

Dr.S.FRANKLIN

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Qualification

Degree	Branch	Institution / University	Year of Passing
Ph. D.	PHYSICS	National Institute Of Technology Tiruchirappalli	2009
M. Phil.	PHYSICS	Bharathidasan University	2003
M. Sc.	PHYSICS	Bharathidasan University	2001
B. Sc.	PHYSICS	Bharathidasan University	1999

Ph.D. Details

Title of Thesis	Area of Specialization	Research Centre	Year of Award
Crystal structure determination and band gap estimation of some potential drugs, Mannich bases and few derivatives of aniline and phenone	X-ray Crystallography	Department of Physics, National Institute of Technology, Tiruchirappalli	August 2009
Research Supervisor			
Dr. T. Balasubramanian, Professor of			

Cleared NET / SET :	Details	Year of Passing
No	-	-

Work Experience

Name of Institution	Address of Institution	Designation	From	To
Bishop Heber College (Autonomous)	Vayalur Road Puthur Tiruchirappalli-620017	Assistant Professor	01.07.2010	till date
National Institute of Technology	Tiruchirappalli-620015	Research Assistant (Teaching))	01-08-2003	31-05-2006
St Josephs College	Tiruchirappalli-620002	Lecturer	01-06-2002	30-04-2003

Teaching / Research Experience

U.G. : Fourteen P.G. : Thirteen Yea M.Phil. Seven Years Ph.D. Nil

Table of Contents

1.	Conferences / workshops / Seminars Attended	36
2.	Research Papers Presented	22
3.	Publication in Journals	10
4.	Publication in Books	0
5.	Books Published / Edited	0
6.	Conferences / Workshops / Seminars Organised	1
7.	Research Projects	2
8.	Resource Person	4
9.	Consultancy	0
10.	Awards Recieved	6
11.	Patent	0
12.	Extension Activities Undertaken	0
13.	Professional Membership	0
14.	M.Phil. / Ph.D. Produced	0 / 0

1. State level Seminar on **"Webinar on Online Teaching Tools"** sponsored by Department of Computer Science, BHC Trichy organized by Department of Computer Science, BHC Trichy at Trichy through ZOOM Platform during 30/05/2020 to 30/05/2020.
2. State level Seminar on **"Webinar: Faculty Development 2020 - A counselling training programme on Addressing Psychological Challenges of Students - Beyond Covid-19"** sponsored by CSI Ewart Womens Christian College, Melrosapuram organized by CSI Ewart Womens Christian College, Melrosapuram at Online Mode (Google Meet) during 29/05/2020 to 29/05/2020.
3. State level Seminar on **"Webinar: Career Opportunities in Medicare Physics"** sponsored by Department of Physics, Parvathys Arts and Science College, Dindigul organized by Department of Physics, Parvathys Arts and Science College, Dindigul at ONLINE MODE (ZOOM Platform) during 26/05/2020 to 26/05/2020.
4. College level Seminar on **"Webinar on Unlocking Online Evaluation"** sponsored by IQAC, BHC Trichy organized by IQAC, BHC Trichy at Trichy through ZOOM Platform during 22/05/2020 to 22/05/2020.
5. College level Seminar on **"Webinar on Online Teaching: The New Norm"** sponsored by IQAC, BHC Trichy organized by IQAC, BHC Trichy at Trichy through ZOOM Platform during 21/05/2020 to 21/05/2020.
6. International level Seminar on **"Webinar: Soft Skills Development of TVET Graduates in the Age of IR 4.0"** sponsored by Colombo Plan Staff College (CPSC), Philippines organized by Colombo Plan Staff College (CPSC), Philippines at ONLINE MODE (Virtual) during 19/05/2020 to 19/05/2020.
7. International level Seminar on **"Webinar: Digital Technology and E-based Learning in TVET"** sponsored by Colombo Plan Staff College (CPSC), Philippines organized by Colombo Plan Staff College (CPSC), Philippines at ONLINE MODE (Virtual) during 11/05/2020 to 11/05/2020.
8. International level Seminar on **"Webinar: Converting Workshops to Online Training"** sponsored by SPACE EU and SCIENTIX organized by SPACE EU and SCIENTIX at ONLINE MODE (Virtual) during 05/05/2020 to 05/05/2020.
9. International level Seminar on **"Webinar: Teacher to Educational Leader"** sponsored by Colombo Plan Staff College (CPSC), Philippines organized by Colombo Plan Staff College (CPSC), Philippines at Virtual (Online) Mode during 23/04/2020 to 23/04/2020.
10. College level Workshop on **"FDP - IGNITE 2019"** sponsored by DBT India organized by BHC Trichy at Trichy during 24/06/2019 to 25/06/2019.
11. College level Workshop on **"Faculty Recharging Programme"** sponsored by IQAC, BHC Trichy organized by IQAC, BHC Trichy at Trichy during 12/06/2019 to 13/06/2019.
12. College level Workshop on **"FDP - Problem Solving in Physics"** sponsored by DBT India organized by Department of Physics at Trichy during 06/06/2019 to 08/06/2019.
13. International level Conference on **"Advanced Nanomaterials for Energy, Environment and Health Care Applications (ANEH 2019)"** sponsored by Royal Society of Chemistry and Royal Academy of Engineering organized by BHC India and Swansea University UK at Department of Physics, BHC Trichy during 04/02/2019 to 06/02/2019.
14. College level Workshop on **"Training of Trainers Workshop on Life Skills"** sponsored by Training and Placement Department, BHC Trichy organized by Training and Placement Department, BHC Trichy at Trichy during 17/11/2018 to 17/11/2018.
15. College level Workshop on **"Faculty Development Programme"** sponsored by UGC organized by BHC Trichy at Trichy during 28/07/2018 to 28/07/2018.
16. College level Workshop on **"Examinations and Evaluation Reforms"** sponsored by IQAC, BHC Trichy organized by IQAC, BHC Trichy at Trichy during 10/03/2018 to 10/03/2018.

17. College level Workshop on **"Faculty Improvement Programme on Experimental Physics"** sponsored by DBT India organized by Department of Physics, BHC Trichy at Trichy during 12/02/2018 to 13/02/2018.
18. College level Workshop on **"Faculty Empowerment Programme"** sponsored by IQAC, BHC Trichy organized by IQAC, BHC Trichy at Trichy during 14/06/2017 to 14/06/2017.
19. College level Workshop on **"Curriculum Design and Evaluation Techniques"** sponsored by DBT India organized by Deanery of Academics, BHC Trichy at Trichy during 21/11/2016 to 22/11/2016.
20. State level Workshop on **"Faculty Development Program on PHYSICS FOR EMERGING TECHNOLOGIES"** sponsored by Department of Physics, National Institute of Technology, Tiruchirappalli organized by Department of Physics, National Institute of Technology, Tiruchirappalli during 15/07/2013 to 19/07/2013.
21. State level Workshop on **"Computer Aided Drug Design- CADD 2012"** sponsored by Department of Bioinformatics, Bishop Heber College (Autonomous) organized by Department of Bioinformatics, Bishop Heber College (Autonomous) at Tiruchirappalli during 05/03/2012 to 05/03/2012.
22. College level Workshop on **"Capacity Building Program"** sponsored by IQAC, Bishop Heber College (Autonomous) organized by IQAC, Bishop Heber College (Autonomous) at Tiruchirappalli during 25/02/2012 to 25/02/2012.
23. Regional level Seminar on **"Scientific Communication"** sponsored by OSA, USA organized by NITT-OSA student chapter of Department of Physics, NIT, Trichy at Tiruchirappalli during 18/10/2011 to 18/10/2011.
24. College level Workshop on **"Examination Reforms & Evaluation"** sponsored by Bishop Heber College (Autonomous) organized by Bishop Heber College (Autonomous) at Tiruchirappalli during 11/03/2011 to 12/03/2011.
25. Regional level Workshop on **"Modern Experiments in Physics"** sponsored by Srimad Andavan Arts & Science College, Trichy organized by Srimad Andavan Arts & Science College, Trichy at Tiruchirappalli during 21/02/2011 to 21/02/2011.
26. State level Workshop on **"Single Crystal X-ray Diffractometry"** sponsored by Sophisticated Analytical Instrument Facility, IIT Madras organized by Sophisticated Analytical Instrument Facility, IIT Madras at Chennai during 20/07/2009 to 21/07/2009.
27. State level Workshop on **"Instrumentation and Applications of TGA-DTA & DSC"** sponsored by Sophisticated Analytical Instrument Facility, IIT Madras organized by Sophisticated Analytical Instrument Facility, IIT Madras at Chennai during 12/11/2008 to 12/11/2008.
28. State level Summer School on **"Emerging Industrial Applications of Laser"** sponsored by MHRD-AICTE organized by Department of Production Engineering, NIT Trichy at Tiruchirappalli during 30/06/2008 to 12/07/2008.
29. State level Workshop on **"X-Ray Diffraction Analysis (XRD) & Intellectual Property Rights (IPR)"** sponsored by TEQIP (MHRD) organized by Department of Physics, NIT Trichy at Tiruchirappalli during 15/03/2008 to 15/03/2008.
30. State level Workshop on **"Nanostructures and Devices"** sponsored by TEQIP (MHRD) organized by Department of Physics, NIT Trichy at Tiruchirappalli during 23/02/2008 to 23/02/2008.
31. State level Workshop on **"Workshop on Advanced Coating Technologies and Their Applications"** sponsored by TEQIP (MHRD) organized by Department of Physics, NIT Trichy at Tiruchirappalli during 24/01/2008 to 24/01/2008.
32. State level Workshop on **"Workshop on Advanced Materials & Devices"** sponsored by TEQIP (MHRD) organized by Department of Physics, NIT Trichy at Tiruchirappalli during 10/01/2008 to 10/01/2008.
33. State level Workshop on **"Workshop on Laser Materials Processing"** sponsored by TEQIP (MHRD) organized by Department of Physics, NIT Trichy at Tiruchirappalli during 09/01/2007 to 10/01/2007.

34. University level Workshop on **"Workshop on Communication Skills"** sponsored by SPIE & OSA, USA organized by Department of Physics, NIT Trichy at Tiruchirappalli during 01/12/2006 to 01/12/2006.
35. University level Workshop on **"Training Course on LATEX"** sponsored by TEQIP (MHRD) organized by Department of Computer Science and Engineering, NIT Trichy at Tiruchirappalli during 27/10/2006 to 28/10/2006.
36. State level Workshop on **"Workshop on Optics and Photonics"** sponsored by Department of Physics, National Institute of Technology, Tiruchirappalli organized by Department of Physics, National Institute of Technology, Tiruchirappalli at Tiruchirappalli during 18/08/2005 to 19/08/2005.



1. **"In-silico Methods of Chemical Compounds of Citrullus colocynthis from Fruit Extracts"** in the International conference on *International Conference on Frontiers in Chronic Diseases (ICFCD 2020)* sponsored by DBT India, organized by Department of Zoology, BHC Trichy at Trichy during 19/02/2020 to 01/01/1900.
2. **"Molecular Docking Analysis of Phytocompounds derived from Polypodium quercifolium with Diabetes Mellitus Target"** in the International conference on *International Conference on Frontiers in Chronic Diseases (ICFCD 2020)* sponsored by DBT India, organized by Department of Zoology, BHC Trichy at Trichy during 19/02/2020 to 01/01/1900.
3. **"Biblical Concepts on the Conservation of Ecosystem - An Alternative Method to Conserve Environment"** in the International conference on *International Eco Conference* sponsored by WCC and NCCI, organized by Consortium of Higher Educational Institutions of CSI at CSI Synod Centre, Chennai during 01/08/2019 to 04/08/2019.
4. **"Synthesis and antibacterial activity of CuO-MgO bimetal oxide nanoparticles: A green approach"** in the International conference on *Advanced Nanomaterials for Energy, Environment and Health Care Applications (ANEH 2019)* sponsored by BHC Trichy and Swansea University, UK, organized by Department of Physics, BHC Trichy at Trichy during 04/02/2019 to 06/02/2020.
5. **"Synthesis and characterization of ZnO-MgO bimetal oxide nanoparticles for antibacterial activity"** in the International conference on *Advanced Nanomaterials for Energy, Environment and Health Care Applications* sponsored by BHC Trichy and Swansea University, UK, organized by Department of Physics, BHC Trichy at Trichy during 04/02/2019 to 06/02/2019.
6. **"Optical Properties Comparison of Multifunctional Green Synthesized ZnO - MgO and CuO - MgO Bimetal Oxide Nanoparticles"** in the International conference on *International Conference on Chemical Research and Innovations Today (CRIT 2019)* sponsored by DST-FIST and DBT India, organized by Department of Chemistry, BHC Trichy at Trichy during 24/01/2019 to 01/01/1900.
7. **"Antibacterial Properties Comparison of the Crystals of Maleate and Fumarate Salts of Benzotriazole"** in the International conference on *International Conference on Chemical Research and Innovations Today (CRIT 2019)* sponsored by DST-FIST and DBT India, organized by Department of Chemistry, BHC Trichy at Trichy during 24/01/2019 to 01/01/1900.
8. **"Optical and biological studies of imidazole and its metal complexes"** in the National conference on *National Conference on Nano Photonics* sponsored by Indian Funding Agencies, organized by Bharathidasan university, Tiruchirappalli at Tiruchirappalli during 06/03/2014 to 07/03/2014.
9. **"Growth and Characterisation of m-nitroaniline benzophenone (1:1) single crystal"** in the National conference on *XV National conference on Crystal Growth* sponsored by Indian Funding Agencies, organized by PSN College of Engineering and Technology, Tirunelveli at Tirunelveli during 23/02/2011 to 25/02/2011.
10. **"Growth and Characterisation of 2-amino-3-nitropyridine maleate single crystal"** in the National conference on *XV National conference on Crystal Growth* sponsored by Indian Funding Agencies, organized by PSN College of Engineering and Technology, Tirunelveli at Tirunelveli during 23/02/2011 to 25/02/2011.
11. **"Growth and Characterisation of benzophenone phthalic acid (1:1) single crystal"** in the National conference on *National conference on Perspectives in Laser, Optics, Spectroscopy and Nanoscience* sponsored by UGC, organized by Department of Physics, Bishop Heber College (Autonomous) at Tiruchirappalli during 14/02/2011 to 14/02/2011.
12. **"Growth and Characterisation of sulphanilic acid oxalic acid (1:1) single crystal"** in the National conference on *National conference on Perspectives in Laser, Optics, Spectroscopy and Nanoscience* sponsored by UGC, organized by Department of Physics, Bishop Heber College (Autonomous) at Tiruchirappalli during 14/02/2011 to 01/01/1900.

13. **"Growth and Characterisation of benzophenone oxalic acid (1:1) single crystal"** in the National conference on *National conference on Perspectives in Laser, Optics, Spectroscopy and Nanoscience* sponsored by UGC, organized by Department of Physics, Bishop Heber College (Autonomous) at Tiruchirappalli during 14/02/2011 to 14/02/2011.
14. **"Growth and Characterisation of 2-amino-3-nitropyridine phthalate"** in the National conference on *National conference on Perspectives in Laser, Optics, Spectroscopy and Nanoscience* sponsored by UGC, organized by Department of Physics, Bishop Heber College (Autonomous) at Tiruchirappalli during 14/02/2011 to 14/02/2011.
15. **"Crystal Structure of 2-[(Phenylamino)methyl]-Isoindole- 1,3-dione"** in the National conference on *National Seminar on Crystallography* sponsored by Indian Funding Agencies, organized by University of Mysore at Mysore during 11/02/2009 to 13/02/2009.
16. **"Crystal Structures of the Salts of Maleic and Fumaric Acid with 8-Hydroxyquinoline"** in the National conference on *National Seminar on Crystallography* sponsored by Indian Funding Agencies, organized by University of Mysore at Mysore during 11/02/2009 to 13/02/2009.
17. **"Crystal Structure of DL-Propranolol Nitrate"** in the National conference on *National Seminar on Crystallography* sponsored by Indian Funding Agencies, organized by University of Mysore at Mysore during 11/02/2009 to 13/02/2009.
18. **"Crystal Structure of 4-Nitrophenyl 4-Butoxybenzoate"** in the National conference on *National Seminar on Crystallography* sponsored by Indian Funding Agencies, organized by Jadavpur University, Kolkatta at Kolkatta during 06/02/2008 to 08/02/2008.
19. **"Crystal Structure of Bis-[Trimethoprim] DL-malate"** in the National conference on *National Seminar on Crystallography* sponsored by Indian Funding Agencies, organized by Jadavpur University, Kolkatta at Kolkatta during 06/02/2008 to 08/02/2008.
20. **"Optical Studies of Gel Grown Magnesium Phosphate - An Inorganic NLO Crystal"** in the International conference on *Frontiers in Optics 2007/Laser Science XXIII/Organic Materials and Devices for Displays and Energy Conversion* sponsored by American Funding Agencies, organized by Optical Society of America (OSA) at Fairmont Hotel, San Jose, CA, USA during 16/09/2007 to 20/09/2007.
21. **"Review of Hydrogen Bonding Patterns in Substituted Oxines"** in the National conference on *National Symposium on Molecular Basis of Diseases* sponsored by Indian Funding Agencies, organized by Indian Institute of Technology Madras, Chennai at Chennai during 08/01/2005 to 09/01/2005.
22. **"Laser Surface Modification Studies on En8 Steel using WC-CO Coatings"** in the National conference on *National Laser Symposium 2002* sponsored by DAE-BRNS, organized by Shri Chitra Tirunal Institute for Medical Sciences and Technology, Tiruvananthapuram at Tiruvananthapuram during 14/11/2002 to 16/11/2002.

1. **"1,5-Dimethyl-2-phenyl-4-[phenyl(pyridin-2-ylamino)methyl]- 1H-pyrazol-3(2H)-one"** published in Acta Crystallographica E (PEER REVIEW) Vol. 68, Issue No. , January 2012 ISSN : ---.
2. **"Structural and spectral analysis of a Mannich base: 3-(morpholin-4-ylmethyl)-1,3-benzo thiazole-2-thione"** published in Journal of Chemical Crystallography (PEER REVIEW) Vol. 42, Issue No. , January 2011 ISSN : ---.
3. **"Crystal Structure, Conformation and Vibrational Analysis of a Mannich Base: 2-[(phenylamino) methyl]-isoindole-1,3-dione"** published in Journal of Chemical Crystallography (PEER REVIEW) Vol. 41, Issue No. , January 2011 ISSN : ---.
4. **"Salts of maleic and fumaric acids with oxine: the role of isomeric acids in hydrogen-bonding patterns"** published in Acta Crystallographica C (PEER REVIEW) Vol. 65, Issue No. , January 2009 ISSN : ---.
5. **"Bis[2,4-diamino-5-(3,4,5-trimethoxybenzyl)pyrimidin-1-ium] DL-malate"** published in Acta Crystallographica C (PEER REVIEW) Vol. 65, Issue No. , January 2009 ISSN : ---.
6. **"Crystal structure, conformation, vibration and optical band gap analysis of bis[rac-propranolol nitrate]"** published in Journal of Molecular Structure (PEER REVIEW) Vol. 927, Issue No. , January 2009 ISSN : ---.
7. **"Vibrational, optical and microhardness studies of trimethoprim DL-malate"** published in Crystal Research and Technology (PEER REVIEW) Vol. 44, Issue No. 12, January 2009 ISSN : ---.
8. **"4,4'-Dimethoxybenzophenone: a triclinic polymorph"** published in Acta Crystallographica E (PEER REVIEW) Vol. 64, Issue No. , January 2008 ISSN : ---.
9. **"2-Aminopyridinium (2-aminopyridine) trichlorido nickelate (II)"** published in Acta Crystallographica E (PEER REVIEW) Vol. 64, Issue No. , January 2008 ISSN : ---.
10. **"Crystal structure and optical properties of 4-nitrophenyl 4-butoxybenzoate"** published in Crystal Research and Technology (PEER REVIEW) Vol. 43, Issue No. 12, January 2008 ISSN : ---.

Conferences / Workshops / Seminars Organised

- 1

1. National level Conference Entitled **"National Conference on Perspectives in Laser, Optics, Spectroscopy and Nanoscience"** at Department of Physics, Bishop Heber College (A), Trichy, sponsored by UGC, during 14/02/2011 to 14/02/2011.

Awards Recieved

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Award Name	Presented by	Year	Level	Instituted by / Place	amount
Non Degree Faculty Enrichment Grant		15/03/2019	INTERNATIONAL	UBCHEA	2688.35USD
Institute Best Thesis Award (Science Stream)		01/08/2009	UNIVERSITY	NIT Tiruchirappalli	
SPIE EDUCATIONAL AWARD 2009		01/01/2009	INTERNATIONAL	SPIE - The International Society for Optical Engineering	2000USD
OSA Student Leader Travel Grant		05/07/2007	INTERNATIONAL	Optical Society of America (OSA)	1878.76USD
SPIE EDUCATIONAL AWARD 2007		01/01/2007	INTERNATIONAL	SPIE - The International Society for Optical Engineering	1000USD
RAJYAPURASKAR AWARD		01/01/1994	STATE	The Bharath Scouts and Guides INDIA	

RESEARCH PROJECTS

- 2

1. Minor project entitled **"STRUCTURAL, OPTICAL, MECHANICAL AND THERMAL ELUCIDATION OF SOME ORGANIC AND SEMI-ORGANIC SINGLE CRYSTALS FOR OPTOELECTRONIC APPLICATIONS"** (*PRINCIPAL INVESTIGATOR*), Sponsored by UGC, during 01/01/2015 to 2019 [Completed].
2. Minor project entitled **"STUDIES ON SINGLE CRYSTALS OF BENZOPHENONE AND m-NITROANILINE DERIVATIVES FOR OPTICAL AND OPTO-ELECTRONIC APPLICATIONS"** (*PRINCIPAL INVESTIGATOR*), Sponsored by Management of BHC Trichy, during 01/01/2010 to 2011 [Completed].

TRAINING PROGRAMME

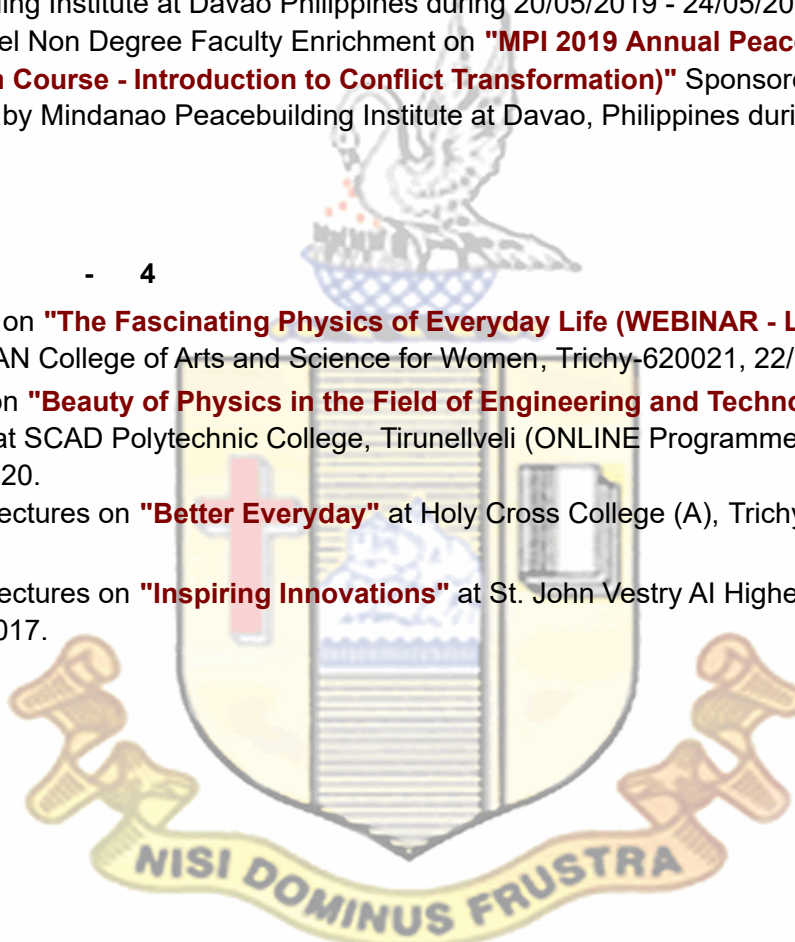
- 4

- # STATE level Faculty Development Programme on **"Enhancing Professional Development of Faculty"** Sponsored by UBCHEA, Organized by CSI Ewart Womens College, Melrosapuram at Melrosapuram during 28/10/2019 - 31/10/2019.
- # INTERNATIONAL level Non Degree Faculty Enrichment on **"MPI 2019 Annual Peace Building Training (Thematic Course - Inter Religious Peace Building)"** Sponsored by UBCHEA, Organized by Mindanao Peacebuilding Institute at Davao, Philippines during 27/05/2019 - 31/05/2019.
- # INTERNATIONAL level Non Degree Faculty Enrichment on **"MPI 2019 Annual Peace Building Training (Thematic Course - Active Non Violence)"** Sponsored by UBCHEA, Organized by Mindanao Peacebuilding Institute at Davao Philippines during 20/05/2019 - 24/05/2019.
- # INTERNATIONAL level Non Degree Faculty Enrichment on **"MPI 2019 Annual Peace Building Training (Foundation Course - Introduction to Conflict Transformation)"** Sponsored by UBCHEA, Organized by Mindanao Peacebuilding Institute at Davao, Philippines during 13/05/2019 - 17/05/2019.

RESOURCE PERSON

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1. Regional level Seminar on **"The Fascinating Physics of Everyday Life (WEBINAR - Lecture Series Online)"** at AIMAN College of Arts and Science for Women, Trichy-620021, 22/12/2021.
2. College level Seminar on **"Beauty of Physics in the Field of Engineering and Technology - A Glimpse (WEBINAR)"** at SCAD Polytechnic College, Tirunelveli (ONLINE Programme through Google Meet), 23/06/2020.
3. Regional level Invited Lectures on **"Better Everyday"** at Holy Cross College (A), Trichy, 06/03/2019.
4. Regional level Invited Lectures on **"Inspiring Innovations"** at St. John Vestry AI Higher Secondary School, Trichy, 05/10/2017.



Signature of Staff
(S.FRANKLIN)