

Dr. Haris P.



Correspondence Address

Assistant Professor
PG Department of Physics
Sir Syed College
Karimbam PO
Taliparamba, Kannur
Kerala, India - 670142
Email: harispg@gmail.com

Permanent Address

Puvvathingal House
Thandukode
Vellayur PO
Malappuram
Kerala
India - 679327
Email: harispg@gmail.com

PERSONAL

First Name : Haris
Last Name : Puvvathingal
Age and Date of Birth : 40 yrs; 5th May 1982
Nationality : Indian

Academic Training

2011-2017 **PhD in Physics**, Mahatma Gandhi University, Kottayam, Kerala, India.
Supervisor: Prof. C Sudarsanakumar

2017 **UGC-CSIR NET**, Physical Science

2009-2010 **Master of Philosophy (MPhil)**, Physics, Mahatma Gandhi University,
Kerala, India. Supervisor: Prof. C. Sudarsanakumar.

2006-2007 **Bachelor of Education (BEd)** Physical Science, Kerala University,
Kerala, India

2004-2006 **Master of Science (MSc)**, Physics Bharathidasan University,
Trichy, tamilnadu, India.

2007 **SET Physics**

Teaching Experience

2019 Jan-Present **Assistant Professor**, Sir Syed College, Taliparamba, Kannur, Kerala

2007-2009 **Lecturer**, Government Higher Secondary School, Tuvvur, Kerala

Research Experience

2011-2017 Explored the molecular recognition of the bioactive components of spices with DNA by using spectroscopic, calorimetric, agarose gel electrophoretic, and computational techniques. Supervisor: Prof.C. Sudarsanakumar

2009-2011 Studied the structure and dynamics of modified nucleic acids by molecular modeling and molecular dynamics simulation methods. A set of AMBER force-field parameters were derived for the expanded bases and the structural dynamics of the xDNA decamer [(xT G xT A xC G xC A G A).(A xC A xT G xC G xTxC XT)] and [(xA C xA C xA C xA C xA T)•(T xG T xG T xG T xA) was explored using a 50ns molecular dynamics simulation in explicit solvent. Supervisor: Prof.C. Sudarsanakumar

Fellowships

2012-2014 **UGC-BSR fellowship for meritorious students in science**,
University Grant Commission, India

2011-2012 **Junior Research Fellowship** , *Mahatma Gandhi University, Kerala, India*

Hands on Instruments

Iso Thermal Titration Calorimeter(ITC), Differential Scanning Calorimeter (DSC), Fluorescence spectrometer, UV- Visible Spectroscope, Agarose gel electrophoresis, XRD.

Research Publications in Refereed journals

Haris P, Mary Varughese, Haridas M, and Sudarsanakumar C.
Energetics, Thermodynamics, and Molecular Recognition of Piperine with DNA.

Journal of Chemical Information and Modeling 55 (12), 2644-2656 (2015).
Impact Factor: 3.804

Haris P, Mary Varughese, Aparna P, Dileep K V and Sudarsanakumar C.
A comprehensive approach to ascertain the binding mode of curcumin with DNA.

Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy
175, 155-163 (2017) (Front cover article)
Impact Factor: 2.88

Haris P, Mary Varughese, and Sudarsanakumar C
Probing the Interaction of the Phytochemical 6-Gingerol from the Spice Ginger with DNA.

International Journal of Biological Macromolecules 113, 124-131 (2018).

Impact Factor: 3.909

Mary Varughese, **Haris P**, Mathew K Varghese, Aparna P, Sudarsanakumar C.
Experimental Probing and Molecular Dynamics Simulation of the Molecular Recognition of DNA Duplexes by the Flavonoid Luteolin.

Journal of chemical information and modeling, 57(9), 2237-2249(2017)

(First and second author contributed equally)

Impact Factor: 3.804

Aparna P, Mary Varughese, Mathew K Varghese, **Haris P**, Sudarsanakumar C.
Conformational features of benzo-homologated γ DNA duplexes by molecular dynamics simulation.

Biopolymers 105 (2), 55-64 (2016)

Impact Factor: 2.248

Haris P, Mary Varughese, and Sudarsanakumar C
Bio Molecular Recognition of Capsaicin, the bioactive component of the spice red chilli with DNA. (Communicated)

Research papers presented in various conferences/ Seminars/Symposia

- 2017 Mary Varughese, **Haris P**, Mathew K Varghese, Aparna P, and Sudarsanakumar C
Molecular Recognition of the Flavonoid Luteolin with Duplex DNA.
International Conference on Science, Engineering Technology & Management (ICSETM-2017) K. E. College, Mannanam, Kerala, India-686561 March, 2017
- 2014 **Haris P**, Mary Varughese, and Sudarsanakumar C.
Interaction of Piperine with DNA: Molecular Modeling and Docking Study. National Seminar on Crystallography (43A), Indian Institute of Science Education and Research (IISER) Mohali, Punjab, India-1430306 March 2014

- 2014 Mary Varughese, **Haris P**, and Sudarsanakumar C.
Molecular Structure and Assembly in Nitroalkene Compounds.
National Seminar on Crystallography (43A), Indian Institute of Science
Education and Research (IISER) Mohali, Punjab, India 1430306 March 2014
- 2014 **Haris P**, Mary Varughese and Sudarsanakumar C.
The energetic of Curcumin binding to DNA.
International Conference on Chemical Biology (ICCB-2014) Disease
Mechanisms and Therapeutics, CSIR-Indian Institute of Chemical
Technology, Hyderabad, India-500007 February 2014
- 2014 **Haris P**, Mary Varughese, and Sudarsanakumar C.
Molecular recognition of anticancer drug Curcumin by DNA.
6th International Symposium on Recent Trends in Macromolecular
Structure and Function (ISRTMSF 2014), Centre of Advanced Study in
Crystallography & Biophysics, University of Madras, Chennai, India-
600025 January 2014
- 2013 **Haris P**, Mary Varughese, Sreeraj S, Aparna P, and Sudarsanakumar C.
*Calorimetric, Molecular Dynamics and Gel Electrophoresis studies of
Curcumin binding with DNA sequences.* National Conference on
Advances in Chemical Sciences, Maharshi Dayanand University,
Rohtak, Haryana, India-124001 March 2013
- 2013 Mary Varughese, Aparna P, **Haris P**, C. Sudarsanakumar.
*Structure and Dynamics of an RNA.DNA Hybrid: A Molecular Dynamics
Investigation.*
23rd Swadeshi Science Congress, Mahatma Gandhi University,
Kottayam, Kerala, India-686560 November 2013.
- 2013 **Haris P**, Mary Varughese, Aparna P, and Sudarsanakumar C.
*Binding Studies of Curcumin with DNA: Calorimetric, Agarose Gel
Electrophoresis and Molecular Dynamics Investigations.*
International Seminar on Recent Biochemical Approaches In
Therapeutics, University of Kerala, India-695581 January 2013

References

Prof.C Sudarsanakumar , Professor, School of Pure and Applied Physics,
Mahatma Gandhi University. Kottayam, Kerala, India- 686560,
email: c.sudarsan.mgu@gmail.com

Prof.N.V Unnikrishnan, emeritus scientists, Mahatma Gandhi University
Kottayam, Kerala, India- 686560. email: nvu100@gmail.com

Poovathingal-house – Vellayoor-post – India-679 327
+91 9496927463 • harispg@gmail.com