

# COLLEGE WEBSITE- FACULTY PERSONAL PAGE

## DATASHEET

### PERSONAL details

Name	<b>Dr. Aparna Thankappan</b>
Department	<b>Physics</b>
Date of commencement of permanent service	<b>4.6.2018</b>
Years of teaching experience as on 1 <sup>st</sup> June of the year	<b>2</b>
Address	<b><u>Official Address</u> Assistant Professor, Department of Physics Baselius College Kottayam <u>Residential Address</u> Areikkunnel House Kallorkadu Muvattupuzha 686668</b>
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website	<a href="https://sites.google.com/view/aparnathankappan/research-publications">https://sites.google.com/view/aparnathankappan/research-publications</a>
Research Gate URL	<a href="https://www.google.com/url?q=https%3A%2F%2Fwww.researchgate.net%2Fprofile%2FAparna_Thankappan&amp;sa=D&amp;sntz=1&amp;usg=AFQjCNE6ZOgM MrjUA8RLL10JveB8vUzAPQ">https://www.google.com/url?q=https%3A%2F%2Fwww.researchgate.net%2Fprofile%2FAparna_Thankappan&amp;sa=D&amp;sntz=1&amp;usg=AFQjCNE6ZOgM MrjUA8RLL10JveB8vUzAPQ</a>

### ACADEMIC QUALIFICATIONS

Degree	Institute	University	Grade/ Rank etc.
UG	<b>Bharat Mata College, Thrikkakara, Ernakulam</b>	Mahatma Gandhi University, Kottayam	
PG	<b>St. Paul's College.</b>	Mahatma Gandhi University,	

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	<b>Kalamassery, Ernakulam</b>	Kottayam	
M Tech	<b>International School of Photonics, CUSAT</b>	Cochin University of Science and Technology	
Ph D	<b>International School of Photonics, CUSAT</b>	Cochin University of Science and Technology	
UGC DSK	<b>International and interuniversity center for Nano science and nanotechnology</b>	Mahatma Gandhi University, Kottayam	

### College-level Duties and in-charge (Mention major charges)

Duty	Position	Duration
SSP	Teacher in charge	2018-19
WWS	Teacher in charge	2019-20
Arts Club	House charge	2019-20
Quiz Club	In charge	20-22

### PUBLICATIONS AND PRESENTATIONS

- **Aparna Thankappan**, Misha Hari, S. Mathew, Santhi Ani Joseph, Erni Rolf, Debajeet Bora, Artur Brau, V.P.N. Nampoori “Synthesis of monocrystalline zinc oxide microrods by wet chemical method for light confinement applications” *Physica E* 44 (2012) 2118–2123
- **Aparna Thankappan**, Sheenu Thomas, V. P. N. Nampoori “Effect of betanin natural dye extracted from red beet root on the non linear optical properties ZnO nanoplates embedded in polymeric matrices” *Journal of Applied Physics* 112, 123104 (2012)
- **Aparna Thankappan**, Divya S. Sheenu Thomas, V.P.N. Nampoori “Optical characterization of ZnO nanoplates embedded in polymeric matrices for optical limiting applications” *Optics & Laser Technology* 52 (2013) 37–42
- **Aparna Thankappan**, Sheenu Thomas, V.P.N. Nampoori “Solvent effect on the third order optical nonlinearity and optical limiting ability of betanin natural dye extracted from red beet root” *Optical Materials* 35 (2013) 2332–2337
- **Aparna Thankappan**, Sheenu Thomas, and V. P. N. Nampoori “Tuning the face orientation of ZnO nano/microcrystals by a wet chemical method” *Chinese Optics Letters* COL 11(10), 101801(2013)
- **Aparna Thankappan**, Sheenu Thomas and VPN Nampoori “Optical limiting performance of ZnO nanoflakes and nanoplates embedded in PVA matrix” *QScience Connect* 2013.33 [10.5339](#)
- **Aparna Thankappan**, Sheenu Thomas, V.P.N. Nampoori “Novel composites based on polymer micro-rods for photonic device applications” *Optics & Laser Technology* 58 (2014) 63–70

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- **Aparna Thankappan**, C.L. Linslal, S. Divya, P.V. Sabitha, Sheenu Thomas, V.P.N. Nampoori “Optical nonlinear investigations on morphology controlled growth of ZnO crystals” *Optics & Laser Technology* 64 (2014) 133–139
- S. Divya, **Aparna Thankappan**, C. P. G. Vallabhan, V. P. N. Nampoori, P. Radhakrishnan, and A. Mujeeb “Electrolyte/photoanode engineered performance of TiO<sub>2</sub> based dye sensitised solar cells” *Journal of Applied Physics* 115, 064501 (2014)
- Ani Augustine Jose, Pranam Prakash, **Aparna Thankappan**, Sheenu Thomas, V.P.N. Nampoori “study of regulation of anthocyanin production from confederate rose by spectroscopic method and their nonlinear optical characterization” *I.J.S.N.*, vol. 4(2) 2013: 294-298
- **Aparna Thankappan**, Misha Hari, S Mathew, Santhi Ani Joseph, V.P.N Nampoori “Structural and optical properties of ZnO micro rods synthesized by low temperature hydrothermal route”. *AIP Conf. Proc. of Optics: Phenomena, Materials, Devices and Characterization*, 1391, 514-516 (2011).
- Arindam Sarkar, **Aparna Thankappan**, and V.P.N. Nampoori “Effect of silver nanoparticles on fluorescence and nonlinear properties of naturally occurring betacyanin dye” *Opt. Mater.* 39, 211-217 (2015).
- **Aparna Thankappan**, Divya S, Anju.K. Augustine, Girijavallaban C.P, Radhakrishnan P, Sheenu Thomas, and V.P.N. Nampoori “Highly efficient betanin dye based ZnO and ZnO/Au Schottky barrier DSSC” *Thin Solid Films* 583 (2015) 102–107
- **Aparna Thankappan**, **V.P.N. Nampoori**, **Sabu Thomas** “Investigations of intensity dependant nonlinear optical properties of betanin/ZnO composites embedded in PVA” *Optics & Laser Technology* 83 (2016) 28–34
- A Sarkar, **A Thankappan**, VPN Nampoori “Size dependent fluorescence tuning of naturally occurring betacyanin with silver nano particles” *LIGHT AND ITS INTERACTIONS WITH MATTER* 1620 ( 1 ), 58 64
- KC Sreechandralijith, Jaison Peter, **Aparna Thankappan**, VPN Nampoori, P Radhakrishnan “Random lasing and coherent back scattering study in rhodamine 6G doped polymer optical fiber (POF) particles” *LIGHT AND ITS INTERACTIONS WITH MATTER* 1620 ( 1 ), 58 64 521-529
- **Aparna Thankappan**, Misha Hari, S Mathew, Santhi Ani Joseph, V.P.N Nampoori “Structural and optical properties of ZnO micro rods synthesized by low temperature hydrothermal route”. *Optics’11 International conference on light* May 23-25, 2011, Calicut, Kerala.
- **Aparna Thankappan**, S Mathew, Misha Hari, and Santhi Ani Joseph “Structural and optical properties of ZnO micro spheres with nano petal like structure synthesized by low temperature chemical bath deposition method” *The Third International Conference on Frontiers in Nanoscience and Technology, Cochin Nano-2011, Cochin*, 14-17 Aug 2011.
- **Aparna Thankappan**, Santhi Ani Joseph, V.P.N Nampoori “Enhancement of UV emission of ZnO microrods on changing the excitation wavelength”. *National Symposium on Nanoscience and Technology, NanosTech 2011, Muvattupuzha, Kerala*, 1-2 September 2011.
- **Aparna Thankappan**, Sheenu Thomas, V.P.N. Nampoori “Morphology impact on the nonlinear optical properties of ZnO crystals embedded in polymeric matrices” *National laser symposium, NLS-22, Manipal, Karnataka*, 8-11 January 2014.

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- Arindam Sarkar, **Aparna Thankappan** and V.P.N Nampoory “Nonlinear studies of Betacyanin dyes in the presence of Silver Nano particles”, National laser symposium ,NLS-22, Manipal, Karnataka, 8-11 January 2014.
- **Aparna Thankappan**, Sheenu Thomas, V.P.N. Nampoory “Optical limiting performance of betanin natural dye” NCMA 2013,Tiruchirappalli, Tamilnadu, 4-5 April 2013.
- **Aparna Thankappan**, Divya S, Sheenu Thomas, V.P.N. Nampoory “Optical characterization of ZnO nanoplates stabilized with pva for optical limiting applications” The first national conference on trends and applications in laser technology and optoelectronics, TALTO 2013,Gurgaon, India, 4 April 2013.
- **Aparna Thankappan**, Sheenu Thomas, V.P.N. Nampoory “Optical limiting performance of ZnO nano flakes and nano plates stabilized in PVA matrix” International conference on nanomaterials: science, technology and applications, ICNM'13, Chennai,1-5 December 2013.
- **Aparna Thankappan**, Divya S, Sabitha P. V, Anju.K. Augustine, C.P. Girijavallaban, P. Radhakrishnan, Sheenu Thomas, and V.P.N. Nampoory “Performance comparison of betanin sensitized heterojunction dye-sensitized solar cells”, Second International Conference on Nanostructured Materials and Nanocomposites, ICNM 2014, Kottayam, Kerala 19-21 December 2014.
- **Aparna Thankappan**, Divya S, C.P. Girijavallaban, P. Radhakrishnan, Sheenu Thomas, and V.P.N. Nampoory “Efficient natural dye sensitized solar cell” International conference on photonics and solar water splitting ,PSWS 2015, St. Teresa’s college Ernakulam,12-13 march 2015
- Abhay Gusain<sup>1</sup>, , Aparna Thankappan, and Sabu Thomas “Roll-to-roll printing of polymer and perovskite solar cells: compatible materials and processes” Journal of Materials Science volume 55, pages13490–13542(2020) <https://doi.org/10.1007/s10853-020-04883-1>

### Books

- Aparna Thankappan, Sabu Thomas, Nandakumar Kalarikkal, “Polymeric and Nanostructured Materials: Synthesis, Properties, and Advanced Applications” Apple Academic Press.ISBN 978-1-77188-644-4
- Aneesa Padinjakkara, Aparna Thankappan, Fernando Gomes Souza, Jr., Sabu Thomas, Biopolymers and Biomaterials Apple Academic Press. <http://www.appleacademicpress.com/biopolymers-and-biomaterials-/ISBN9781771886154>
- Aparna Thankappan, Sabu Thomas, “Perovskite photovoltaics- basic to advanced concepts and implementation”, Elsevier.ISBN 978-0-12-812915-

### Book Chapters

- Aparna Thankappan, Sabu Thomas “thermal characterization of Polymer Electrolyte Characterization” <https://doi.org/10.1002/9783527805457.ch3>
- Aparna Thankappan, V.P.N Nampoory “Thermal Lens Technique: An Investigation on Rhodamine 6G Incorporated in Zinc Oxide Low Dimensional Structures” ISBN 978-1-77188-644-4
- Aparna Thankappan, V.P.N. Nampoory, Sabu Thomas “ Optimization of betanin dye for solar cell applications” ISBN 978-1-77188-644-4

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- Aparna Thankappan, V.P.N. Nampoory, Sabu Thomas “ Optimization of betanin dye for solar cell applications” ISBN **978-1-77188-644-4**

#### Details of Seminars/Conferences organised

Program co-ordinator for organizing National Science day 2020 with the financial assistance of KSCSTE. (2020)

#### MEMBERSHIPS IN FORUMS, COMMITTEES, SOCIETIES OUTSIDE COLLEGE

Organisation	Title	Since (Year)
	Photonics society of India	2012

Signature of the teachers with date