

Dr. B. Lawrence



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Virudhunagar - 626 001

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Educational Qualifications : M.Sc., M.Phil., Ph.D.,

Professional Experience : Teaching Experience 6 years 3 months
Research Exp:10 yrs

PROFESSIONAL EXPERIENCE

Sl. No.	Institution	Designation	Duration	
			From	To
1	V.H.N.S.N College, Virudhunagar	Assistant Professor of Physics	15.06.2022	till date
Total Teaching Experience			6	3

EDUCATIONAL QUALIFICATION

Course / Degree	College / School studies	University / Board	Class / Percentage obtained	Year of Passing
SSLC	K.V.S Hr. Sec. School, Virudhunagar	Tamilnadu State Board of Education, Chennai	79.4	2000 -01
HSC	K.V.S Hr. Sec. School, Virudhunagar	Tamilnadu State Board of Education, Chennai	65.66	2002 -03
B. Sc. (Physics)	V.H.N.S.N College, Virudhunagar	Madurai Kamaraj University, Madurai	57.6	2003 -06
M.Sc. (Physics)	V.H.N.S.N College, Virudhunagar	Madurai Kamaraj University, Madurai	67.25	2006 -08
M.Phil.	V.H.N.S.N College, Virudhunagar	Madurai Kamaraj University, Madurai	70	2009 -10
Ph.D.	V.H.N.S.N College, Virudhunagar	Madurai Kamaraj University, Madurai	----	24 th March, 2017

TEACHING SUBJECT SPECIALIZATION/COURSE HANDLING

- B.Sc Physics – Mechanics and Properties of Mater & Sound
Electromagnetism
Spectroscopy
Energy Physics
Analog Electronics

RESEARCH SKILLS

Research Experience : 10 Years 7 Months

Detail	Place	From	To	Funding Agency
Project Fellow	VHNSN College Virudhunagar	01 Feb 2011	31 Jan 2014	UGC - Major Research Project

TITLES OF DISSERTATION

Ph.D.	“Fabrication and Characterization of Biomolecules Infiltrated Nanocrystalline Porous Silicon for Biosensor Applications”
M.Phil.	“Synthesis and Characterization of P - type Porous Silicon”

RESEARCH SPECIALIZATION

- Porous Silicon
- Particle Physics
- Nanotechnology

RESEARCH COLLABORATION (BOTH NATIONAL & INTERNATIONAL)

Name of the Collaborator	Institute	Collaboration Details	Collaboration Output (Papers/Patents/Research/Online)
Dr. P. Pandaram	Kudankulam Nuclear Power Plant	Research	Papers
Dr. K. Suresh Kumar	Mepco Schlenk Engineering College	Research	Papers

COMPLETED RESEARCH PROJECT

No	Title of the Project	Funding Agency	Total Grant	Year
1.	Seed Money Grant	VHNSN College Management, Virudhunagar	9,000/-	01 Oct 2021 - 31 Aug 2022

HONORS/AWARDS/RECOGNITIONS

- Kamarajar Award – 2021 from Rotary Club of Virudhunagar

PUBLICATIONS

S.NO	PAPER TITLE	AUTHORS	JOURNAL DETAILS
1.	“Effect of Surface modification on the porous silicon infiltrated with Biomolecules”	B.Lawrence , N.Alagumani Kumaran, N. Prithivikumaran, N.Jeyakumaran , V.Ramadas B.Natarajan	Applied Surface Science, Vol 264, (2013) 767-771. Impact Factor: 2.71
2.	“Effect of Biomolecule Fraction on Optical Properties of Biomolecule treated Porous Silicon”	B. Lawrence , N. Jeyakumaran	International Journal of Chem Tech Research, Vol.6, No.3, pp 2117-2119, May-June 2014
3.	“Structural and optical characterization of PVP/ZnO nanocomposites prepared by sol-gel dip-coating method”	A Dhanalakshmi, C Amutha, B Lawrence , K. Kulathuraan, V. Ramadas, B. Natarajan	International Journal of Current Research, 5 (11), 3408-3413, 2013.
4.	“Influence of Concentration on Structural and Optical Characteristics of Nanocrystalline ZnO Thin Films Synthesized by Sol-Gel Dip Coating Method”	C. Amutha, A. Dhanalakshmi, B. Lawrence , K. Kulathuraan, V. Ramadas, B. Natarajan	Progress in Nanotechnology and Nanomaterials, Vol. 3, PP. 13-18, Jan. 2014.
5.	“Synthesis and characterization of conducting polymer Polyaniline doped with Salicylic Acid”	M. Reka Devi, B. Lawrence , N. Prithivikumaran, N. Jeyakumaran,	International Journal of ChemTech Research, Vol.6, No.13, pp 5400-5403, November 2014.

6.	“Synthesis and characterization of PMMA doped Iron oxide thin films by Sol-gel spin coating method”	K.S.Balaji, B. Lawrence , A.Saranya, J.Pandiarajan, N. Prithivikumar, N. Jeyakumar	International Journal of Technical Research and Applications, Special Issue 38, (February, 2016), PP 41-44.
7.	“Influence of mono energetic gamma radiation on structural and electrical properties of TiO ₂ thin film coated on p-type porous silicon”	P Pandaram, B Lawrence , N Prithivikumar, N Jeyakumar	Journal of Materials Science: Materials in Electronics 30 (7), 7135-7149, 2020. Impact factor : 2.220
8.	“Non-linear structural and surface morphological modifications due to gamma irradiation in p-type porous silicon”	P Pandaram, A Saranya, S Jothi, B Lawrence , N Prithivikumar, N.Jeyakumar	Materials Science in Semiconductor Processing 104, 104678, 2019. Impact factor : 3.085
9.	“Disparate structural changes in the titanium dioxide thin film coated on the p-type Si and porous silicon textures after gamma irradiation”	P Pandaram, KB Jashi, AV Sathish, A Saranya, S Jothi, B Lawrence , N.Jeyakumar	Materials Science and Engineering: B 267, 115089, 2021. Impact factor : 4.706

PAPER PRESENTED IN CONFERENCE/SEMINAR/WORKSHOP

1. “Synthesis and characterization of PMMA doped iron oxide thin films by sol gel spin coating method”, K.S.Balaji, **B.Lawrence**, A.Saranya, J. Pandiarajan, N. Prithivikumar, N.Jeyakumar, National conference on “Advances in Applied Physics and Materials Science” organized by Hindustan university, Chennai on 29-30 January 2016.
2. “Preparation of p-type nanocrystalline porous silicon: Effect of current density”, Deepalakshmi, A. Alfind Paul Frit, **B.Lawrence**, N. Prithivikumar and N. Jeyakumar, National Conference on Advanced Functional Materials (NCAFM 2014) organized by Bharathiyar University, Coimbatore on 30th , 31st January, 2014.
3. “Fabrication and studies of Polymer/ Nanocrystalline Porous silicon based optoelectronic devices”, N.Jeyakumar, B.Natarajan, S.Jothi, **B.Lawrence**, N.Prithivikumar and V.Vasu, Recent Advances in Surface Science (RASS 2013) Organized by Gandhigram Rural Institute (GRI), Gandhigram at Dindigul on 14th & 15th February, 2013.
4. “Characterization of P-Type Polymer Coated on N-Type Nano Porous Silicon for Solar Cell Applications”, N.Jeyakumar, **B.Lawrence**, J.Pandiarajan, N.Prithivikumar, B.Natarajan, V.Vasu, Trends in Renewable Energy, Sources, Applications & Technologies Organized by Sathyabama University at Chennai on 1-3 February, TRESAT-2012.
5. “Surface Passivation Of Chlorinated n- type Nano Crystalline Porous Silicon”, N.Jeyakumar, **B. Lawrence**, B. Natarajan, N. Prithivikumar, National Conference on Nanomaterials, Karunya University at Coimbatore on 3&4 December 2010.
6. “Structural and surface chemical properties of p- type nano Crystalline porous silicon - effect of current density”, N. Jeyakumar, **B. Lawrence**, B. Natarajan, N. Prithivikumar, National Conference on Nanomaterials, Karunya University at Coimbatore on 3&4 December 2010.
7. “Structural and Chemical Composition Studies of Iron Passivated Nanocrystalline Porous Silicon”, N. Jeyakumar, **B. Lawrence**, B. Natarajan, N. Prithivikumar, National Conference on Nanomaterials, Karunya University at Coimbatore on 3&4 December 2010

8. "XRD and FTIR studies of p-type Nano crystalline Porous Silicon", **B. Lawrence**, J. Pandiyarajan, N.Prithivikumar, N.Jeyakumar, National Conference on Advanced Materials - NCAM 2010 sponsored by DST, DAE and BRNS, Government of India organized by PSN College of Engineering and Technology, Tirunelveli on 25-27, August, 2010.

PAPER PRESENTED IN CONFERNCES/ WORKSHOPS

1. "Partial oxidation of nancrystalline porous silicon for the development of glucose optical biosensor", B.Lawrence, N. Prithivikumar, N. Jeyakumar, International conference on Nanomaterials for Energy, Enviroment, Catalysis and Sensor (ICNEECS -15) organized by MK University at Madurai, Tamil Nadu on 11 - 12 December 2015.
2. "Structural, Surface Morphological and Chemical Compositional Properties of Sol-Gel Spin Coated Nanoscale PMMA Thin Films ", K.S.Balaji, **B.Lawrance**, J. Pandiarajan, N. Prithivikumar, N.Jeyakumar, , International Conference on Recent Advances in Materials and Chemical Sciences (ICRAMCS-2015) organized by Department of chemistry, Gandhigram Rural Institute - Deemed University, Gandhigram, Dindigul on 14-15th December 2015.
3. "Sol-gel synthesis and characterization of nanostructured iron oxide thin films", K.S.Balaji, **B.Lawrence**, A.Saranya, J. Pandiarajan, N. Prithivikumar, N.Jeyakumar, , International conference on "Nanomaterials for Energy, Environment, Catalysis and Sensors (ICNEECS - 15)" organized by Madurai Kamaraj university, Madurai on 11-12th December 2015.
4. "Sol gel synthesis of Fe₂O₃ thin films for supercapacitor application; Effect of annealing temperature ", K.S. Balaji, **B. Lawrence**, N. Prithivikumar, N. Jeyakumar, , International conference on Recent trends in Materials (ICRTM - 2014) organized by Devanga Arts College(Autonomous), Aruppukottai, Tamilnadu on 22-23rd December 2014.
5. ""Fabrication and Characterization of Polymer/Porous Silicon Based Light Emitting Device", N.Jeyakumar, **B.Lawrence**, J.Pandiarajan, B.Natarajan, N.Prithivikumar V.Vasu, , International Conference of Young Researchers on Advanced Materials (ICYRAM-2012) Organized by Materials Research Society (MRS), Singapore at Singapore on 1st - 6th July, 2012.
6. "Effect of Substrate Temperature on Electrical and Structural Properties of Cu Thin Film Deposited by DC Magnetron Sputtering Method", **B. Lawrence**, R. Suriyakarthick, K. Prabakaran, B. Natarajan, G. David Rathinavelu, N.Prithivikumar, N.Jeyakumar, , International of Conference on Thin Films & Applications (ICTFA-2012) Organized by SASTRA University at Thanjavur, on 15 – 17 March 2012.
7. "Increase of charge carries in CCl₄ treated Porous silicon based Solar Cell", N.Jeyakumar, **B.Lawrence**, B.Natarajan, N.Prithivikumar, , International Conference and Workshop on New Materials and Devices for Photovoltaic Application Organized by Madurai Kamaraj University at Madurai on Feb. 10 - 12, 2011.
8. "Photoluminescence Studies of Porous Silicon & PMMA/PS Heterojunction", K.Kulathuraan, B.Natarajan, V.Raja, **B.Lawrence**, N.Jeyakumar, International Conference and Workshop on New Materials and Devices for Photovoltaic Application Organized by Madurai Kamaraj University at Madurai on Feb. 10 - 12, 2011.
9. "Luminescence And Chemical Composition Properties Investigated For p - type Nano Crystalline Porous Silicon", N.Jeyakumar, **B.Lawrence**, B.Natarajan, N.Prithivikumar, International Conference and workshop on new materials and devices for photovoltaic application, Madurai Kamaraj University at Madurai on Feb. 10 - 12, 2011.

INSTRUMENTS HANDLED

- ✓ Vacuum Coating Unit (Thermal evaporation & Sputter deposition)
- ✓ Spray Pyrolysis
- ✓ Photo Chemical Deposition Unit
- ✓ Chemical Bath Deposition
- ✓ Cyclic Voltammeter
- ✓ UV – Vis Spectrometer
- ✓ FT – IR Unit

TECHNICAL SKILLS

- ❖ Construct Chemical Bath deposition and Photo Chemical Deposition set up for thin film deposition
- ❖ Rectify any problems occur in thin film coating unit

REFERENCES

1. **Dr. N. JEYAKUMARAN**
Dean – Research,
Associate Professor of Physics,
V. H. N. Senthikumara Nadar College,
Virudhunagar – 626 001
Cell: 94435 69268
2. **Dr. P PANDARAM**
Scientific officer -G ,
TLD Laboratory.
Nuclear Power Corporation of India Limited
Kudankulam Nuclear Power Project
Kudankulam Post, Radhapuram Taluk,
Tirunelveli District, Tamil Nadu -627120
Cell: 94890-93420

EXTRACURRICULAR ACTIVITIES

- Very much interested in fine Arts clubs activities and got many prizes
- I also very much interested in nattupurakali.

PERSONAL DETAILS

Name : Dr. B. Lawrence
Father's Name : S. Boulsathiyathan
Occupation : Assistant Professor of Physics,
V.H.N. Senthikumara Nadar College,
Virudhunagar – 626 001.
Native place : Virudhunagar
Date of Birth : 10.08.1985 & Age: 37
Marital Status : Married
Sex : Male
Community : BC
Caste : Nadar
Address : 30/1C, Fathima Nagar,
Virudhunagar – 626 001.
Contact Numbers: 95979 86676, 97895 13801
Email ID : lawrence@vhnsnc.edu.in
lawrence2shine@gmail.com

DECLARATION

I hereby declare that the above all furnished information is true to the best of my knowledge and belief.

B.LAWRENCE