from Alliance Française, Chennai, India (2010)
- Participated in the Inter School Basketball Tournament, Kumara Rani Meena Muthaiah Matriculation Higher Secondary School, Chennai, India (2007)
- Participated in the **Summer Science Camp** organized by the **Science City, Government** of **Tamil Nadu, India** (2007)
- Secured I Class in the Prathmic Examination (Hindi) conducted by Dakshina Bharat Hindi Prachar Sabha, Chennai, India (2007)
- Secured the **Certificate of Merit** in the Junior Geography Talent Test organized by the **Association of Geography Teachers of India, India** (2006)
- Completed the **Grand Master Level** of **SIP Academy's Brain Gym and Abacus Programme**, **Chennai**, **India** (2006)
- Obtained the **Certificate of Merit** for Excellence in Presentation of Literary Review conducted by **Scholastic, India** (2005)
- Obtained the Black Belt in Karate from the Board of Ishiai Goju Ryu Karate Do International (2004)
- Recipient of the **Best in Mathematics Award** in the State Level Mathematics Contest conducted by the **Excellent Exams, India** (2004)

- Secured I Place in the Prof. Maths Contest conducted by Kolbro Group, India (2002)
- Participated in the Justice P.S.Kailasam Memorial **Swimming Meet**, Chennai, India (2001)
- Participated in the **Learn to Swim Campaign** conducted by the **Sports Development Authority of Tamil Nadu, India** (2001)
- Participated in various National Level Olympiads
- Recipient of several **Proficiency Awards** for securing the First Rank in the School Examinations
- Recipient of numerous **Awards** in the Oratorical, Light Music, Art, Handwriting, Essay Writing and Athletic Competitions in the School Level
- Other Talents: Karate, Tennis, Swimming, Yoga, Skating, Dance, Music, Photography, Photo Editing
- Languages Known: English, Tamil, Hindi, Telugu, French