

# Biodata

Name : FRANCIS P. XAVIER SJ

**Date of Birth** : October 23, 1952

**Present Position**: Chief Academic Officer.

Jesuit Worldwide Learning (JWL), Geneva

# Positions occupied Academic:

1. Rector, Lovola Campus (2019-2023)

2. Visiting Faculty, Creighton University, Omaha, USA (Mar-Apr 2019)

- 3. Gasson Professor (2017-2018), Boston College, USA
- 4. Professor of Physics, Loyola College, Chennai (1981-1983 and 1992-2009)
- 5. Visiting Faculty, "Time Management", Vidyaniketan, Trivandrum (1994-2015)
- 6. Visiting Faculty Boston College, USA (Summer, 1993-2016)
- 7. Visiting Professor, "Science and Theology" Jesuit Regional Theologate, (Arul Kadal), Chennai (1995, 2010, 2011, 2013)
- 8. Visiting Professor, "Philosophy of Science" Jesuit National Philosophate, (Satyanilayam), Chennai (2005 - 2016)

# Administration:

- 1. Chief Academic Officer, JWL (2023 )
- 2. Rector and Vice President, Loyola College Society, Chennai (2019-2023)
- 3. Vice President for Academics and Research, Jesuit Worldwide Learning (JWL), Geneva (Jan 2017 Jan 2019)
- 4. Chair, TF for: Education of the Marginalized, Rome (2017-2018)
- 5. Founder Director and Professor of Physics, Loyola-ICAM College of Engineering and Technology (LICET) Chennai (2010-2016)
- 6. Member of Preparatory Committee (Coetus Praevisu) for GC 36, Rome (Sep 2015)
- 7. Provincial, Jesuit Madurai Province (1999-2005)
- 8. Founder-Director, Loyola Institute of Frontier Energy (LIFE), Loyola College, Chennai (1995-1999)

#### Research:

- 1. Research guide for PhD: Madras University, Chennai, Anna University, Chennai, and MG University, Kottayam.
- 2. Editor-in-Chief of "Convergence", LIFE, Loyola College, Chennai (1995-2017)
- 3. Institute of Physical Electronics, Stuttgart University, Germany (1998 –1999 Post doctoral research)
- 4. Boston College, USA (Doctoral Research 1986-1992)

#### **Present Address**

: Rev Dr Francis P. Xavier, SJ Jesuit Worldwide Learning (JWL)

18, rue Jacques-Dalphin 1227, Carouge GE Geneva, Switzerland Residence in India: Dhyana Ashram

25, Madha Church Road Mylapore, Chennai-600 028

Email (P): <a href="mailto:francisx@gmail.com">francisx@gmail.com</a>
Website: <a href="mailto:www.francispxaviersj.com">www.francispxaviersj.com</a>

#### **Educational Qualifications**

: **BSc** (Physics – 1974 - 1977)

Loyola College, Chennai, India

**MSc** (Physics – 1977 - 1979)

St Joseph's College, Trichy, India

**BPh** (Philosophy – 1979 - 1981)

Jnana Deepa Vidyapeeth, Pune, India

**MDiv** (Theology – 1983 - 1986)

Sankt Georgen, Frankfurt/M, Germany

**PhD** (Physics – 1986 - 1992)

Boston College, Chestnut Hill, USA

Post-Doctoral Research (1998-1999)

Stuttgart University, Germany

#### **PhD Thesis**

: "Optical and Transport Properties of

Phthalocyanine and Related Compounds" (1992)

# **Teaching Experience**

: 1981-1983 (Asst Professor of Physics) Lovola College, Chennai, India

1986-1992 (Teaching Assistant)

Boston College, Chestnut Hill, USA

1992- 2009 (Professor of Physics)

Loyola College, Chennai, India

2010 – 2016 Professor of Physics, LICET 1995, 2010, 2011, 2013 (Visiting Professor)

"Science and Theology"

Jesuit Regional Theologate,

(Arul Kadal), Chennai, India

1994 – 2016 (Visiting Professor)

Time Management, Vidyaniketan, St Xavier's College, Trivandrum

2005 - 2016 (Visiting Professor)

"Philosophy of Science"

Jesuit National Philosophate

(Satyanilayam), Chennai, India

### **Research Experience**

: 2008 - 2016 (approved Doctoral guide)

Madras University, Chennai; Mahatma Gandhi University,

Kottayam, Kerala; and

Anna University, Chennai

1996-2000 (collaborative research)

- 1. Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam, India
- 2. Central Electro-Chemical Research Institute (CECRI), Karaikudi, India

1995 - 2010 (Director of Research)

Loyola Inst. of Frontier Energy (LIFE)

Loyola College, Chennai, India

1992 - 2016 (collaborative research)

- 1. Crystal Growth Centre, Chennai, India
- 2. Boston College, Chestnut Hill, USA

1986-1992 (Doctoral studies)

Boston College, Chestnut Hill, USA

#### **Publications**

# A. Monographs/Books (authored/edited):

A.26. One Drop Ocean,

Don Bosco Pub., Chennai (2023).

A.25. Seeing Everything New,

ATC Pub., Bengaluru (2022)

A.24. Sharing: Jesuit Legacy (Ed),

Don Bosco Pub., Chennai (2021).

A.23. Implications of Quantum Logic to the Notion of Transcendence,

(Co-authored with Jerome Manyahi) –

ISPCK, Delhi 2020

A.22. Jesuit Education – Formation for Transformation,

ATC Pub., Bengaluru 2020.

Book Review: *New Frontiers in Education*, **53**(4) Oct-Dec2020 and **54** (1) Jan-Mar2021 67-74 (by Mark Labuntog).

A.21. Creating the 25th Hour,

ATC Pub., Bengaluru 2019.

A.20. Engineering Response to Climate Change (Ed).

LICET Publication, Chennai 2016.

A.19. Frontiers in Materials Science for Energy and Environment (Ed) LIFE Publication, Loyola College, Chennai 2013.

A.18. Bioethics, Biodiversity and Making a Repository of Ethical World Views of Nature (Ed)

LIFE Publication, Loyola College, Chennai 2013.

A.17. Climate Change and Future Security (Ed),

LIFE Publication, Loyola College, Chennai (2010).

- A.16. Die Rechte der Ausgegrenzten, DHRC, Chengalpattu (2010).
- A.15. Recent Trends in Sensor-Development for Environment Assessment and Management (Ed),

LIFE Publication, Loyola College, Chennai (2010).

A.14. The Rights of the Marginalized,

DHRC Publication, Chengalpet (2009).

# A.13. Inventing the 25<sup>th</sup> hour: Time Management as Personal Management,

LIFE Publication, Loyola College, Chennai (2009).

A.12. Biodiversity, Bioresources, and Biotechnology: for sustainable Livelihood of rural Community (Ed),
Loyola Institute of Frontier Energy (LIFE), Loyola College, Chennai (2008)

#### A.11. God of the Atoms,

LIFE/ISPCK Publication, Delhi (2006)

A.10. Education for the Marginalized (in Tamil),

DHRC Publication, Chengalpet (2006 – 1st Ed Jun & 2nd Ed Aug).

A.9. Beyond the Horizon,

St Mary's, Dindigul (2005).

A.8. Environment, Biodiversity and Bioethics (Ed),

Loyola College Publication, Chennai (2002).

A.7. Environment and Bioethics (Ed),

Lovola College Publication, Chennai (2000).

A.6. Materials for Energy Conversion (Ed),

Loyola College Publication, Chennai (1998)

A.5. Energy Crisis and Environment (Ed),

Loyola College Publication, Chennai (1997).

A.4. Conducting Polymers (Ed),

Loyola College Publication, Chennai (1996).

#### A.3. Guilt Feelings: Help to Moral Growth,

St Paul Publication, Mumbai (1995).

A.2. Recent Trends in Physics (Ed),

Loyola College Publication, Chennai (1994).

# A.1. Optical and Transport Properties of Phthalocyanine and Related Compounds

(PhD Thesis) Microfilm Uni. International, Ann Arbor, MI, USA (1993).

- B. *Research Papers in Research Journals* (Physics) (authored/coauthored):
  - B.75. Discovering Self: Scientific Perspectives, *Omega*, **XXI** (2022)2, 116-126.
  - B.74. Universal Peace Building through effective Implementation of Environmental Ethics through positive Deeds and Actions, *Formosan J. of Medical Humanities*, **23** (1&2), Dec2022, 10-17.
  - B.73. Future Challenges to the Physicists, *Omega*, XX (2021)2 127-135.
  - B.72. The Fifth Dimension of the Universe Emergence and Convergence, *SNC J. Intercultural Philosophy*, **39** (Mar 2021) 48-61.
  - B.71. Artificial Intelligence: Influence and Impact, *Omega*, XIX (2020)2 68-78.
  - B.70. Our Challenges and Responsibilities Towards Tackling the Climate Change, *Proceed. Engin. Res. to Climate Change* (LICET), 2016 1-17.
  - B.69. The Relevance of Ethics and its Essential Role in Modern Biotechnology, *Proceed. Engi . Res. to Climate Change* (LICET), 2016, 19-25.
  - B.68. Ethical Dilemma Towards Food Security in Indian Scenario and the Role of Higher Educational Institutions, *Proceed. Engin. Res. to Climate Change* (LICET), 2016, 69-72.
  - B.67. Global Warming and Climate Change: Issues and Challenges in 21st Centaury in India, *Proceed. Engin. Res. to Climate Change* (LICET), 2016, 73-76.
  - B.66. Need for Development of Ethics in Curriculum for Different Streams of Students in Higher Educational Institutions, *Proceed. Engin. Res. to Climate Change* (LICET), 2016 81-84.
  - B.65. Need of Bioethics in Energy and Environment Research, *Proceed. Engin. Res. to Climate Change* (LICET), 2016 85-95.
  - B.64. Water Quality Assessment of Piatua River Using Macroinvertebrates in Puyo, Pastaza, Ecuador, *Am J Life Sciences* **3**(3) (2015) 167-174.
  - B.63. An investigation on the effect of porosity on the transport properties of porous silicon,
    - Int. J. Microstructure and Materials Properties, 8 (6) (2014) 462–477.
  - B.62. Photoluminescence and photoconductivity studies on pure and aluminium doped Zno nanostructured films, *Int J of Chem Tech Research*, **6** (3) (2014) 2204-2206.
  - B.61. Effect of Al-dopant concentration on structural, optical and photoconducting properties in nanostructured zinc oxide thin films, Mater. Sci. Semicond, Process, **16** (2013) 295-302.
  - B.60. Sol-Gel Preparation, Deposition and Characterization of Nanostructured Aluminium Doped Zinc Oxide, *J Nano Research*, **24** (2013) 96-106.
  - B.59. Thickness dependent microstructure, optical and photo conducting properties of ZnO thin films by spin coating process, *Journal of Electron Devices*, **17** (2013) 1417-1422.

- B.58. Effect of post deposition annealing on the optical absorption and photoconductivity studies of pure ZnTe and pure MgPc thin films formed by vacuum deposition,
  - Archives of Applied Science Research, 5(2) (2013) 167-171.
- B.57. Photoconductivity studies of hybrid ZnTe/MgPc thin films prepared by physical vapour deposition, *Archives of Physics Research*, **4**(1) (2013) 22-28.
- B.56. Synthesis and structural, optical and electrical properties of TiO2/SiO2 Nanocomposites, *J Mater Sci*, DOI 10.1007/s10853-013-7167-2 (2013).
- B.55. An investigation on the effect of porosity on the transport properties of porous silicon,
  - *Int J Microstructure and Materials Properties,* **8** (6) (2013) 462-477.
- B.54. Synthesis and characterization of TiO<sub>2</sub>/SiO<sub>2</sub> nano composites for solar cell Applications, *Appl Nanosci.*, **2**, (2012) 429-436.
- B.53. Natural dye sensitization of TiO<sub>2</sub> Thin Films using Lawsone dye extracted from Lawsonia Inermis for Solar Cell Applications, *Archives of Applied Science Research*, **4** (5), (2012) 2122-2132.
- B.52. Investigation on the variation of conductivity and photoconductivity of CuO thin films as a function of layers of coating, *Archives of Applied Science Research*, **4** (5), (2012) 2174-2183.
- B.51. Synthesis and Characterization of Nanocrystalline SnO<sub>2</sub> synthesized by precipitation method, ISBN. 978-93-82062-63-9.
- B.50. Determination of optical constants of Al doped ZnO thin films from UV-Vis-NIR spectra,

  Proceedings of National Conference on Frontiers in Spectroscopy,
  (NCOFIS-2012) 276-282 (ISBN 978-93-80264-60-0).
- B.49. Photoconductivity of Multilayered Thin films of Nanostructured Aluminium doped ZnO, (NASAM-2012), *Advanced Materials in Physics* 9-18 (ISBN-13: 978-81-909300-6-2).
- B.48. Photoconducting and photoresonse studies on multilayered thin films of aluminium doped zinx oxide, *Ind. J. Sci and Tech* **5**(3) (2012) 2360-2363.
- B.47. Synthesis and Characterization of TiO2/SiO2 Nano Composites for Solar Cell Applications, *Appl. NanoScience*, DOI 10.1007/s13204-012-0060-5.
- B.46. Effect of Annealing on the Optical and Photoconductivity Studies of Hybrid ZnTe/MgPc Thin Films formed by Vacuum Evaporation, In: *Thin Films and Nanomaterials*, MacMillan Advanced Research Series, Dec 2011, 165-168.
- B.45. Effect of Annealing on Optical and Photo Conducting Properties of ZnO Thin Films by Spin Coating,
- J. Pure Appl. and Ind. Phys., 1 (4) (2011) 240-251.
- B.44. Quantum Logic as the Power of Possibilities,

- Chiedza, 13 (1) (May 2010) 95-104.
- B.43. Implications of Quantum Logic to the Notion of Transcendence, *Pensamiento*, **65** (2009) 947-958.
- B.42. Implications of Dark Matter/Dark Energy to the Understanding of Reality, *Convergence*, **11** (2009) 49-55.
- B.41. Logical approach to Quantum Reality, *Convergence*, **11** (2009) 21-32.
- B.40. Are Human Rights and Health Care Universal?: Reflections on Health Care in India.
  - *Eubios J of Asian and International Biosethic*, **19** (4) (July 2009) 113-121.
- B.39. Isolation and characterization of biologically metal-doped semiconductor polymers,
  - Mater. Chem. Phy., 111 (2008) 517-523.
- B.38. Electrical conductivity as a tool for identification of metal contaminated fish protein,
  - J. Food Engineering, 83 (2008) 405-410.
- B.37. Electrical and electroreflectance studies on ortho-chloranil-doped polyaniline, *Physica B*, **392** (2007) 20-28.
- B.36. Growth and characterization of Phthalocyanine doped anthracene crystals for photoconductivity applications, In: *Physics of Semiconductor Devices* (IWPSD-2003) Ed. K.N. Bhat and A. Das Gupta, Narosa Pub House, New Delhi (2004) pp. 1178-1180.
- B.35. Raman scattering and photoluminescence studies on O<sup>+</sup> implanted silicon, *Physica B*, **337** (2003) 36-41.
- B.34. Three-zone furnace: Apparatus to grow doped crystals from two materials which have wide difference in sublimation temperature, *J. Mater. Sci.*, **38** (2003) 555-560.
- B. 33. Organic semiconductor solar cells: For pollution free energy conversion, In: *Environment, Biodiversity and Bioethics*, F.P. Xavier et al (Ed), LIFE, Loyola College, Chennai, 2002, p. 85-95.
- B.32. Ellipsometry studies on the effect of etching time in porous silicon, **Physica E**, **15** (2002) 243-251.
- B.31. Structural investigation of copper phthalocyanine thin films using X-ray diffraction, Raman scattering and optical absorption measurements, *Phys. stat. sol. (b)*, **229** (2002) 1175-1186.
- B.30. Electrical conductivity of single crystal of anthracene around 273 K, *Bull Electrochemistry*, **18** (2002) 41-44.
- B.29. The role of traps in electrical conductivity and optical absorption in phthalocyanine-doped anthracene co-crystals, *J. Cryst. Growth*, **233** (2001) 583-590.
- B.28. Growth of Phthalocyanine doped anthracene crystal using three zone furnace by vacuum sublimation method,
  - J. Cryst. Growth, 225 (2001) 168-172.
- B.27. Our Mission as Jesuits in Science, Proc. *Int. Conference of Jesuits in Science* (Chennai), 2001 (Jan 4-6) 18-26.
- B.26. Etch Pit Study of pure and doped Potassium Pentaborate (KB5) Single

Crystals,

Convergence, 2 (2000) 24-29.

B.25. Photoelectrochemical studies on [MnMoO2(NCS)(Ox)3(H2O2)]-A novel system for Solar Energy Conversion,

Int. J. Energy Res., 24 (2000) 1351-1358.

- B.24. Growth, thermal and mocrohardness studies of single crystals of potassium penta borate (KB5),
  - J. Cryst. Growth, 218 (2000) 323-326.
- B.23. Role of metal phthalocyanine in redox complex conductivity of polyaniline and aniline black,

J. Por. And Pcs, 3 (1999) 679-686.

- B.22. Photoconductivity measurements in lead phthalocyanine thin films, *Matt. Letts.*, **41** (1999) 5-8.
- B.21. Investigation of manganese-molybdenum-diethyldithiocarbamate complex as a potential system for solar energy conversion, *Int. J. Energy Res.*, **23** (1999) 229-233.
- B.20. Analysis of anthracene single crystal structure using NMR spectrum and current density calculations, *Bull. Electrochem.*, **14** (1998) 430-432.
- B.19. pH-based conductivity studies on fish in a contaminated environment, *Bull. Environ. Contam. Toxicol.*, **61** (1998) 645-649 and In: *Modern Trends in Environmental Pollution and Ecoplanning*, A. Kumar (Ed), ABD Pub., Jaipur, p. 100-107.
- B.18. Solid state electrical conductivity studies on manganese-molybdenum Schiff base polymer,

Bull. Mater. Sci., 21 (1998) 403-407.

- B.17. Conductivity studies in fish in contaminated environment:
  - (i) Industrial tannery, and (ii) Domestic detergent, *Ind. J. Environ. Prot.*, **18** (1998) 495-497.
- B.16. Role of Electric Charges in the Process of Energy Transfer in Physiology, *Phys. Edn.*, **15** (1998) 21-28.
- B. 15. Study of aquatic pollution due to heavy metal by protein-conductivity in fish Clarias batrachus,

In: *Energy Crisis and Environment*, F.P. Xavier et al (Ed), LIFE, Loyola College, Chennai, 1997, p. 137-152.

- B.14. Electroreflectance analysis of organic semiconductor thin films, *Bull. Mat. Sci.*, **20** (1997) 651-665.
- B.13. Conduction mechanism in anthracene as a function of temperature, *Bull. Mat. Sci.*, **20** (1997) 317-323.
- B.12. Conduction mechanism of metal-free phthalocyanine single crystals as a function of temperature, *Bull. Mat. Sci.*, **20** (1997) 297-303.
- B.11. Copper phthalocyanine as an efficient dopant in development of solar cells, *Mat. Res. Bull.*, **32** (1997) 539-546.
- B.10. Single crystal growth of organic photoconductors: phthalocyanine, *Bull. Mat. Sci.*, **19** (1996) 429-435.

B.09. Photoconductivity studies of CdSe<sub>1-x</sub>Te<sub>x</sub> thin films as a function of doping concentration,

Bull. Mat. Sci., 19 (1996) 437-442.

B.08. Band gap study on zinc-doped cadmium sulphide,

Bull. Mat. Sci., 19 (1996) 443-448.

B.07. Organic semiconducting polymers,

In: Conducting Polymers, F.P. Xavier et al (Ed), LIFE, Loyola College, Chennai 1996, p.11-38.

B.06. Photoconductivity in crystalline phthalocyanine,

Bull. Mat. Sci., 18 (1995) 269-275.

B.05. Photoconductivity in thin films of phthalocyanine, Bull. Mat. Sci., 18 (1995) 277-281.

B.04. Photoconductivity of iodine-doped single crystals of phthalocyanine, Bull. Mat. Sci., 18 (1995) 283-287.

B.03. The Body Electrici: Role of electric charges in physiology, Bio. Edn., 11 (1994) 87-93.

B.02. World of Wonders: Study of Organic Semiconductors, Caritas 77 (1993) 24-33.

B.01. Optical and transport properties of phthalocyanine and related compounds (abstract), Disst. Abst. Intern. (b) 53 (1993) 4755-B.

#### C. Inter-disciplinary Research Papers: Science and Religion

C.9. Religion and Science: Are they at Crossroad,

Omega, XVII (2018)1 137-166.

C.8. Christian Perspectives on Science and Religion, Ind. Th. St., 42 (4) (2005) 415-434.

C.7. Life Beyond Death: Scientific Perspectives, Omega 2 (1) (2003) 66-79.

C.6. Eternal flow of Time!,

Ind. Th. St., 39 (1) (2002) 48-76.

C.5. Creation in Evolution,

Jeevadhara (Malayalam) XXIX/170 (1999) 133-153 and Ind. Th. St., 38 (1) (2001) 44-70 and Omega VIII (2) (2009) 110-128.

C.4. Matter-Energy-Spirit,

Vaiharai **3** (3) (1998) 168-187.

C.3. Spirituality of Physics,

Vaiharai 2 (4) (1997) 294-312 and Budhi II (3) (1998) 247-255.

C.2. Science and Theology: Are they at cross-purposes?

Vaiharai 1 (2) (1996) 123-133.

C.1. Leibniz: Physics and Philosophy,

In: (Ed) A. Amaladoss, *Essays on Leibniz*, Satya Nilayam, Chennai (1996) 63-83.

# D. General (Theology, Education, Administration, Environment, etc):

D.99. Ignatian – All the Way (Ignatian Spirituality – Part I and II) The New Leader, 136 (14) 16-31Jul2023 30-32 (Part I);

The New Leader, 136 (15) 01-15Aug2023 30-32 (Part II).

D.98. Millets in Sanga Thamizh Literatures,

In: M. Selvanayagam (Ed), *The Power of Millets*, LIFE Pub., Loyola College, Chennai, 2023, 29-41.

D.97. Millets – A Miracle Resource for Healthy Life,

In: M. Selvanayagam (Ed), *The Power of Millets*, LIFE Pub., Loyola College, Chennai, 2023 8-18.

D.96. The Resurrection of Millets – A Miracle Resource of the Indian Diet, In: M. Selvanayagam (Ed), *The Power of Millets*, LIFE Pub., Loyola College, Chennai, 2023, 1-7.

D.95. Education as Character Formation,

New Frontiers in Edn, 55 (4), Oct-Dec2022 and 56 (1), Jan-Mar2023 55-59.

D.94. Growing into Godness: Ignatian Perspectives,

In: E. Rajendram (Ed), *Re-discovering Inigo the Pilgrim in South Asianness*, ISPCK, Delhi, 2023, pp.37-53.

D.93. The Youth: The Future of any Organization and any Nation, *Rally*, Jan 2023 5-6.

D.92. Seeing All Things Anew – Ignatian Integrated Perspectives on Professional Education,

*New Frontiers in Education*, **55** (2 &3), Apr-Jun & Jul-Sep 2022 76-85.

D.91. Fullness is Emptying,

In Christo, 60 (4) 2022 195-199.

D.90. Imagineering Prayer,

In Christo, 60 (3) 2022 154-162.

D.89. Ascending Awareness and Descending Grace,

VJTR, 86 2022 536-541.

D.88. Building Agile Teams in the Post Pandemic World, *New Frontiers in Education*, **54** (4) 2021 33-37

D.87. No One enters the same Reality Twice,

Research and Reflection on Education, St Xavier's College of Education, 19(4), Oct-Dec2021, 50-52.

D.86. Marching Together with the Attitude of Gratitude,

Rally, 24 (12) Dec 2021 5-7.

D.85. The Ignatian World View – Contemporary Interpretation, In: *Rowing into the Deep...*, Xavier Alphonse (Ed), ICRDCE Pub., Chennai (2021) 287-294.

D.84. Child Protection – Awareness and Access,

*New Frontiers in Education*, **54** (2 & 3) 2021 82-86.

D.83. Jesuit Education for Leadership Formation,

Ignatian Year Celebration 2021-2022, St Xavier's College, Kolkata, Vol-I (Jul-Sep, 2021) 12-16.

D.82. Have you found Meaning in Life?

INIgo Year INItiative, Oct-Dec2021.

D.81. Religious Dogmas and Social Values,

Rally, 24 (9), Sep 2021 5-7.

D.80. Bending Down – Beaten Up – Beaming Out,

In Christo, 59 (3) Jul2021 200-204.

D.79. Frontline Crusader for the Liberation of the Marginalized (Fr Antony Raj SJ – In Memoriam), In; Anbu Nirai Kalam, Nandhni Krishnan, Thudi Pub., Chennai, Jul2021, pp. 46-58.

D.78. Teaching: Dream or Nightmare?, New Frontiers in Education, **53** (4) Oct-Dec2020 and **54** (1) Jan-Mar2021 49-55.

D.77. 'You have won, O Galilean', *In Christo*, **59** (1) Jan 2021 46-51.

D.76. Universal Apostolic Preferences: Roadmap of the Jesuits (2019-2029), In: (Ed Joe Arun), *Province Apostolic Preferences*, Jesuit Chennai Province, Chennai, **2021** 188-205.

D.75. Artificial Intelligence and Advancement of Society, *Impact of Artificial Intelligence on Business and Society* (AIBS-2021),

LIBA, Chennai Feb**2021** 21-30.

D.74. Ethics of Business during the Pandemic,

Nurturing Research (Faculty Seminar Series 20-21, BEACON), LIBA,
Chennai, Mar**2021** 1-6

D.73. A Book that Made me Think (Ichigo Ichie), INigo Year INItiative, Oct-Dec2020.

D.72. The World and I: A Bird's Eyeview of Jesuit Education, *Vidyajyoti J. Theol. Reflections*, **84** (2020) 690-704.

D.71. Reality and Mirage, *In Christo*, **58** (4) Oct2020 271-275.

D.74. Crisis – Creativity – Cleverness, New Frontiers in Education, **53** (2-3) Apr-Sep 2020 50-55.

D.73. Marching with the Migrants, *JIVAN*, Aug 2020, 22-23.

D.72. Remembrance and Reliving, *In Christo*, **58** (3) July 2020 190-196.

D.71. Durable Solution for the Sri Lankan Refugees, *Local Integration* (Consultation Report), JRS/LISSTAR, Feb 2020, 13-16.

D.70. Jesuit Worldwide Learning, *Jesuit Year Book* (2019) 138-141.

D.69. Implications of Dark Matter/ Dark Energy to the understanding of Reality, *Caritas*, June 2016 – May 2017 (2018) 36-59; *Omega*, XIX (2020) 1 112-130.

D.68. GC 36 was an enriching, energizing Event, *Caritas*, June 2016 - May 2017 (2018) 23-31.

D.67. Loyola Institute of Frontier Energy (LIFE), *JIVAN*, July 2018, 18-19.

D.66. A Long Journey to Liberation: Jesuit Republics in South America, *Vagdevi*, **21** (1) (2017) 5–23 and *Caritas* (2016) 63-78 (Pub July 2017).

D.65. Our Challenges and Responsibilities towards tackling the climate Change (co-auth.)

In: Engineering Response to Climate Change, LICET Pub., Chennai (2016)

1 - 18. ISBN: 978-81-932993-0-2.

D.64. The Relevance of Ethics and its Essential Role in modern Biotechnology, (co-auth.)

In: *Engineering Response to Climate Change*, LICET Pub., Chennai (2016) 19 - 25. ISBN: 978-81-932993-0-2.

D.63. Ethical Dilemma towards Food Security in Indian Scenario and the Role of Higher Educational Institutions, (co-auth.)

In: Engineering Response to Climate Change, LICET Pub., Chennai (2016) 69 - 72. ISBN: 978-81-932993-0-2.

D.62. Global Warming and Climate Change: Issues and Challenges in 21st Century in India, (co-auth.)

In: *Engineering Response to Climate Change*, LICET Pub., Chennai (2016) 73 - 79. ISBN: 978-81-932993-0-2.

D.61. Need for Development of Ethics in Curriculum for Different Streams of Students in Higher Educational Institutions, (co-auth.)

In: *Engineering Response to Climate Change*, LICET Pub., Chennai (2016) 81 - 84. ISBN: 978-81-932993-0-2.

D.60. Need of Bioethics in Energy and Environment Research, (co-auth.) In: *Engineering Response to Climate Change*, LICET Pub., Chennai (2016) 85 - 95. ISBN: 978-81-932993-0-2.

D.59. Becoming all for all: Jesuit Global Contribution, Vagdevi 20, **10** (2) (2016) 57-73.

D.58. Jesuit Contribution to Science,

In: *Mastery Meets Mystery*, (Ed) A. Pamplany, Serial Pub., New Delhi, (2015) 414-420.

D.57. Becoming all for all, *Magis* (2014) 6-11.

D.56. Road travelled and Miles to go,

Jesuit Year Book 2016 135-137.

D.55. Forming Engineers to engineer a just Society,

Jesuit Year Book 2016 121-123.

D.54. Caste Politics and Development of the Marginalized Groups in India – Strategies for Empowerment,

Man and Society, XII (2015) 23-46.

D.53. Who am I and Whose am I?,

*In Christo* **53** (1) (2015) 13-20.

D.52. Twin Jubilee of the Jesuits, *Magis* (2014)

D.51. Road Less Travelled,

*Magis* (2013)

D.50. Anatomy of Humiliation and Signs of Hope,

Jeevadhara, XLI (241) (2011) 26-34 and

In: *Dalit Studies*, C. Arockiaraj and D.M. Zacharias (Ed), CBCI (SC/BC) Center, New Delhi, 2022, pp.53-61.

D.49. Right to Food as Invitation to Sharing,

The New Leader, 123 (20), Oct 16-31, 10-13, 2010.

D.48. St Francis Xavier: Man with Affinity to new Frontiers, *125<sup>th</sup> Jubilee Souvenir*, St Francis Xavier Hr Sec School, Tuticorin, Mar 2010, pp. 1-5.

D. 47. Education of Excellence leading to Achievement, *In Christo* **47** (2) (2009) 92-97.

D.46. Locus and focus of ministerial life, *In Christo* **46** (2) (2008) 66-74.

D.45. Benchmarking practices towards excellence: A view of student-supportive progression,

In: Proceeding NAAC Sponsored National Seminar on Internal Quality Assurance System Innovations and Initiatives, Feb 19-20 2008 (Fatima College, Madurai), 39-49.

D.44. The Inner determines the Outer: Towards quality Education, *In Christo* **45** (1) (2007) 54-73.

D.43. Jesuits and higher Education - A global View, *IGNIS* **XXXV** (IV) (2006) (No.4) 5-19.

D.42. Education for the Marginalized, *In Christo* **44** (3) (2006) 202-212 and *Caritas* **91** (2) (2006) 52-63.

D.41. Power within for Empowerment,

J. All India Assn for Edn Research, 17 (1 and 2) (2005) 72-79.

D.40. Looking Back ... (Review of Mission in the Province Oct 1999 – Jul 2005, *Caritas* **90** (2) (2005) 59–76.

D.39. An excellent Teacher is an effective Learner, *Caritas* **90** (2) (2005) 39-43.

D.38. Better Relationship between Bishops and Religious, *Caritas* **90** (2) (2005) 28-38.

D.37. The World we live in, *Caritas* **90** (1) (2005) 44-49.

D.36. Union of Minds and Hearts, *Caritas* **90** (1) (2005) 04-14.

D.35. Future of Education,

*Caritas* **89** (2) (2004) 60-75; In: *Education as Mission*, (Ed) L. Stanislaus, Ishvani Kendra/ISPCK, Pune (2004) 199-214.

D.34. Priest: Shepherd and Liberator, *In Christo* **42** (3) (2004) 125-134 and *Caritas* **89** (2) (2004) 21-33.

D.33. Mary the Indomitable: A Profile, *In Christo* **42**(1 & 2) (2004) 29-36.

D.32. A Mind to share and a Heart to understand (Prov Meet talk Dec 29<sup>th</sup> 03), *Caritas* **89** (1) (2004) 10-21; *MNL* (Supplement) Jan 2004.

D.31. Inaugural Talk at JEPASA Meeting: Vailanganni (Oct 15<sup>th</sup> 03), *Caritas* **89** (1) 2004 04-09.

D.30. Affective Maturity: Meaningful Relationship, *In Christo* **41** (3) (2003) 190-200; and *Caritas* **88** (2) (2003) 17-27.

D.29. Jesuit Education in T.N.: Achievements and Challenges, <u>JIVAN</u> **2** (4) Apr 2003, pp.23f.

D.28. Religious-Commitment and Mission-Consciousness: Challenges to the

Society of Jesus in India,

Caritas **88** (1) (2003) 39-56; In: *Jesuits in India – Vision and Challenges* (Ed) Delio De Mendonca, Gujarat Sahitya Prakash (2003) 205-224.

D.27. The Lord is my Cup and Portion and my Rock, *Caritas* **88** (1) (2003) 11-16.

D.26. Charism of Jesuit Vocation,

In: *Set the World on Fire*, Ed. X. Alphonse, Pub: Jesuit Madurai Province, Dindigul (2002) 9-12.

D.25. Safeguarding Human Dignity and Equality: New Madura Mission,
In: Born Again – Jesuits Back in Tamil Nadu,
Ed: L. Fernando and B. D'Sami, Pub: Jesuit Madurai Province, Dindigul (2002) 10-16.

D.24. Seeing the World in a grain of Sand: Self Esteem for meaningful Mission, *Caritas* **87** (2) (2002) 4-16; and *In Christo* **40** (4) (2002) 1-12.

D.23. Radical Discipleship. *MNL* June 2002 7-8.

D.22. Discipleship: To imitate, to inculturate, and to dialogue, *In Christo* **40**(2) (2002) 12-18; and *Caritas* **87** (2) (2002) 17-24.

D.21. Culture of Life vs Culture of Death, *Caritas* **87** (1) (2002) 4-9.

D.20. From Povery to Power,

In: A. Amaladass (Ed), *Profiles of Poverty and Networks of Power*, DACA Pub., Madurai (2001) 13-20.

D.19. Our Spirituality: Integrated or Disoriented? *In Christo* **39** (3) (2001) 136-148; and *Caritas* **86** (1&2) (2001) 12-25.

D.18. To struggle without counting the cost, *The Rally* **5** (7) July 2001 3-4.

D.17. Eucharist: A Gift of Life, *In Christo*, **39** (1) (2001) 1-5.

D.16. Decision-Making, Administration and Time-Management: An Ignatian Perspective,

IGNIS XXIX (4) (2000) 3-10.

D.15. Loyola 2000: Meeting of the Major Superiors at Loyola *JIVAN*, Nov 2000, 4-10.

D.14. Transformation of Society through Education, *New Frontiers in Education* **XXIX** (3) (1999) 273-283 (Jul-Sep).

D.13. Seeing in Stages,

*In Christo* **37** (4) (1999) 47-56.

D.12. Putting on Christ,

*In Christo* **37** (2) (1999) 26-36.

D.11. Promises to keep and Miles to go, *Caritas* **83** (1) (1998) 52-65.

D.10. Changing trends in Education, *Edn. Monitor*, **1** (6) (1998) 24-28.

D.09. The Ignatian intellectual formation and affective transformation, *IGNIS*, **XXVII** (1) (1998) 53-62.

D.08. Education: An attitude-formation or skill-training? *Edn. Monitor*, **1** (1) (1998) 1-6.

D.07. Time management = Personal Management, *University News*, **35** (29) (1997) 5-9.

D.06. Tomorrow's Today,

IGNIS XXVI (1997) 14-27; and Caritas 81 (1997) 39-50.

D.05. Gospel values through Education (Tamil), *Marai Aruvi* **21** (1997) 101-112.

D.04. Jesuits of Madurai Province Teaching Science in Colleges and High Schools,

Caritas 80 (1&2) (1996) 25-31.

D.03. The art of growing in friendship, *In Christo* **34** (1996) 240-249.

D.02a. Let my people go,

JIVAN 17 (1996) 23-25.

D.02b. Religious Life: Answer to Yahweh's Call, *Caritas* **80** (1996) 40-44.

D.01. Varusanadu Mission - A mission with a difference, *JIVAN* **16** (1995) 21-23; *Caritas* **79** (1995) 8-15; and New Leader **108** (May 1-15, 1995) 27-28.

#### Symposia/Seminars organized

16. National Conference on: **Engineering Response to Climate Change** at Loyola-ICAM College of Engineering and Technology (LICET), 15-17 Jan 2016.

15. 14th Asian Conference on Bioethics.

LIFE and LICET collaboration (Nov 19-23 2013).

- 14. National Conference on 'Green Energy for Sustainable Development', Loyola College (Jan 7-8, 2011) Convener.
- 13. International conference on 'Recent Trends in Sensor-Development for the Assessment and Management of the Environment',

Loyola College, Chennai (Jan 8-10, 2009) - Convener

12. National conference on 'Bidiversity, Bioresources and Biotechnology for sustainable livelihood of rural community',

Loyola College, Chennai (Jan 18-20, 2008) - Convenor

11. National conference on 'Environmental Biosensors',

Organizing Secretary, Loyola College, Chennai (Jan 11-12, 07).

10. International Conference on "Environment and Bioethics",

Convenor, Loyola College, Chennai (Jan 1999).

09. Seminar on "Materials for Energy Conversion",

Convenor, Loyola College, Chennai (Mar 1998)

08. National Conference on "Energy Crisis and Environment", Convenor, Loyola College, Chennai (Mar 1997).

07. Seminar on "Electrophysiology"

Convenor, Loyola College, Chennai (Feb 1997).

06. Seventh National Seminar on Crystal Growth,

Organizing committee, Alagappa University, Karaikudi (Jan 1997).

05. Seminar on "Solar Energy Prospects for the Future",

Convenor, Loyola College, Chennai (Mar 1996).

- 04. National Conference on: **Fundamentals of Crystal Growth**, Organizing committee, Anna University, Chennai (Jan 1996).
- 03. Seminar on "Conducting Polymers",

Convenor, Loyola College, Chennai (Feb 1995).

- 02. Seminar on "**Recent Trends in Laser Applications**" Convenor, Loyola College, Chennai (Jan 1994).
- 01. Seminar on "**Recent Trends in Crystal Growth**", Convenor, Loyola College, Chennai (Jan 1993).

#### Papers presented in Symposium/Seminar/Conference: (authored/coauthored)

62. Ethical Issues and Challenges in New Normal Covid-19 in Health Services,

22<sup>nd</sup> Asian Bioethics Conference, International Medical University, Kuala Lumpur, 15-17 May 2023.

- 61. Ethical issues and challenges in new normal COVID-19 in education, International conference on new normal COVID-19 and ethical issues related to public health and education, LIFE, Chennai, 12<sup>th</sup> and 13<sup>th</sup> December, 2022.
- 60. Universal peace building through effective implementation of
  Environment Ethics through positive thinking and effective action –
  19th International Scientific Conference of ISCB, Okayama, Japan, 12 Nov
  2022.
- 59. Bioethics and Global Health with reference to hand washing in Children, Conference on Bioethics, Sustainability and Global Health, 8th December 2018. LICET, Chennai, India.
- 58. Community based Disaster Preparedness and Management to face the Impact of Climate Change with Reference to Children Asian Bioethics Association (ABA) Conference, Kaohsiung, Taiwan, 14 Nov 2018.
- 57. Bioethics of Climate Change and Adaptation for Children and Youth Wellbeing in African and Asian Regions organized by Africa Asia International Forum on Public Healthcare Bioethics for Children and Youth, 22-24 Aug 2018, Durban (South Africa)
- 56. **Education of the Marginalized** International Association of Jesuit Universities, Bilbao (Spain) Jul2018.
- 55. **Bioethics and Global Public Health Training Workshop** organized by American University of Sovereign Nations (USA), Medical Laboratory Association of Nepal and Eubios Ethics Institute, New Zealand, Kathmandu, Nepal 1-3, Mar2018 –

Title: "Bioethics and Global health with reference to Hand washing in Children"

54. International Conference on Materials for Energy and Environment

(ICMEE2018), Feb 22 - 23, 2018 - organized by Loyola Institute of Frontier Energy (LIFE), Loyola College, Chennai 600034.

Title: "Energy, Environment and sustainable development for the survival of Humanity"

53. Joint Bioethics Workshop – Organized by Gangneung-Wonju National University (GWNU) and American University of Sovereign Nations (AUSN) – Title: The Jesuit Worldwide Learning Initiative towards Holistic Formation of the Marginalized through Higher Education to transform the World –

Research Institute of Natural Science, Gangneung-Wonju National University, Gangneung, Republic of Korea, 30 October 2017.

52. 18th Asian Bioethics Conference (ABC 18) –

Title: Is Bioethics relevant

today for Climate Change Deliberations and the Future of Health? – Organized by the Korean Bioethics Association -

Avison Biomedical Research Center, Yonsei University, Seoul, South Korea, Oct 25-27 2017.

51. Bioethics for Biodiversity: Conflicts between over exploitation and Preservation. Resolving Biodiversity conflicts: Comparisons between India and Equador.

PERNAS 8 JBHKI & ABC 17, Yogyakarta, Indonesia (12-17) November, 2016.

50. 17<sup>th</sup> Asian Bioethics Conference –

**Title: "Resolving Biodiversity Conflicts:** 

**Comparison between India and Ecuador**" – organized by Peernas 8 JBHKI & ABC 17, jointly organized as Bioethics and Humanity 8<sup>th</sup> National meeting of Jaringan Bioetka dan Humaniora Kesehatan, Indonesia (Nov 14-17 2016).

49. 16<sup>th</sup> Asian Bioethics Conference –

Title: "The Ethics of eWaste Management"

– organized by St Paul University (Quezon City) and De La Salle University (Manila), 4-8 Nov 2015.

48. 16th Asian Bioethics Conference –

Title: "The Relevance of Ethics and its

**essential Role in modern Biotechnology**" – organized by St Paul University (Quezon City) and De La Salle University (Manila), 4-8 Nov 2015.

47. Bioethica Universitaria 2015 –

Title: "Need of Bioethics in Energy and

**Environmental Research**" - organized by the Central University of Ecuador, Quito (28th and 29th April, 2015).

- 46. Community based disaster preparedness and enhancement of sustainable livelihood for the inhabitation of Pulicat lake. Looking beyond disaster international youth forum 4, held in St.Paul's University, Manila, Philippines from April 2-6, 2014.
- 45. The first UNESCO conference on Ethics education for All "searching of

- learning to live together: Asia Pacific" -
- Title: "Ethics curriculum development for Higher Educational Institution", organised by UNESCO, Bangkok (28th to 30th October, 2014).
- 44. First International Conference of the Asia-Pacific Society for Agricultural and Food Ethics at Chulalonkorn University, Bangkok (Thailand) Title: 'Ethical Dilemmas towards Food Security in Indian Scenario and the Role of Higher Educational Institutions' (Nov 28-30 2013).
- 43. I st Biennial international congress on 'Urban Green Spaces', organised by Center for Urban Green spaces, Aravali foundation for Education, Delhi Government and Department of Environment, government of India, New Delhi (5th to 7th, March, 2012)
  - Title: Role of Educational Institutions in developing Green Spaces inn the Urban Areas.
- 42. International Conference on Frontiers in Materials Science for Energy and Environment (ICFMS 2012),
  - Loyola College, Chennai (Jan 11-13, 2012).
- 41. Role of Educational Institutions in developing Green Space in the Urban Areas.
  - 1st Biennial International congress on Urban greenspaces (5-7 March, 2012), New Delhi.
- 40. Ethics and Climate change: What is our Role and Responsibility as Custodians of our Mother Earth?
  Ethics and climate change: energy Ethics after Fukushima (29th to 31st August, 2011), Bangkok, Thailand.
- 39. Need for development of ethics curriculum for different streams of students in higher education institutions. Ethically inclusive practices and policies (9th to 11th, November, 2011).
- 38. 2nd International Conference on Advanced Nanomaterials and Nanotechnology (ICANN 2011), Indian Institute of Technology, Guwahati, Assam (Dec 8 10<sup>th</sup> 2011)
- 37. National Seminar on: Global Warming and Climate Change on: "Issues and Challenges in 21st Century India", Suri Vidyasagar College, West Bengal, Nov 20-21, 2010.
- 36. National Seminar on 'Reimaging the Relationship between Christianity and Dalit Liberation'
  - Title: "Anatomy of Humiliation and Signs of Self-Respect", Asian Centre for Cross-Cultural Studies, Panayur, Chennai, Sep 10<sup>th</sup> and 11<sup>th</sup>, 2010.
- 35. The Eleventh Asian Bioethics Conference (ABC 11)/Fifth UNESCO Asia-Pacific School of Ethics Roundtable Bioethics and Policy Conference, Title: "Anthropogenic Activities and Ethical Dilemma towards Climate Change and Future Security", National University of Singapore (NUS), Singapore Aug 01-02, 2010.
- 34. National Conference on: 'Renewable Energy Sources', Yadava College, Madurai Mar 4-5, 2010.

- 33. Workshop on Scientific Writing and Presentation, Women's Christian College, Chennai Feb 18<sup>th</sup> 2010.
- 32. International Conference on Women and Education, Immaculate College of Education, Puducherry – Feb 5-6, 2010 Title: **Women in Science and Technology** – Panel discussion)
- 31. World Commission on the Ethics of scientific Knowledge and Technology COMEST, Petaling Jaya, Selangor, Malaysia June 15-19 '09
  Title: Relevance and Experience of teaching Bioethics to
  undergraduate students in Arts and Science College A case study)
- 30. 9th Asian Bioethics Conference (UNESCO), Yogyakarta, Indonesia, Nov 3-7 '08

# Title: Are Human Rights and Health-Care universal?

- 29. UNESCO Conference on Ethics and Energy Technologies, TN Dr Ambedkar Law College (in collaboration with UNESCO Bangkok), Sep 22-23, 08 Title: **Energy Equity**
- 28. Metanexus Institute's 9<sup>th</sup> Annual Conference, Tile: **Subject, Self, and Soul**, Universidad Pontificia Comillas, Madrid, July 13<sup>th</sup> to 17<sup>th</sup> '08. (Invited participant from India)
- 27. 6<sup>th</sup> National Conference on the emerging trends in crystal growth and nano materials, Loyola College, Chennai (Feb 28-29, 2008).
- 26. National Seminar on Internal Quality Assurance System Innovations and Initiatives, Fatima College, Madurai (Feb 19-20 2008).
- 25. International Conference of Jesuits in Science and Religion, Pune (Jan 2<sup>nd</sup> 07).
- 24. Multidisciplinary Research, Brainstorming session on Multidisciplinary Research, Loyola College, Chennai (Dec 8-9 '06).
- 23. National Workshop on Student Quality Circles –

# Title: **Developing Methodologies and Strategies to ensure Quality Education**, St Theresa's College, Eluru (Sep 26, 2006)

- 22. 4<sup>th</sup> ISE Spring Meeting, Singapore (Apr 17-20, 2006).
- 21. International Symposium on Chemical Education, Loyola College, Chennai (Jan 4-7, 2004).
- 20. National seminar on 'Environment, Biodiversity and Bioethics Title: **Current trends and future directions'**, Loyola College, Chennai (Sep 20-22 '01).
- 19. International conference on 'Environment and Bioethics', Loyola College, Chennai (Jan '99).
- 18. DAE Solid State Physics Symposium, Dept of Physics, Kurukshetra University, Kurukshetra, Haryana (Dec 27-31, '98)
- 17. 4th World Congress of Bioethics, Nihon University, Tokyo, Japan (Nov '98).
- 16. 2<sup>nd</sup> International Symposium on Phthalocyanines, Pollock Halls, University of Edinburgh, Scotland (Sep 21-23 '98).
- 15. Seminar on "Materials and Characterization", Central Electrochemical Research Institute, Karaikudi (July 13 '98)
- 14. National symposium on 'Environmental Pollution and Ecoplanning', S.K. University, Dumka (Mar 20-21 '98).

- 13. National Conference on Advances in Condensed Matter Physics, Raman School of Physics, Pondicherry University, Pondicherry (Feb 26-28 '98).
- 12. National Seminar on Advances in Science and Technology Polymeric Materials, Indian Institute of Technology Madras, Chennai (Dec 19-20 1997).
- 11. Chemists' Meet 1997, Indian Institute of Technology Madras, Chennai (Dec 1997).
- 10. National Conference on Energy Crisis and Environment, Loyola College, Chennai (Mar 7-8 1997).
- 09. Proceedings of the 4<sup>th</sup> National Seminar on Physics and Technology of Sensors, Sardar Patel University, Gujarat (Feb 1997).
- 08. Sympoisum on Current Status on Solar Energy Materials and Systems (Invited Paper), Anna University, Chennai (Feb 1997).
- 07. Seventh National Seminar on Crystal Growth (Invited Paper), Alagappa University, Karaikudi (Jan 1997).
- 06. National Conference on Fundamentals of Crystal Growth, Anna University, Chennai (Jan 1996).
- 05. Sixth National Seminar on Crystal Growth, Anna University, Chennai (Feb 1995).
- 04. Fifth National Seminar on Crystal Growth, Anna University, Chennai (Nov 1993).
- 03. American Physical Society Meeting, Washington, USA (Apr 1991).
- 02. American Physical Society Meeting, Cincinnati, USA (Mar 1991).
- 01. American Physical Society Meeting, St Louis, USA (Mar 1989).

**Visiting Scientist** : Jesuit Institute at Boston College, USA

June 2010, May-June 2009

Boston College, Chestnut Hill, USA

Summer research (1993-2016)

Stuttgart University, Germany

October 1998 – September 1999

**Research Institute Named:** Antony-**Xavier** Interdisciplinary Scholastics (AXIS)

DACA, Madurai

#### Patents:

- a. Digital Humidity Sensor (LIFE 934/Che/2003 2008: extended for 20 years)
- b. 'Temperature sensitive three-zone furnace' (Govt of India File No. MAS/2002/964 Patent pending)

#### **Resource Person:**

- For the Religious Congregations: i. Retreat; ii. Orientation programs; and iii. Guide for Chapter Meetings
- On **Time Management** over 100 workshops conducted in India, Sri Lanka, Thaiwan, Hongkong)
- on Internal Quality Assurance System Innovations and Initiatives.

Fatima College, Madurai (Feb 19-20 2008).

• on Student Quality Circles – Developing Methodologies and Strategies to ensure Quality Education,

St Thresa's College, Eluru (Sep 26 2006).

• on 'Individual and group Effectiveness and Time Management'

AIACHE National Program for College Teachers, Bangalore (May 2006).

- on "Personality Development and Counseling" Sri Y.S.R.R. Loyola Degree College & Sri Y.S.R.R. Polytechnic College, Pulivendla (Dec 1997).
- on "College Autonomy" St Joseph's College, Irinjalakuda (Jan 1996), and Vimala College, Thrissur (Mar 1996)
- on "Deemed University Status" (Nov 1995)
   Loyola College, Chennai, St Joseph's College, Trichy,
   Arul Anandar College, Karumathur, St Xavier's College, Palayamkottai
- Reviewer: InderScience Pub Int. J. of Indian Culture and Business Management (2018 - )

#### **Awards**

- : 1. SSLC National Merit Scholarship (1969)
- 2. BSc (Distinction) Merit Scholarship (1977)
- 3. MSc (Uni. Rank) Merit Scholarship (1979)
- 4. Yeddanapalli Research Award (1996, 1997 & 1998)
- 5. Asia/Pacific: Who's Who (1998, p. 426)
- 6. Best Citizens of India Award (1999)
- 7. Man of Achievement Award (1999)
- 8. Best Paper Award: (July 1997)- For the research

paper presented in the National Conference in Central Electrochemical Research Institute (CECRI), Karaikudi, India.

9. Best Paper Award: (Jan 2004) – For the research paper presented in the International Symposium on Chemical Education, Loyola College, Chennai, India.

#### Research Guide:

#### PhD: Completed

- 1. A.R. Inigo Conducting Polymer (UK)
- 2. Lawrence Selvaraj Co-Crystal of Pthalocyanine and Anthracene (USA)
- 3. Prabakaran Porous Silicon (**Portugal**)
- 4. Arockiadoss Conductivity of fish protein in polluted environment (MK Uni.)
- 5. Danis Ponniah Structure analysis of organic photoconductors using Raman Scattering (**Dindigul**)
- 6. Merline Shyla Organic dye for solar cell fabrication (LCC)
- 7. Immanuel Organic Thin Film Transistors: Research in Italy (**Germany**)
- 8. Rajesh Solar cell fabrication using sol-gel method (Chennai)
- 9. Ganesh Co-crystalization for solar cell (Chennai)

- 10. Jerome Manyahi Transcendence in Quantum Mechanics (**Tanzania**)
- 11. CSA Raj Inorganic-Organic photoconductivity (Madurai)
- 12. Arun Kumar organic-organic photodiode (**Japan**)

### **MPhil**: (Theses completed)

- 19. Photoelectric Response of Carbon-Nitrogen doped TiO<sub>2</sub> Thin Film
  - Bijay (Jul 2010).
- 18. A Study on the Gravitational Force
  - Rajesh (Jul 2010).
- 17. Photoconductivity Studies of Inorganic-Organi Compounds: ZnO, CuPc, Pani A. Vidyaganga (Sep 2008).
- 16. Enhancing the Photoconductivity of Copper Phthalocyanine doping with Perylene A. Amala Rani (Sep 2008).
- 15. Growth of n-Zinc Oxide on various substrates using pulsed laser deposition (PLD) and its photoconducting properties
  - G. Naresh Kumar (Sep 2007).
- 14. Investigation of transport properties as a function of porosity in porous silicon J. Merline Shyla (Oct 1999).
- 13. Transport properties of n-type silicon and porous silicon Jolly Sebastian (Sep 1998).
- 12. Conductivity studies on p-type silicon and porous silicon X. Beatrice Jasmine Jayanthy (Sep 1998).
- 11. pH-based conductivity studies on fish in contaminated environment T. Arockiadoss (Dec 1997).
- 10. Analysis of single crystal of anthracene with respect to transport properties S. Lawrence Selvaraj (Dec 1997).
- 09. Structure analysis of organic compounds using Fourier transformation Raman spectroscopy J. Danis Ponniah (Nov 1997)
- 08. Transport of charge carriers in polyaniline doped with copper phthalocyanine M.K. Rosy (Oct 1997).
- 07. Construction of solar cells using manganese-molybdenum diethyldithiocarbamate complex and photoconductivity studies on manganese (II) molybdate G. Balaji (Apr 1997).
- 06. Transport of charge carriers in fish protein A. Claude (Dec 1996).
- 05. Generation, absorption and transport of charge carriers in CuPc A. Arulselvi (Aug 1996).
- 04. Conduction mechanism of metal-free phthalocyanine single crystals as a function of temperature Ayona Simon (Nov 1995).
- 03. Bandgap study of anthracene as a function of temperature Jeena V. Joseph (Oct 1995).
- 02. Bandgap study on zn-doped cadmium sulphide T.K. Anee (Sep 1994).
- 01. Photoconductivity studies of CdSe<sub>1-x</sub>Te<sub>x</sub> thin films as a function of doping concentration D. Ravichandran (Aug 1994).

# Membership

- 1. Fellow of Society of Environmental Sciences (Life member since 1998)
- 2. American Association of Physics Teachers

(1997-1999)

- 3. American Physical Society (1986-1993)
- 4. Indian Physics Association (1992 )
- 5. Indian Association of Physics Teachers (Life member since 1995)
- 6. The Society for Advancement of Electrochemical Science and Technology (Life member since 1997).

#### **Academic Positions**

- 1. Global Chief Academic Officer, JWL (2023 ); Vice President for Academics and Research, Jesuit Worldwide Learning (JWL), Geneva, 2017-2019.
- 2. Gasson Prosfessor @ Boston College, USA (2017-2018)
- 3. Rector and Vice President, Loyola Institutions, Chennai (2019-2023).
- 4. Founder-Director, Loyola-ICAM College of Engineering and Technology (LICET) (2009-2016)
- 4. Provincial of the Jesuit Madurai Province (1999-2005)
- 5. Chairman of the Governing Bodies of Jesuit Colleges and School in Tamilnadu (1999-2005)
- 6. Member of Board of Studies for Crystal Research, Alagappa University, Karaikudi (1997-2000).
- 7. Founder-Director, Loyola Institute of Frontier Energy (**LIFE**), Loyola College, Chennai (1995- 2010)
- 8. Senate Member, Satyanilayam (College of Philosophy), Chennai (1995-1997 and 2015-2017).
- 9. Member of the Governing Body, Loyola College, Chennai (1994-1998)
- 10. Academic Vice Principal, Loyola College, Chennai (1993-1998)
- 11. Chief Editor of 'Convergence', a quarterly interdisciplinary journal devoted to physical and life sciences with a focus on energy and environment, LIFE (1999 2016)

#### **Webinar Talks:**

Physics and Chemistry in unraveling the mysteries of Biology (Tokyo 2017) <a href="https://www.youtube.com/watch?v=ot0XuP3C8cU">https://www.youtube.com/watch?v=ot0XuP3C8cU</a>

Science and Religion – Are they at Cross-Roads? (Gasson Lecture, BC 2018)

https://www.youtube.com/watch?v=ANmN1uxQuhI

https://www.youtube.com/watch?v=ANmN1uxQuhI&t=240s

Loyola (Chennai): https://www.youtube.com/watch?v=ANmN1uxQuhI&t=240s

#### Dark Matter and Dark Energy

https://www.youtube.com/watch?v=aqpN7pzl64Y

LICET: <a href="https://www.youtube.com/watch?v=4UswrgkJy8Y&feature=youtu.be">https://www.youtube.com/watch?v=4UswrgkJy8Y&feature=youtu.be</a> Creighton: <a href="https://piweo.com/user38763154/review/331845381/4ea186c809">https://piweo.com/user38763154/review/331845381/4ea186c809</a> <a href="https://jaydrop.creighton.edu/message/KeKXOkd2TmejS9ayM27CxG">https://jaydrop.creighton.edu/message/KeKXOkd2TmejS9ayM27CxG</a>

#### **Time Management**:

Life Voyage: Doing vs Being (Time Management) <a href="https://www.youtube.com/watch?v=dCuVSYViMvg">https://www.youtube.com/watch?v=dCuVSYViMvg</a>

Time Management as Energy Management <a href="https://www.youtube.com/watch?v=yinw-RXizlg">https://www.youtube.com/watch?v=yinw-RXizlg</a>

Stress and Conflict Management <a href="https://www.youtube.com/watch?v=k-y0z-UAbwQ">https://www.youtube.com/watch?v=k-y0z-UAbwQ</a>

Befriending Stress: Stress Management in the Context of Covid-19 <a href="https://www.youtube.com/watch?v=KeK2OdshM84">https://www.youtube.com/watch?v=KeK2OdshM84</a>

Motivation and Goal-Setting https://www.youtube.com/watch?v=N7IrVwSEbvU

Decision-Making and Discernment https://www.youtube.com/watch?v=dofa5eGXbOA

Time Management Matrix and Multitasking <a href="https://www.youtube.com/watch?v=E4nUf7bbIY0">https://www.youtube.com/watch?v=E4nUf7bbIY0</a>

Suicide – A Solution? https://www.youtube.com/watch?v=ftYXVFs7syM

Perspectives of Jesuit Higher Education <a href="https://www.youtube.com/watch?v=nygz9EbD24g">https://www.youtube.com/watch?v=nygz9EbD24g</a>

Marching with the Migrants <a href="https://www.youtube.com/watch?v=dpshMFYptJE">https://www.youtube.com/watch?v=dpshMFYptJE</a> <a href="https://www.youtube.com/watch?v=XRFVQDLz844">https://www.youtube.com/watch?v=XRFVQDLz844</a>

Jesuit Universal Apostolic Preferences <a href="https://www.youtube.com/watch?v=w\_zlVrSIxts">https://www.youtube.com/watch?v=w\_zlVrSIxts</a>

Biblical Leadership https://www.youtube.com/watch?v=iEbpGDILYjA

Global Contributions of the Jesuits: Becoming All for All <a href="https://www.youtube.com/watch?v=G4eFxt2IGYg">https://www.youtube.com/watch?v=G4eFxt2IGYg</a> <a href="https://www.youtube.com/watch?v=bgJbMLcTcxY">https://www.youtube.com/watch?v=bgJbMLcTcxY</a>

Paper Presentation <a href="https://www.youtube.com/watch?v=XB\_IB69k9pc">https://www.youtube.com/watch?v=XB\_IB69k9pc</a>

Jesuit Education as Mission (Ignatian Novena)

https://www.youtube.com/watch?v=-j4HpHSkKF8

Ignatian Governance (Ignatian Novena) <a href="https://www.youtube.com/watch?v=ZPkEXDZl6Cs">https://www.youtube.com/watch?v=ZPkEXDZl6Cs</a>

Encountering Life (Ignatian Novena) <a href="https://www.youtube.com/watch?v=ADkISu1zRAU">https://www.youtube.com/watch?v=ADkISu1zRAU</a>

The Art of Spiritual Conversation <a href="https://www.youtube.com/watch?v=fDDLW4r95hw">https://www.youtube.com/watch?v=fDDLW4r95hw</a>

Healing the Broken World <a href="https://www.youtube.com/watch?v=muSC4CbeBIc">https://www.youtube.com/watch?v=muSC4CbeBIc</a>

Christmas Message (2019) <a href="https://www.youtube.com/watch?v=yrianwOhPnQ">https://www.youtube.com/watch?v=yrianwOhPnQ</a>

Ignatian Integration of Head, Heart and Hand (02Jul2021) <a href="https://youtu.be/7cFkv7Nhmxo">https://youtu.be/7cFkv7Nhmxo</a>

Life Voyage: Doing vs Being (Time Management as Energy Management) 17Jul2021 <a href="https://youtu.be/onKHhf7e9Ig">https://youtu.be/onKHhf7e9Ig</a> (<a href="https://www.youtube.com/watch?v=onKHhf7e9Ig">https://www.youtube.com/watch?v=onKHhf7e9Ig</a>)

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