

PERSONAL DETAILS

Name	Dr. Nibu A George
Department	Physics
Date of commencement of permanent service	06 July 2011
Years of teaching experience as on 1 st June of the year	Nine
Address	Assistant Professor of Physics Baselius College Kottayam
Phone (off.)	0481 256 6162
Email	nibuageorge@baselius.ac.in
Google Scholar URL	https://scholar.google.co.in/citations?user=a_G1NJsAAAAI
Research GateURL	http://www.researchgate.net/profile/Nibu_George
Wikipedia	http://en.wikipedia.org/wiki/Depth_kymography

ACADEMIC QUALIFICATIONS

Degree	Institute	University	Grade/ Rank etc.
UG	SVR NSS College Vazhoor	Mahatma Gandhi University	First Class
PG	Pondicherry Central University	Pondicherry Central University	First Class
Ph D	Cochin University	Cochin University	

Certificates
Design for Six Sigma (DFSS) Business-process management methodology: Yellow Belt Certified.
Dutch Language: A1 Level Certified

Additional Qualifications/Work Experience
<p>Development Engineer (Solid State Lighting)-2 years Philips Lighting, Eindhoven, the Netherlands Designed and developed different types of energy saving LED lamps</p>
<p>Post-Doctoral Fellow Department of Biomedical Engineering, University Medical Center Groningen, the Netherlands. Designed and developed world's first 3D endoscope for <i>in-vivo</i> imaging of human vocal folds vibration in 3D</p>
<p>Post-Doctoral Fellow Ultrafast Laser and Spectroscopy Lab, Materials Science Center, University of Groningen, the Netherlands. Designed and developed a wavelength tunable Femtosecond Non-colinear Optical Parametric Amplifier (NOPA).</p>
<p>Post-Doctoral Fellow Department of Mechanical and Industrial Engineering, University of Toronto, Canada. Designed and developed an optical (laser) thermometer for industrial application</p>
<p>Post-Doctoral Fellow Thermal and Fluid Sciences Section, Department of Applied Physics, Delft University of Technology, the Netherlands. Designed and developed a combined CARS-LDA (Coherent Anti-Stokes Raman Scattering and Laser Doppler Anemometry) setup for simultaneous measurement of temperature and velocity inside large flames.</p>

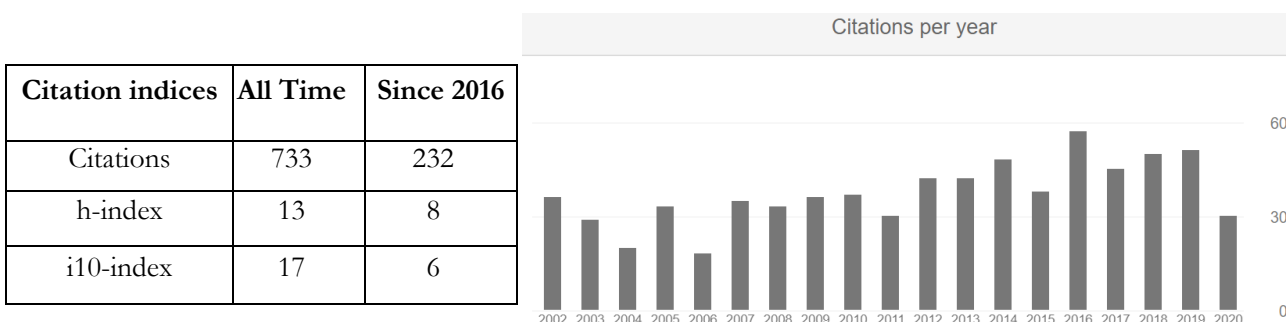
College-level Duties and in-charge (Mention major charges)

Duty	Duration
In-Charge, Physics Research Centre	2015—Continuing
College level coordinator for Open Course	2016- Continuing
Editorial Board member, Baselian Researcher	2011-Continuing
College level coordinator of SWAYAM-Online Learning Platform	2019- Continuing
College level Coordinator of MOOC course on Organic Farming by MG University	2020-2021
College Council Member	2015-2016
Internal Quality Assurance Cell (IQAC) Member	2011-2015
Joint Convener, Teaching and Learning Criterion of NAAC assessment	2011-2015
Coordinator, College Alumni association (WeBaselians)	2011-2016
Baselius College Staff Cooperative Society Director Board Memeber	2015-2018
Teacher-in-Charge, Physics Association	2012-2013
Department level coordinator of CBCSS programme in Physics Department	2011-2014, 2016- Cont.
Organizing Committee Member, Baselius Trophy All Kerala Intercollegiate Basketball, Volleyball and Football Championship	2011, 2012, 2013, 2015

PROJECTS, PUBLICATIONS, AND PRESENTATIONS

Research Projects	
Minor Research Project	Principal Investigator of a minor project (Rs 1,45,000) entitled “ <i>Design and development of a low cost photothermal beam deflection method and its application for the characterization of optically opaque and highly scattering liquids</i> ” funded by UGC, India.
Major Research Project	Co-investigator of a Major project (2012-2015) entitled “ <i>Investigation on application of photothermal effect in material science and biophotonics</i> ” funded by Kerala State Council for Science, Technology and Environment, Government of Kerala, India (Rs 15,78,000).

Books Authored		
Title	Publisher	ISBN
Environmental Physics and Human Rights	Lilly Publishing House, Kerala	978-81-935601-3-6
Physics in Daily Life	Lilly Publishing House, Kerala	978-81-935601-2-9
Energy and Environmental Studies	Lilly Publishing House, Kerala	



International Journal Publications
<ol style="list-style-type: none"> Enhanced thermal diffusivity of water in the presence of iron oxide nanoparticles: A laser induced thermal lens measurement Lekshmi P Kumar and Nibu A George <i>Materials Research Express</i> (in Press 2020) [Imp Factor: 1.45] Effect of viscosity on the far-field diffraction pattern of spatial self-phase modulation Nibu A George, Silpa Sreekumar S, Ardra S Nair, Anisha Mary Mathew, Ambika D <i>Optica Applicata</i> (2017) [Imp Factor: 0.7] Enhancement of nonlinear optical properties of BaTiO₃ nanoparticles by the addition of silver seeds:Comment Nibu A George <i>Optics Express</i> 25 (15), 18056-18057, (2017) [Imp Factor: 3.2] Optimization of an optical chopper-laser beam arrangement in low-frequency applications Nibu A George, Nibu B Thomas, Haroon Hussain Moidu, and Piyush K <i>Optik- International Journal for Light and Electron Optics</i> 126 (23), 3628–3630 (2015) [Imp Factor: 2.19] Tailoring of optical properties of fluorescein using green synthesized gold nanoparticles Jisha John, Lincy Thomas, Nibu A. George, Achamma Kurian and Sajan D. George

- Physical Chemistry Chemical Physics* 17, 15813-15821, (2015) [**Imp Factor: 4.49**]
6. Thermal Diffusivity of Gold Nanoparticle Reduced by Polyvinyl Alcohol Using Dual Beam Thermal Lens Technique,
Lincy Thomas, Jisha John, Rajesh Kumar .B, **Nibu A George**, Achamma Kurian
Materials Today, Volume 2, Issue 3, 1017–1020, (2015).
 7. Single-beam thermal lens measurement of thermal diffusivity of engine coolants
Nibu A George, Nibu B Thomas, Kavya Chacko, Neethu V T, Haroon Hussain Moidu, Piyush K and Nitheesh M David
Nondestructive Testing and Evaluation 30 (2), 165-170 (2015) [**Imp Factor: 0.95**]
 8. Silver nanoparticle assisted urine sugar determination using thermal lens spectroscopy
Lincy Thomas, Jisha John, **Nibu A George** and Achamma Kurian
Measurement Science and Technology 35, 115701, (2014). [**Imp Factor: 1.59**]
 9. Microbend fiber optic detection of continuously varying refractive index of chlorinated water.
Nibu A George, Anu Maria Paul and Saranya M S
Optik- International Journal for Light and Electron Optics 125, 301 (2014) [**Imp Factor: 0.84**]
 10. A simple optical sensor for the measurement of Dry Rubber Content in natural latex
Nibu A George, Akhila Peethan and Midhula Vijayan
Nondestructive Testing and Evaluation 28(4), 313-320, (2013) [**Imp Factor: 0.95**]
 11. Depth-kymography of vocal folds vibrations: part II. Simulations and direct comparison with 3D profile measurements
Frits F M de Mul, **Nibu A George**, Gerhard Rakhorst & Harm K Schutte
Physics in Medicine and Biology 54, 3955-3977 (2009) [**Imp Factor: 2.9**]
 12. New laryngoscope for quantitative high-speed imaging of human vocal fold vibration in the vertical and horizontal directions.
Nibu A George, Frits F M de Mul, Q. Qiu, Gerhard Rakhorst & Harm K Schutte
Journal of Biomedical Optics 13 (6) (2008) [**Imp Factor: 3.2**]
 13. Depth-Kymography: High-speed calibrated 3D imaging of human vocal fold vibration dynamics
Nibu A George, Frits F M de Mul, Q. Qiu, Gerhard Rakhorst & Harm K Schutte
Physics in Medicine and Biology 53, 2667-2675 (2008) [**Imp Factor: 2.9**]
(This paper is selected as the Editors Choice (IOP select) and one among the most downloaded papers in 2008)
 14. Evidence of band structure modification due to Jahn-Teller distortion in $\text{Li}_x\text{Mn}_2\text{O}_4$ by photoacoustic spectroscopy.
S T. Lee, K Raveendranath, R. M Tomy, **Nibu A George**, S Jayalakshmi and J. Ravi,
Journal of Physics D: Applied Physics, 40, 3807-3810 (2007) [**Imp Factor: 2.5**]
 15. Photoacoustic spectrum of samarium phthalocyanine powder.
Nibu A George, R Jyotsna, S Thomas Lee, B Aneeshkumar, J Thomas, V P N Nampoori and P Radhakrishnan
Optical Materials 27, 1593-1595 (2005) [**Imp Factor: 2.0**]
 16. Measurement of velocity-temperature correlations in a turbulent diffusion flame.
M J Tummers, E H van Veen, **Nibu A George**, R Rodnik and K Hanjalic
Experiments in Fluids 37, 364-374 (2004) [**Imp Factor: 1.6**]
 17. Fiber optic position sensitive detection of photothermal deflection.
Nibu A George
Applied Physics B: Lasers and Optics 77(1), 77-80 (2003) [**Imp Factor: 1.8**]

18. Combined LDA-Cars Measurements of Velocity-Temperature Correlations in Turbulent Flames.
M J Tummers, E van Veen, **Nibu A George**, R Rodink & K Hanjalic
Proceedings of 3rd Int. Symp. on Turbulence and Shear Flow Phenomena, Vol. 3, pp 1013-1018, (Sendai, Japan)
June 25-27, 2003. Editors: N. Kasagi et al,
19. Thermal diffusivity of liquid crystalline polymers measured using open cell photoacoustic technique.
Nibu A George
Smart Materials and Structures 11, 561-564 (2002) [**Imp Factor: 2.5**]
20. Photothermal deflection studies on GaAs epitaxial layers.
Nibu A George, C P G Vallabhan, V P N Nampoori and P Radhakrishnan
Applied Optics 41, 579-584(2002) [**Imp Factor: 1.7**]
21. Photoacoustic studies on n-type Indium Phosphide.
Nibu A George, C P G Vallabhan, V P N Nampoori and P Radhakrishnan
Optical Engineering, 41(1), 251-254 (2002) [**Imp Factor: 0.96**]
22. Photoacoustic evaluation of the thermal diffusivity of coconut shell.
Nibu A George and Vinayakrishnan R
Journal of Physics: Condensed Matter 14, 4509-4513 (2002) [**Imp Factor: 2.4**]
23. Effect of pH on quantum yield of fluorescein measured using thermal lens technique
A Kurian, **Nibu A George**, S D George, K P Unnikrishnan, B Paul, P Gopinath, V P N Nampoori
and C P G Vallabhan,
Journal of Optics, 31, 29-36, (2002) [**Imp Factor: 2.0**]
24. Studies on fluorescence efficiency and photodegradation of rhodamine 6G doped PMMA using a dual
beam thermal lens technique.
A Kurian, **Nibu A George**, B Paul, V P N Nampoori and C P G Vallabhan,
Laser Chemistry, 20, 99-110 (2002) [**Imp Factor: 0.4**]
25. Use of an open photoacoustic cell for the thermal characterization of liquid crystals.
Nibu A George, C P G Vallabhan, V P N Nampoori, A K George and P Radhakrishnan,
Applied Physics B: Lasers and Optics, 73, 145-149 (2001) [**Imp Factor: 1.8**]
26. Thermal wave propagation in multilayer samples: A laser-induced photoacoustic investigation.
Nibu A George and Vinayakrishnan R
Lasers in Engineering 11, 283-292 (2001) [**Imp Factor: 0.5**]
27. Laser induced photoacoustic technique for the detection of phase transitions in liquid crystals.
Nibu A George, C P G Vallabhan, V P N Nampoori, A K George and P Radhakrishnan,
Journal of Nondestructive Testing and Evaluation, 17(6), 315-324 (2001) [**Imp Factor: 0.95**]
28. Open-cell photoacoustic investigation of the thermal effusivity of liquid crystals.
Nibu A George, C P G Vallabhan, V P N Nampoori, A K George and P Radhakrishnan,
Optical Engineering, 40(7), 1343-1347 (2001) [**Imp Factor: 0.96**]
29. Photoacoustic evaluation of the thermal effusivity in the isotropic phase of certain comb-shaped
polymers.
Nibu A George, C P G Vallabhan, V P N Nampoori, A K George and P Radhakrishnan,
Journal of Physics: Condensed Matter, 13, 365-371 (2001) [**Imp Factor: 2.4**]
30. Chemical sensing with microbent optical fiber
Thomas Lee S, **Nibu A George**, P Sureshkumar, V P N Nampoori, C P G Vallabhan
and P Radhakrishnan
Optics Letters, 26 (20), 1541-1543 (2001) [**Imp Factor: 3.4**]
31. Use of photoacoustic effect for the detection of phase transitions in liquid crystal mixtures.

- Nibu A George**, C P G Vallabhan, V P N Nampoorei, A K George and P Radhakrishnan,
Journal of Physics D: Applied Physics, 33, 3228-3232 (2000) [**Imp Factor: 2.5**]
32. Photoacoustic investigation of the effect of excess lead oxide on thermal diffusivity of PLZT ceramic.
Nibu A George, T Paul, P Radhakrishnan, V P N Nampoorei, C P G Vallabhan and M T Sebastian,
Journal of Materials Science Letters, 19, 499-501 (2000) [**Imp Factor: 1.5**]
33. Physical and optical properties of phthalocyanine doped inorganic glasses.
G A Kumar, J Thomas, **Nibu A George**, N V Unnikrishnan, P Radhakrishnan, V P N Nampoorei and C P G Vallabhan,
Journal of Materials Science, 35(10), 2539-2542 (2000) [**Imp Factor: 2.2**]
34. Optical absorption studies of free and rare earth phthalocyanine doped borate glasses.
G A Kumar, J Thomas, **Nibu A George**, B A Kumar, P Radhakrishnan, V P N Nampoorei, C P G Vallabhan and N V Unnikrishnan,
Physics and Chemistry of Glasses, 41(2), 89-93 (2000) [**Imp Factor: 2.6**]
35. Spectral studies of naphthalocyanine (Nc) and rare earth phthalocyanine (RePc) molecules in an inorganic glassy borate matrix.
G A Kumar, J Thomas, **Nibu A George**, V P N Nampoorei, P Radhakrishnan, C P G Vallabhan and N V Unnikrishnan,
Physics and Chemistry of Glasses, 41(4), 199-203 (2000) [**Imp Factor: 2.6**]
36. Photoacoustic study on photobleaching of Rhodamine 6G doped in poly methyl methacrylate.
Nibu A George, B Aneeshkumar, P Radhakrishnan and C P G Vallabhan,
Journal of Physics D: Applied Physics, 32, 1745-1749 (1999) [**Imp Factor: 2.5**]

Major Conference Presentations

- 3D imaging of vocal fold vibration dynamics.
Nibu A George, F F M de Mul, Q Qiu & H K Schutte. *Voice Foundation's 37th Annual Symposium*, Philadelphia, May 28- June 1, 2008
- 3D modeling of vocal folds vibration dynamics
Frits F M de Mul, Nibu A George & H K Schutte, *Pan European Voice Conference*; (Groningen, The Netherlands) August 29-September 1, 2007
- Femtosecond mid-infrared light source at 4kHz repetition rate.
Nibu A George, G.D. Cringus, M. S. Pshenichnikov & D. A. Wiersma, *Atomic Molecular and Optical Physics Conference*; (Lunteren, The Netherlands) November 11-12, 2004
- Measurements of velocity-temperature correlations in a turbulent diffusion flame
Nibu A George, R Rodink, E van Veen, M J Tummers & K Hanjalic
11th Int. Sym. on Applications of Laser Techniques to Fluid Mechanics; (Calouste Gulbenkian Foundation, Lisbon, Portugal) July 8-11, 2002
- Photoacoustic study of thermotropic liquid crystals
Nibu A George, C P G Vallabhan, V P N Nampoorei, P Radhakrishnan, C Carboni & A K George

5th Gordon Research Conference on Photoacoustic and Photothermal Phenomena, (Queens College, Oxford, UK)

Aug 19-24, 2001

6. Photoacoustic evaluation of thermal diffusivity of Indium Phosphide
Nibu A George, C P G Vallabhan, V P N Nampoori and P Radhakrishnan,
National Conference on Materials Science (M G University, Kottayam, India) Mar.23-24, 2001
7. Use of photoacoustic effect for the detection of phase transitions in polymer dispersed liquid crystal mixtures
Nibu A George, C P G Vallabhan, V P N Nampoori, A K George and P Radhakrishnan,
National Laser Symposium (Defense Science Centre, New Delhi, India) Dec 13-15, 2000
8. Photoacoustic evaluation of the thermal effusivity of the liquid crystals 7OCB and 8OCB
Nibu A George, C P G Vallabhan, V P N Nampoori, A K George and P Radhakrishnan,
National Laser Symposium (Defense Science Centre, New Delhi, India) Dec 13-15, 2000
9. Photoacoustic Monitoring of Nematic to Isotropic Transition in the Liquid Crystal BL001
Nibu A George, C P G Vallabhan, V P N Nampoori, A K George & P Radhakrishnan,
Int. Conf. on Laser Devices and Materials, (DSC, New Delhi, India), Dec 8-10, 1999
10. Photoacoustic study of phase transitions in liquid crystals
Nibu A George, C P G Vallabhan, V P N Nampoori, A K George and P Radhakrishnan,
National Seminar on High Power Lasers, (CUSAT, Cochin, India), Feb 26-27, 1999
11. Photoacoustic study on photobleaching of Rhodamine 6G doped in poly methyl methacrylate
Nibu A George, B Aneeshkumar, P Radhakrishnan & C P G Vallabhan,
Int. Conf. on Optics and Optoelectronics; (IRDE, Dehradun, India), Dec 9-12, 1998
12. Investigations on the photobleaching of Rhodamine 6G doped in poly methyl methacrylate using photoacoustic technique
Nibu A George, B Aneeshkumar, P Radhakrishnan and C P G Vallabhan,
National Laser Symposium, (IIT Kanpur, India), Dec 14-16, 1998

Resource Person/Invited Talk			
Conference/Event	Place	Type	Year
Raman Optronics International Conference	University of Kerala	International Seminar (Chaired a Session)	28-Nov-2020
“Sastrapadam”- Samagra Siksha Kerala, on science awareness, research aptitude development and project guidance or higher secondary school students	BRC Kottayam East	District Level	26-Nov-2020

“Sastrapadam”- Samagra Siksha Kerala, on science awareness, research aptitude development and project guidance or high school students	BRC Kottayam West	District Level	24-Nov-2020
Seminar: Career Opportunities in Physics	KG College, Pampady	MG University Regional	11-Nov-2020
Moulding a Physicist-International Webinar series	Pavanatma College Idukki	International	14-Sept-2020
Career Opportunities in Physics	BCM College, Kottayam	College Level	2019
Physics Association Inauguration	KE College, Mannanam	College Level	2018
Quizmaster: Intercollegiate Physics Quiz Competition	SB College Changanacherry	State Level	2018
Workshop	St. Thomas College, Pala	College Level	2017
Career Guidance	St. Mary’s College, Manarcadu	College Level	2017
Current Trends in Materials Science	Christian College, Chengannur	National Seminar	2016
External Mentor: Walk With a Scholar Program	NSS College, Pandalam	WWS Program	2014
Physics Association Inauguration	St. Thomas College, Ranni	College Level	2014
Workshop on Recent Trends in The Emerging Fields of Electronics	NSS College, Rajakumari	State level	2014
Modern Trends in Electronic Communications and Signal Processing	BPC College, Piravom	National Seminar	2013
Condensed Matter Physics	Govt.College, Kottayam	State level Seminar	2013
Emerging Tools in Computational Physics	Cochin College, Ernakulam	State level Seminar	2013
Annual Photonics Workshop	CUSAT, Cochin	National Seminar	2013
Annual Photonics Workshop	CUSAT, Cochin	National Seminar	2012
Current Developments in Nano-materials (NANOMS 11)	Catholicate College, Pathanamthitta	National Seminar	7-9 Dec 2011

Details of Seminars/Conferences organised

Workshop on Plasma Physics	Baselius College, Kottayam	State level Seminar	28-Feb-17	Coordinator
Workshop on Indian Nuclear Programme	Baselius College, Kottayam	State level Seminar	24-Nov-2016	Coordinator
One Day workshop on Energy Saving and Eco-friendly LED Light Bulb assembling (International Year of Light, 2015)	Baselius College, Kottayam	State level Workshop	5-Dec-2015	Convener

DETAILS OF RESEARCH GUIDESHIP

Centre of Research: Physics Research Centre, Baselius College, Kottayam

Number of Scholars under supervision : 2

Name of the scholar	Full time/Part Time	Status- Awarded (with year)/submitted/ work in Progress/ etc.
1) Lekshmi P Kumar	Full Time	Work in progress
2) Manu Mohan P	Full Time	Work in progress

AWARDS, HONORS, RECOGNITIONS, PATENTS

Nature	Title	Institute
Patent	Light source Comprising a light emitter arranged inside a translucent outer envelope (International Publication No: WO 2010/128419 A1)	Philips Lighting, the Netherlands
Editor's Choice Award (IOP Select)	One of the most downloaded research papers in 2008 (Depth-Kymography: High-speed calibrated 3D imaging of human vocal fold vibration dynamics, Nibu A George, Frits F M de Mul, Q. Qiu, Gerhard Rakhorst & Harm K Schutte, <i>Physics in Medicine and Biology</i> 53, 2667-2675 (2008)	Institute of Physics, UK
Award (Citation and Rs.50,000)	Young Scientist Award, 2013	Attumalil Trust, Kerala
Biography published	Marquis Who's Who in Science and Engineering (2003), Marquis Who's Who in Asia (2006) Marquis Who's Who in the world (2007, 2008).	News Communications Inc, USA
Monitoring Committee Member	Monitoring Committee Member, Accreditation for computer course (2013)	National Institute of Electronics and Information Technology (NIELIT), Govt of India

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

Organisation	Title	Since (Year)
Photonics Society of India	Life Member	2013

20/01/2021

(Signature of the teachers with date)