

Dr. Dipunadas C.N

Asst.Professor
Dept. of Physics
Christian College, Kattakada
Thiruvananthapuram
email:dipunaabynraj@gmail.com
Mob +91 9400422405

ACADEMIC DETAILS

Course	Duration	University
Ph.D ThesisTitle: "Spectroscopic Investigations of Flavonoid Compounds with the aid of Density Functional Theory"	January-2018	ManonmaniamSundaranar University, Tirunelveli
M.Phil	January-2010	ManonmaniamSundaranar University, Tirunelveli
B.Ed	March-2004	Kerala University, Thiruvananthapuram
M.Sc. Physics	April-2003	Kerala University, Thiruvananthapuram
B.Sc Physics	April-2000	Kerala University, Thiruvananthapuram

AREA OF ACADEMIC INTERESTS

Subject name: Optics and BioPhysics

ACADEMIC BODIES/ DUTIES

NIL

CORE COMPETENCIES

- **Ability to relate effectively to students of diverse cultural backgrounds and to tailorteaching methods to suit their individual needs.**
- **Skill for involving and motivating students of all ability levels via verbal communication andco-ordination.**
- **Skill for teamwork, leadership, obligation and concern toward assignments.**
- **Expertise in handling MS office and Adobe Photoshop etc.**
- **Proficiency in using any web platform for specific information search.**

RESEARCH/ ACADEMIC EXPERIENCE

August-2017 – February 2020

Designation : Guest Faculty
Institute : Christian College, Kattakada

February 2020 to till Date

Designation : Assistant Professor
Institute : Christian College, Kattakada

FUNDED RESEARCH PROJECTS

- NIL

BOOKS & CHAPTERS

- NIL

PUBLICATIONS

- **C.N.Dipunadas, I. Hubert Joe, V. Bena Jothy,2016, Experimental and Computational Analysis of 7-Isopropoxy-3-phenyl-4H-1-benzopyran-4-one, International Journal of Pure and Applied Researches, Paper ID :A16403 ,Volume4 (1): Pg: 1-7,ISSN: 2455-474X, ISI - Impact Factor: 0.862 / SJIF- Impact Factor: 3.498. (UGC INDEXED JOURNAL NO. 45204).**
- **M.R.Meera, C.N.Dipunadas, V. BenaJothy, S.L.Rayar, 2016, Studies on Crystal Growth, Vibrational, Electronic Properties of Nonlinear Optical Crystal: Triglycine Phosphate, Journal of Applied Science and Engineering Methodologies,Volume.2, No.3, Pg:268-271, ISSN:2395-5341.**
- **C.N.Dipunadas, V. BenaJothy, ,2017, Crystallographic and Bonding Analysis of 3-(4-Chlorophenyl)-5, 7-dimethoxy-4H-chromen-4-one Holding Spectral and Computational Studies, Indian Journal of Science and Technology, Vol 10 (22), DOI: 17485/ijst/2017/v10i22/114485, ISSN (Print) : 0974-6846; ISSN (Online) : 0974-5645. (UGC INDEXED JOURNAL NO.122)**
- **C.N.Dipunadas, V. Bena Jothy,2017, Spectroscopic Exploration in aggregation with In Silico Molecular Modelling and In Vitro assay on Antioxidant 7-Chloro-2-4-fluorophenyl-3-hydroxychromen-4-one, Journal of King Saud University-science (ELSEIVIER), ISSN:1018-3647.Pg: 372-383**
- **C.N.Dipunadas, V.BenaJothy, 2017, Spectral Informations and Intramolecular Interactions of 2-(4-Fluorophenyl)-3-Hydroxy-7-Methylchromen-4-one Supported by Natural Bond Orbital Analysis, International Journal Of Advance Research In Science And Engineering ; ISSN:2319-8354, Pg:333-338.**
- **C.N.Dipunadas, 2017, Electronic structural UV-Vis Analysis of 7,8-dihydroxy-**

4PhenylCoumarinMonohydrate reinforced by DFT approach, International Journal of Scientific Research in Science and Technology; ISSN : 2395-602X | Print ISSN : 2395-6011,UGC Approved Journal No : 64011, Volume.3, No:7,Pg:856-861.

- C.N.Dipunadas, V. BenaJothy, 2018, Crystallography and Spectral Analysis in structuring of 7,8-dihydroxy-4Phenyl Coumarin Monohydrate, Journal of Foundations and Applications of Physics, ISSN:2394-3688.vol. 5, No. 1. Pg:1-14

INVITED LECTURE

Resource person-Oral talk

- "Fundamentals of Spectroscopy", Physics Association 14th March 2018 at organized by Sr.Jude's College, Thoothoor.

SYMPOSIA & WORKSHOPS

Papers Presented in International Conferences

- C.N.Dipunadas, V. BenaJothy, Biological Entities of 2-(4-fluorophenyl)-3-hydroxy-7-methylchromen-4-one with the aid of computational methods, International Seminar on Technologically Advanced Materials- "ISTAM-2018", Muslim Arts College, Thiruvithancode,Tamil Nadu,September 29, 2018.
- C.N.Dipunadas, V. BenaJothy, Vibrational Spectral and Normal coordinate analysis of 5-Bromo-2,4-dihydroxy-3-methoxychalcone, International Conference on Materials for the Millenium- "MATCON 2016" (ISBN 978-93-80095-738), Cochin University, Cusat, Kochi, January 14 -16,2016. Pg No: 56,57.
- M.R.Meera, C.N.Dipunadas, S.L.Rayar, V. BenaJothy, Crystal growth, vibrational, electronic properties of nonlinear optical crystal: Triglycine phosphate, International Conference on Integration of STEM Education and Mental Health (ICISEM-16),Department of Physics, Noorul Islam Centre for Higher Education, Kumaracoil, Thuckalay, June 20-21, 2016. Pg No: 02.
- C.N.Dipunadas, M.R. Meera, T. Joselin Beaula, R.Mini, I.Hubert Joe, V. BenaJothy, Spectroscopic structural properties and Quantum Chemical Computations of 7-Isopropoxy-3-phenyl-4H-1-benzopyran-4-one, International Conference on Integration of STEM Education and Mental Health (ICISEM-16) Department of Physics, Noorul Islam Centre for Higher Education, Kumaracoil, Thuckalay, India Special Session June 20-21, 2016. Pg No: 03.
- C.N.Dipunadas, I.Hubert Joe, V. BenaJothy, Spectra and DFT studies of 5-Bromo-2,4dihydroxy3methoxychalcone, International Conference on Perspectives in Vibrational Spectroscopy (ICOPVS), University of Lucknow, November 5-8,2016 Pg.No:160.
- C.N.Dipunadas, I.Hubert Joe, V.BenaJothy, Spectroscopic Structural Properties and Quantum Chemical Computations of 7-Isopropoxy-3-Phenyl-4H-1Benzopyran-4-one International Conference on Materials Processing and Applications (ICMPA-2016), Centre for Crystal Growth School of Advanced Sciences, VIT University, Vellore, December 14-16, 2016 Pg.No:86.
- M.R. Meera, C.N. Dipunadas, S.L. Rayar, V. BenaJothy, Investigations on Effect of Sulphuric acid (H2SO4) on Growth and Characteristics of Triglycine Phosphate (TGP) single crystals for Non-linear Optical Applications,

International Conference on Materials Processing and Applications (ICMPA-2016), Centre for Crystal Growth School of Advanced Sciences, VIT University, Vellore, December 14-16, 2016 Pg.No:87.

- C.N.Dipunadas, V. BenaJothy, Vibrational Spectral and Normal coordinate analysis of 7,8-dihydroxy-4-phenylcoumarin, International Conference on Recent Trends in Analytical Chemistry (ICORTAC-2015), (ISBN 978-93-85374-37-1), University of Madras, Chennai, December 28 - 30, 2015. Pg: 153-154.
- C.N.Dipunadas, Growth and Intramolecular hydrogen bonding of L-Tartrate Monohydrate, International Conference on Recent Trends in Advanced Materials (ICRAM-2012), Centre for Crystal Growth School of Advanced Sciences, VIT University, Vellore, February 20-22, 2012.

Papers Presented in National Conferences

- C.N.Dipunadas, IR and Raman studies and DFT quantum chemical calculations of the vibrational levels for 2-Amino-5 Chloro Benzophenone, National Conference on Exploring the frontiers of Vibrational Spectroscopy (Exfovis-2011), Women's Christian College, Nagercoil, Sept 1-2, 2011.
- C.N.Dipunadas, I.Hubert Joe, V.BenaJothy, Vibrational Spectra and Normal Coordinate Analysis of the Flavonoid molecule 5,7-Dihydroxy -4-Phenylcoumarin: A Density Functional Theory Study, 100th Indian Science Congress, University of Kolkatta, Jan 3-7, 2013, Pg: 82.
- C.N.Dipunadas, V.BenaJothy, Vibrational Spectra of Isoflavonoid Molecule 4'-Chloro-5,7-Dimethoxyisoflavone, National Conference of Kanniyakumari Academy of Arts and Sciences (KAAS-2015) (ISBN 978-93-81658-13-0), Women's Christian College, Nagercoil, September 18-19 2015 Pg: 34.
- C.N.Dipunadas, V.BenaJothy, Vibrational Spectral and Normal coordinate analysis of 2-(4-fluorophenyl)-3-hydroxy-7-methylchromen-4-one, National seminar on Advancements in Materials Science, Department of Physics, Govt. College for Women, Thiruvananthapuram, Dec 3-4, 2015, Pg:18.
- C.N.Dipunadas, V. BenaJothy, Vibrational Spectral and Normal coordinate analysis of 7-chloro-2-4-fluorophenyl-hydroxychromen-4-one, National Conference on Advanced Functional Materials, SSN College of Engineering, Chennai, Dec 28-29, 2015 Pg: 34-39; ISBN: 978-93-85374-34-0.
- C.N.Dipunadas, V. BenaJothy, Normal coordinate analysis of Isoflavonoid Molecule 4'-Chloro-5,7-Dimethoxyisoflavone, 103rd Indian Science Congress, University of Mysore, Mysuru, Jan. 3-7, 2016, Physical Science Pg:55.
- C.N.Dipunadas, M.R. Meera, T. Joselin Beaula, R.Mini, P.Divya, I.Hubert Joe, V. BenaJothy, Spectral Studies and Natural Bond Orbital Analysis of 2-(4-fluorophenyl)-3-hydroxy-7-methylchromen-4-one, National Conference on Advanced Materials (NCAM-2016), Department of Physics, Nanjil Catholic College of Arts and Science, Kaliyakkavilai, February 27, 2016. Pg: 14.
- C.N.Dipunadas, I.HubertJoe,V. BenaJothy, Molecular Docking and Natural Bond Orbital Analysis of Isoflavonoid Molecule 7-Isopropoxy-3-phenyl-4H-1-benzopyran-4-one, National Seminar on Advanced Analytical Technqiues (NSAAT-2016), Department of Chemistry, Mar Ivanios College, March 9-11, 2016.
- C.N.Dipunadas, V. BenaJothy, Natural Bond Orbital and Normal coordinate

analysis of 5-Bromo-2,4-dihydroxy-3-methoxychalcone, National Seminar on Photonics, Medicine and the Environment (NSPME-2016), All Saint's College Thiruvananthapuram, Kerala, India, Jun 22- 23, 2016.

- C.N.Dipunadas, V. BenaJothy, I. Hubert Joe, Natural Bond Orbital and Normal Co-Ordinates Analysis of 7-Chloro-2-4-Fluorophenyl-3- Hydroxychromen-4-One, National Conference on Technologically Advanced Materials, Department of Physics, Muslim Arts College, Thiruvithancode, September 6,2016, ISSN NO:2349-8886, pg: 67-70.
- C.N.Dipunadas, A.JarletJeyaseeli, V.BenaJothy, Docking studies of Bioactive molecule5-(4-Chlorophenyl)-3-(4-Fluorophenyl)-4,5-Dihydro-1H-Pyrozole-1-Carbaldehyde with the aid of DFT computations, National seminar on Exploring the Plethora of Research, Research Forum Women's Christian College, Nagercoil, February 23,2017, pg: 5.
- C.N.Dipunadas, V. BenaJothy, Crystallographic Bonding Analysis of 3-(4-Chlorophenyl)-5,7-dimethoxy-4H-Chromen-4-one, National conference on Technology Innovation in Mechatronics, Energy Management and Intelligent Communication NCTIMEMIC'17, Lourdes Matha College of Science And Technology, Thiruvananthapuram, April 6th and 7th 2017.
- C.N.Dipunadas, V. BenaJothy, Spectral analysis and Potential energy surface scan analysis of 5-Bromo-2,4-dihydroxy-3-methoxychalcone: A Density functional theory study,National Symposium on Spectroscopy: Fundamentals and Recent Trends,St.Cyril's College, Adoor, March 9th, 2018.

Conference attended:

- International Conference on Molecular Spectroscopy of Advanced Materials and Biomolecules (IMSAB-2012) held at Bishop Moore College, Mavelikara, Kerala, India during August 7-9, 2012.
- National Conference on Recent Trends in Vibrational Spectroscopy organized by Department of Physics held at Bishop Moore College, Mavelikara, Kerala, India during August 26-27, 2011.
- The National Academy of Sciences, India, 81st Annual Session of the Academy held at University of Kerala, kariavattom, Thiruvananthapuram from November 24-26,2011.
- Nuclear Science Programme (NSP-17) organized by Department of Physics and research Centre held at Women's Christian College, Nagercoil, March 2, 2017.
- Societal Applications of Indian Space Program, conducted at Dale View Campus Punalal, February 17, 2018.

Workshops attended:

- "Workshop on Interpretation of instrumental methods (WIIM-2017)" organized by Department of Chemistry, Satyabhama University held on 5th-7th January 2017.
- "Workshop on Computer Aided Drug Discovery: Current Approaches And Insights" organized by Athmic Biotech Solutions Pvt Ltd, Kalliyoor held on 26th-28th January 2017.
- "Workshop on Spectroscopy and its Perspectives" organized at Sacred Heart College, Tirupattur held on 10th-12th September 2017.

ACHIEVEMENTS

- Ph.D in Physics

PERSONALDETAILS

Profile : **Female, 40, married.**
Nationality : **Indian**
Date of Birth : **24.04.1980**
Current Location : **Kalliyoor, Thiruvananthapuram, Kerala**
Name of Father : **T.Christudas**
Qualification :**M.sc,M.Phil,Ph.d**
Languages known : **Malayalam, English, Hindi, German**
Hobbies: Listening Music, Dancing, Singing, Gardening, Playing both indoor and outdoor games, Cooking etc.

PERMANENT ADDRESS

Didina Bells
MRA-131,
Kalliyoor
Kalliyoor P.O
Pin: 695042