

<b>Name: Dr B THANUJA</b>	<div>Photo</div> <div></div>			
<b>Designation:</b>	Associate Professor			
<b>Qualification:</b>	M.Sc., M.Phil., Ph.D. B.Ed., (Hindi)			
<b>Area of specialization:</b>	CHEMISTRY			
<b>Experience:</b>	<b>Industrial Experience</b>		<b>Teaching Experience</b>	
	NIL		15YRS 5MONTHS 15DAYS	
<b>Number of workshops / FDP attended:</b>	<b>Number of Workshops</b>		<b>Number of FDPs</b>	
	24		12	
<b>Publications:</b>	<b>Conference</b>		<b>Journal</b>	
	<b>National</b>	<b>International</b>	<b>National</b>	<b>International</b>
	5	1	3	17
<b>Books / Book Chapters</b>	1			
<b>Patents:</b>	<b>National</b>		<b>International</b>	
	5		NIL	
<b>Professional Body Membership</b>	3			
<b>Staff Achievements</b>				

### Educational Qualifications:

Category	Name of the Degree	Specialization	Year of Passing	Name of the College	Name of the University	% of Marks / Grades obtained	Class obtained
UG	B.Sc.	General Chemistry	1993	SDNB Vaishnav College	Madras University	66.27%	I
PG	M.Sc.	General Chemistry	2005	Annamalai University	Annamalai University	62.18%	I
	M.Phil.	General Chemistry	2009	Bharathidasan University	Bharathidasan University	72.2%	I
Ph.D.	Ph.D	Chemistry	Completed 2013	Vels University	Vels University		

### Academic Experience:

Name of the College	Designation	Joining Date	Relieving Date	Experience		
				Years	Months	Days
Vels University	Assistant Professor	02.07.2009	22.08.2013	4	1	23
Sri Sai Ram Engineering College Sri Sai Ram Engineering College	Assistant Professor	23.08.2013	31.05.2019	5	8	21
	Associate Professor	01.06.2019	TILL DATE	5	6	15
	Total			15	5	15

### Workshops/Seminars attended:

1. Hands on training Design and Manufacturing IOT,PCB,3D printing,Sri sairam Techno Incubation Foundation from 24.06.24 to 28.06.24
2. Progress workshop series on Managing and monetizing plastics at IIT madras on 23.01.2024.
3. SEG proposal on rural energy conservation conducted IIT Madras on 28.10.23.
4. Recent research in materials Physics & Nano devices organized by the department of Physics & IQAC,Rajapalyam Rajus' College from 21/11/2022 to 25/11/2022.
5. Recent Advances and Trends in the Analytical Instrumentation Techniques, St.Peter's Institute of Higher Education and Research from 26/09/2022 to 30/09/2022.
6. SIRD -PR workshop conducted on LSDG from 10/10/2022 to 14/10/2022.
7. Indian Nanoelectronics Users' Programme - Idea to Innovation, INUP - i2i Familiarization Workshop on Nanofabrication Technologies, held at IIT Bombay during January 19-21, 2022. Dr. Ashwin Tulapurkar, Professor, Dept. of Electrical Engineering, Indian Institute of Technology,Bombay.

8. DST-SERB Sponsored National Workshop on “Nanomechanical and Tribological Characterization of Materials”, organized by Centre for Nanoscience and Nanotechnology, Sathyabama Institute of Science and Technology, Chennai, during March 4-5, 2022.
9. Emerging trends in nanomaterials on electronics and optoelectronic devices(AICTE sponsored), Swarnadhara Engineering College,17/05/2021 to 21/05/2021
10. In silico drug discovery and design methods and applications, Baptala Pharmacy college,Andhrapradesh,01/3/2021 to 06/03/2021
11. Completed Refresher course in Chemistry organized by A.V.C college of Engineering from 08.03.2021 to 13.03.2021.
12. STTP on Nanomaterials for manipulating clean energy and environmental applications conducted by Dr.Mahalingam College of Engineering and technology from 2.11.2020 to 7.11.2020.
13. Recent Trends in Advanced Materials and Applications organized by National Institute of Engineering, Mysuru, 19/10/2020 to 23/10/2020
14. TNSCST sponsored one-day workshop on Molecular Docking on 19<sup>th</sup> September 2018 at D G Vaishnav college.
15. DRDO sponsored workshop on Li-ion batteries at SSN college on 18/05/2018
16. One day National Workshop on advanced functional materials (FUNMAT 2017) at CSIR-Central Electrochemical Research Institute, Karaikudi on May 22<sup>nd</sup>,2017.
17. National Workshop on “Advancements in Chemical Sciences” organized by Department of Chemistry, Sri SAIRAM INSTITUTE OF TECHNOLOGY, 18<sup>th</sup> July, 2016.
18. One day National Workshop on Smart materials-applications and characterizations, organized by CCG, Department of physics, VIT-Vellore, 27<sup>th</sup> April, 2016.
19. INUP Hands-on Training Workshop on Nano fabrications Technologies, held at IIT Bombay, August 17-21<sup>st</sup>, 2015.
20. Two week ISTE workshop on environmental studies conducted by IIT Bombay under the National Mission on Education through ICT (MHRD. Govt. of India) 2-12<sup>th</sup> June, 2015.
21. INUP familiarization workshop on nanofabrication Technologies, IIT Mumbai, May 27-29<sup>th</sup>, 2015.
22. ISTE Workshop Askash for Education-National Mission on Education ICT(MHRD),10<sup>th</sup> and 11<sup>th</sup> November 2012, organized by IIT, Bombay.
23. Introduction to Research Methodologies, IIT, Bombay, 25<sup>th</sup> June - 4<sup>th</sup> July, 2012. National Mission on Education ICT (MHRD).

**FDP/STTP Attended:**

- 1.NPTEL FDP on Waste Water Treatment and Technology
2. NPTEL FDP on Applied Environmental Concepts and life cycle Analysis
3. NPTEL FDP on applied Microbiology
4. FDP-AMCDP-2024- Department of Physics, Anurag University, 15.07.24 to 20.07.24
- 5.International FDP on Application on advanced technology in chemical sciences, Eswari Engineering College,31/08/21 to 04/09/2021
6. ATAL FDP on Personal Effectiveness, Birla Institute of Technology, 05.01.2021 to 9.01.2021.
7. ATAL FDP on Novel materials, SRM IST UNIVERSITY,9.11.2020 to 13.11.2020
- 8..ATAL FDP on Recent Trends in Advanced Materials and Applications, National Institute of Engineering,Mysuru,19.10.2020 to 23.10.2020
9. ATAL FDP on Sensors Technology, Dr. Ambedekar Institute of Technology, 21.09.2020 to 25.09.2020

10. ATAL FDP on Augment and Reality at Sri Sairam Engineering College, 27.05.2020-29.05.2020
11. Completed UHV on the theme of Inculcating Universal Human Values in Technical Education organized by AICTE from 14.12.2020 to 18.12.2020.
12. FDP on Remarkable Structural, Magnetic and Microwave Adsorption Properties of Rare Earth-Doped Mn-Cu Ferrites. & In-situ characterization of Materials at Elevated Temperatures” at Kristu Jayanthu College, Bengaluru, 04.05.2020
13. FDP on Recent trend in COVID-19: DIAGNOSIS AND MANAGEMENT” organized by Vels University, June 4th, 2020
14. National STTP AICTE sponsored on Comprehensive Village development, Indo Global college, Punjab, 20/09/21 to 25/09/21

#### **Symposium Attended:**

1. CSIR sponsored the National Seminar on Recent Trends in Laser Spectroscopy and its Applications at Sri Sairam Engineering College on 17<sup>th</sup> October, 2013.
2. Nuclear Magnetic Resonance (NMR) Spectroscopy, IIT, Madras, 8<sup>th</sup>-12<sup>th</sup> March, 2012.
3. National Seminar on insight into recent trends in chemical research, A.M. Jain college, 16<sup>th</sup> December, 2011.

#### **Conference Attended:**

1. Review of physio chemical properties of various reiver, INBCEA, 24, Vels university 28th Feb & 29th Feb, 2024.
2. A comparative studies on structural and spectral investigation of substituted benzoin using DFT studies at 109th session of Indian Science Congress in Chemical Science section. January 3-5, 2024 at Lovely Professional University, Phagwara, Punjab with allotted reference number as ISC Chem 24/OP/013.
3. Participated and presented at ICRTSR-23 Dr. Ambedkar Arts & Science and College from 30.08.2023 & 21.08.2023
4. 27th SPSR International pharmacist a proactive positive player in rational Therapeutics on 24.09.2023
5. Harnessing Nanotechnology biosynthesis and characterization of AG NP and their biomedical application on 15th October 2023.
6. International Virtual Conference on CHEMICAL RESEARCH FOR SUSTAINABLE DEVELOPMENT (ICCRSD-2021) on 24th & 25th September 2021, Anti-oxidant activity of benzoin phenyl hydrzone and benzoin hydroxylamine biomaterials, SRM INSTITUTE OF SCIENCE AND TECHNOLOGY RAMAPURAM CAMPUS, CHENNAI-89, 24th and 25th September, 2021.
7. 2nd International Symposium on “Modeling of Crystal Growth Processes and Devices” impact of substituents and solvent effects, SSN, Chennai, 5/07/2021 to 8/7/20

8. Presented paper at International conference on Recent Trends Materials Applications, Presented a Paper on Synthesis, characterization and solvent effect on the fluorescence spectra of 4-methoxy  $\alpha,\beta$  unsaturated hydroxy ketone' organized by The New College on 21<sup>st</sup> January 2020.(PP -02)
9. Presented Paper at Recent Advance in Organic Medicinal and Biological Chemistry, International Virtual Conference on RAOMBC-2020, VIT,Chennai, 8.07.2020-09.07.2020
10. International Virtual Conference INNOVATIVE RESEARCH IN CHEMICAL SCIENCES (IRCS-2020) Effect of Substituents and functional groups, SRM Institute of Science and Technology, Ramapuram, 29.06.2020-30.06.2020
11. Participated at Virtual Conference on "Materials for Energy Harvesting and Catalysis,TIFR,IISER,Kolkatta,01.05.2020-03.05.2020
12. Presented paper in the International Conference on Recent Trends in Applied Science and Technology on the title 'Hydroxyl ketone-biological and NLO properties' in Tamil at SSN college from 19/09/2019 to 21/09/2019
13. Presented a Paper on 'Comparative studies on benzoin phenylhydrazone and hydroxylamine biomaterials' at SSN College on 21/03/2019 and 22/03/2019 (first place for best Oral Presentation).
14. Presented a Paper on Antimicrobial activity of new synthesized 2,2'-dichlorohydrobenzoin at VEC at 2<sup>nd</sup> National Conference on 09/02/2019.
15. Presented a Paper on, "Synthesis, Characterization and *in vivo* and *in silico* studies of benzoin and its derivatives at 22<sup>nd</sup> National Seminar on Crystal Growth and its application at Sacred Heart College,Tiupathur,29<sup>th</sup>-31 at January 29<sup>th</sup> -31<sup>st</sup>,2018. (OP 31)
16. Presented a Paper on, "Synthesis, Characterization of antimicrobial activity of 2,2' dichlorohydrobenzoin ", in Indian Science Congress on, Jan 3-7, 2017.(pp-14).
17. Presented a Paper on, "Synthesis, Characterization and solvent effect at VEC 3<sup>rd</sup> National Seminar on the concepts of Green Chemistry on 27<sup>th</sup> March 2017.
18. Photocatalytic Degradation of Benzoin in pollution abatement. Paper presentation in the International Seminar on New Frontiers and challenges in Environmental Sciences held on February,11<sup>th</sup> and 12<sup>th</sup>,2016 organized by Marudupandiyar college, Thanjavur.
19. Comparative studies of anti depressant and anti - inflammatory activity *in vivo* and *in silico* studies of benzoin and substituted benzoin at VEC, 2<sup>nd</sup> National Seminar on 'The concept of Green Chemistry' on 18<sup>th</sup> April, 2015.
20. Synthesis, characterization, *in Vivo* and *in silico* studies of antidepressant activity and anti inflammatory studies of substituted benzoin, **15<sup>th</sup> Tetrahedron symposium, Asia Edition**, Challenges in bio organic and organic medicinal chemistry, **Singapore Expo between October 28-31, 2014.**
21. Regional Science Congress **INDIAN SCIENCE CONGRESS ASSOCIATION** held from Dec 12th - Dec 13th Dec 2013, SRM University. Synthesis and nonlinear optical absorption properties of 2-chloro-4'-methoxy benzoin compounds
22. Synthesis, characterization, anti-inflammatory and docking studies of substituted benzoin, "International Conference on Advances in Civil Engineering and Chemistry of Innovative Materials" at SRM University, Ramapuram Campus being hosted on 13th and 14th march 2014.(O-38).
23. Presented a paper on, Synthesis, characterization and solvent effect on the optical properties of 2-semicarbazone-1-hydroxy, 1-(2-chlorophenyl)-2-(4'-methoxyphenyl) ethanol single crystal in DST,DRDO,CSIR & BRNS Sponsored 17th national seminar on Crystal growth centre, Anna university on Jan 9-11,2013. (P-36) 243.

24. Presented a Paper on, "ultrasonic studies of intermolecular interactions in binary mixtures of 2-chloro-4'-methoxy benzoin with various solvents: excess molar functions of ultrasonic parameters at different concentrations and at different solvents in **Indian science congress** on, Jan 3-7, 2013.(P-12).
25. Presented a Paper on, "Synthesis and crystal structure of 4-methoxy benzoin", in **Indian Science Congress** on, Jan 3-7, 2012.(O-10).
26. Presented a Poster on, **International Conference** on Emerging Trends in Bio-Engineering, Mch 28 & 29, 2011 organized by the Department of BioEngineering, **Bharath University, Selaiyur**, Chennai.(P-12).
27. Presented a Paper on, "National Conference on AICTE sponsored National level Technical conference on advances in Chemical Engineering (Chemcore 2011),April 7 & 8, 2011, organized by the Department of Chemical Engineering, **MVJ college of Engineering, Bangalore** - 560 067.
28. Presented a Paper on, "Synthesis and crystal structure of new 2'-chloro -4-methoxy benzoin", National Conference on New Renaissance in Chemical Research (NCNRCCR-2011), March 4, 2011, organized by the Department of Chemistry, **SRM University**, Ramapuram, Chennai – 89. (**Best oral Presentation award**).
29. National Conference on crystal growth science and Technology, Department of Physics, **Anna University**, 18<sup>th</sup> and 19<sup>th</sup> October 2010.

#### **Completed / Ongoing Projects:**

- ED II voucher A sanctioned Rs.2.00.000 under the title 'Production high grade vermicompost using IOT'
- Sanctioned IEEE Epics fund 4500\$ under the title Digitally enabled waste receptacle
- Sanctioned fund from Nirman project to idea,IIT madras under the title Planet guard:Revolutioniszing Management through ECOAR.
- Solid waste management at college campus:Vermicomposting and flower dust into viable products.
- UBA perennial fund Rs.15,000 for flower waste project.
- Suo moto proposal,Idex6,Prime,Disc 7 challenges project Li-Fi Technology submitted for Defence Army.
- Project entitled; Restoring minerals in RO submitted to UBA
- Project entitled 'Solutions for an effective and sustainable fecal sludge management to increase productivity of soil and contribute to double the farmers income **submitted to DST-TDT on 31/11/2020**
- Project entitled' Bioplastic Degrading into Fertilizers by Eradicating Plastic Waste **submitted to DST-TDT on 31/11/2020**
- Project entitled: " **Enhancing the Yield of Limonene from Citrus sinensis fruit peels: An effective strategy for wealth creation and solid waste management submitted to DST-TARE, Submitted on 15/03/2020**
- Project entitled: Degradable of bioplastic into reusable fertilizer to NASF(submitted)
- Green Environment using treated Water in Poonthandalam Village School to UBA( Submitted)

#### **Patent:**

Title: Synthesis of Biodegradable bottle from Alage with Integrated AR Technoilogy for environmental awareness

Application No.202441063638 A

Date:30.08.2024

**Title:Smart bin with display,Design patent granted**

**Application no.:380109001**

**Date:24.02.2024**

**Title:** Viable Incence cups from waste viable products

**Appliction number:** 20234106153

Date of filing:23.09.2023

Status:Published

**Title:** Smart bin with LED Display,Indian Design Patent

**Appliction number:** 380109-001(Consultancy Rs.18,000 )

**Title:** LI-FI TECHNOLOGY INTEGRATED WITH SENSING AND ANALYTICAL SYSTEM

**Application No.**202241077101 A

Published on:20/01/23

**TITLE:** A SYSTEM AND METHOD OF DISPOSING DOMESTIC WASTE  
(consultancy Rs.20,000)

**APPLICATION NO:** E-2/2620/2019-CHE/201941033595

**REFERENCE NO:** 26955

### **Journal Publications:**

1. **Thanuja B** , Kavitha E , Andal C & Reshma Chandran S, Synthesis and Nonlinear Optical Absorption Properties of 2-Chloro4'methoxy Benzoin Compounds, Journal of Harbin Engineering University,2023,Vol 44(12)624-631.
2. Thanuja B,Kripa S, Bhavadharani T,Charles kanagam,the Effect of Substituents and Functional Groups on Enhancing the Antioxidants activity of Benzoin Derivatives,2022,16(1) 70-80.DOI: 10.2174/2212796816666220517103230.
3. S.Sumathi, Charles Christopher Kanagam, **B.Thanuja** 'Synthesis, Characterisation, Anti-Cancer Activity and Docking Studies of 4-(4-(dimethylamino) phenyl)-1,3,6-triphenylpiperidin-2-one' . 2022 , Vol : 15 , issue : 8.
4. **B.Thanuja**, Charles Kanagam, In Vivo Anticonvulsant activity of 2-Semicarbazano-1-hydroxy,1-[2-Chlorophenyl]-2-[4'MethoxyPhenyl] Ethane, (IJPSR) 12(11) 6481-6487(ESCI &WOS) doi: 10.13040/IJPSR.0975-8232.11(12).6481-87.
5. **B.Thanuja**, Charles Kanagam, Solvent effect of dioxan, ethonol, chlorofrom, methanol, acetonitrile on the spectral characteristics of 2 - chloro - 4 - methoxy benzoin,Adv.Materials.App,3,2019,1-5

6. **B.Thanuja**, Charles Kanagam, Asian journal of pharmaceutical and clinical research, Synthesis, Characterization of Antimicrobial Activity of 2,2-dichlorohydrobenzoin. 12(11) 2018,328-338.
7. K.Selvarani, R.Mahalakshmi, **B.Thanuja**, Structural, non-linear optical and dielectric properties of LPA HCl-manganese sulphate and cadmium chloride co-crystals. Materials science-poland 3(1) 2018p 7-13
8. G.K.Ayyadurai, V.Ramamurthy, **B.Thanuja**, Some physics-chemical of soil and water of keezhathottam Mangroove, Tamilnadu, India, International journal of chemical concepts, 2017, 03(02)208-217.
9. **B. Thanuja**, G. K. Ayyadurai and Charles C. Kanagam, Comparative studies of anti-inflammatory activity in Vivo and in Silico studies of 4-methoxy benzoin and benzoin, Der Pharma Chemica, 2017, 9(24):15-20.
10. G. K. Ayyadurai **B.Thanuja**, and Charles C. Kanagam, , Synthesis, characterization and solvent effect on the optical properties of novel zinc doped chalcone organic crystals 1,3 bis (2-methyl benzal)acetone, Der Pharma Chemica, 2017, 9(23):59-63.
11. **B. Thanuja**, G. K. Ayyadurai and Charles C. Kanagam, Synthesis, characterization and solvent effect on the optical properties of 2-semicarbazono-1-hydroxy, 1-(2-chlorophenyl)-2-(4'-methoxyphenyl) ethanol single crystal., Der Pharma Chemica, 2016, 8(12):135-142
12. S. Usha, Charles C Kanagam, **B.Thanuja**, Study of Molecular Interactions of Binary Mixture of Mandelic Acid in Different Solvents Using Ultrasonic, *AASCIT Journal of Chemistry*, 2015; 2(3): 55-60 57.
13. **B. Thanuja**, Charles Kanagam Synthesis, characterization in vivo and in silico studies of antidepressant activity of 2-chloro-4'-methoxy benzoin, *Current Chemical Biology*, 2014,8,17-26.
14. **B.Thanuja**, Charles Kanagam, Synthesis, characterization and solvent effect on the Fluorescence spectra of Benzoin, *Journal of Energy and Chemical Engineering*., Jan 2014,vol 2(1) PP 51-58.
15. **B.Thanuja**, Charles Kanagam, G.Nithya, *Indian journal of Physics*, Study of molecular interactions in binary mixtures of 2-chloro-4'-methoxy benzoin with various solvents through ultrasonic speed measurements. 87(12)2013,1225-1231.(I.F 1.5).
16. G. Nithya, **B. Thanuja** , Charles C. Kanagam *Ultrasonics Sonochemistry*., 20 (2013) 265– 270 242 (I.F 4.5).
17. **B.Thanuja**, Nithya. G, Charles Kanagam, *Ultrason.*, 19 (2012) 1213–1220. (I.F:4.35).
18. **B.Thanuja**, Nithya. G, Charles Kanagam, *Photonics letters of Poland.*, vol. 4 (1), 41-43 (2012) I.F:1.35.
19. G. Nithya, **B. Thanuja**, G. Chakkaravarthi and Charles C. Kanagam *Acta Cryst.*, (2011). E67, 1535 (I.F 0.5).
20. **Thanuja B**, Kanagam C, Sreedevi S: Studies on intermolecular interaction on binary mixtures of methyl orange-water system: excess molar functions of ultrasonic parameters at different concentrations and at different temperatures. *Ultrason Sonochem.*, Nov;18(6): (2011)1274-8 (I.F 4.5)

#### Books / Book Chapters:

#### Book Publication:

- From Earth to Eden from sustainable odyssey, ISBN Number 978-9395415-66-8

#### Awards:

- Best Teacher award:



- Teaching Excellence award by Sairam Institutions on Teacher Day celebration, September 5th, 2024.
- Women Power India award 2023 for Best Researcher by MIT Square charity.
- “GRATITUDE-2020” organized by the Department of Chemistry, SRM Institute of Science and Technology, Ramapuram Campus, Chennai-89 on 5th September, 2020 for being an Inspiring Chemistry Teacher.

#### **Green Action Awards:**

- Green Action Volunteers Award by IGEN, September 15th, 2024.
- Sustainability legend award, by GSLSN 2024
- Eco-Activist. IEA 2024.
- ABR, WRCA and IBR world record, 54<sup>th</sup> EARTH DAY indexed third edition of IGEN ENERGATHON 2024, 18<sup>th</sup> and 19<sup>th</sup> MAY 2024. Role: Organiser
- NIEP Green Action 2022
- IGEN Green action award 2021
- IGEN best organizer award for youth contest and green actions 2022

#### **Best Oral presentation awards:**

1. Presented a Paper on ‘Comparative studies on benzoin phenylhydrazone and hydroxylamine biomaterials’ at SSN College on 21/03/2019 and 22/03/2019 (first place for best Oral Presentation).
2. Presented a Paper on, “Synthesis and crystal structure of new 2’-chloro -4-methoxy benzoin“, National Conference on New Renaissance in Chemical Research (NCNR-CR-2011), March 4, 2011, organized by the Department of Chemistry, **SRM University**, Ramapuram, Chennai – 89. (**Best oral Presentation award**).

#### **Startup:**

- **AGSAIMO ORGANIC SOLUTIONS PVT LTD**

UDYAM-TN-08-0052456

CIN no: U20119TN2024PTC167369

GSTN: 33ABACA1347G1Z7

Under national industry classification code: 38

Startup TN RISE: selected

#### **Webinar:**

1. Webinar on International Day of Light, IEEE photonics Society, IIT Guhawati, 16.05.2020

2. Webinar on Remote Sensing in Crop Monitoring and Assessment". IIRS, ISRO, May 19th-June 9th, 2020.
3. National Seminar on the concepts of Green Chemistry, Valliammai Engineering College, 16<sup>th</sup> November, 2013

#### **Resource Person:**

- Chief guest on Independence day at Sairam Vidyalaya School Madipakkam and given talk on Biosphere Serve Champions for UNSECO students teams.
- Speaker at IGEN Energathon on Leveraging Energy aAction on 17 goals
- Invited talk on Climate actions at MGR university on september 27th, 2024.
- COP 2030 Energy Action plan, IGEN Envirothon May 18th 2024.
- R&D talk on Upscaling waste management in community at SSEC, Department of Civil on 12.10.2023.
- Webinar talk Recycling floral waste into agarbathis organized by Eco chakra Abihiyan on 30.09.2023
- Invited talk on upscaling of biodegradable waste into viable products at SRM University on 08.09.2023
- Jury at SSEC Synergia'23, Department of IT on 24.08.2023 & 25.08.2023
- Panel Expert at G -20 panel, IIU youth cabinet.
- Speaker at G-20 IIU on the title Heritage, culture and Tourism on 03.09.2023
- Speaker at SDG 16 MGR IGEN ENSAV Club on 24.09.2023
- Speaker at COP2030 on climate Actions on 12.11.2023
- Observer for UHV I at Mahendra College of Engineering from 11.09.2023 to 13.09.2023.
- Seminar given on Project Preparation Concepts for **Technical and Skill Training for SIRD & Officials on 12/10/2022.**
- Invited talk Webinar on vision of Materials Pathway, Sri sairam Engineering College, Department of Electronics and Communication in association with IEEE society, 20.07.2022
- Invited Talk on application of Chemistry on Engineering Chemistry, Annai Veilankanni's College of Engineering, Chennai on Nov.1, 2021.
- Judge for Toycathon 2021, Jan 2021 to Sep 2021.
- Consistant Mentor for ATL Tinkerpreneur Jan 2021 to Sept 2021
- Invited Talk on Growth, Characterization, Solvent Effect of Substituted Alpha Hydroxy Ketones", Dept of Chemistry, MGR University, 09/07/2021
- Keynote speaker at ICWMR 2021, Indo -Euro Collaboration in the topic Empowering rural Women on March 8<sup>th</sup> - 9, 2021.
- Technical talk on Sept 16<sup>th</sup>, 2020 in the topic Environment and Agriculture at FDP, Annai Veilankanni's College of Engineering, Chennai
- Technical talk on Nov 3<sup>rd</sup>, 2017 in the topic Material science and Technology at FDP, EGS Pillay group of Institutions, Nagapattinam

#### **Online Courses:**

1. Introduction to IOT, Simply Learn
2. Creativity, Innovation, and Change, COURSERA

3. The 3D Printing Revolution, COURSERA
4. Quantum Mechanics, COURSERA
5. Biohacking Your Brain's Health, COURSERA
6. The Sustainable Development Goals – A global, transdisciplinary vision for the future, COURSERA
7. Safety in the Utility Industry, COURSERA
8. Biohacking Your Brain's Health, COURSERA
9. Python for Beginners
10. Introduction to Molecular Spectroscopy
11. Waste water treatment, NPTEL,(ELITE)
12. Completed NITTR Module
13. Applied Environmental Microbiology,NPTEL,(ELITE)
- 14..Air pollution and control,NPTEL (ELITE)
15. Environmental Science (ELITE)
16. Waste Water Treatment and Recycling Technology (ELITE)
- 17.Sustainable Engineering and life cycle concepts (ELITE)
18. ViLGRO Cohort training course completed.