



Aswathy B R

Assistant Professor of Physics

ADDRESS & EMAIL

Kochuvila Puthen Veedu,
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QUALIFICATION

M Sc, M Ed, NET

DATE OF JOINING

17/10/2012

EXPERIENCE IN YEARS

8 Years

AREA OF SPECIALIZATION

Thin Films

Nanomaterials

ADMINISTRATIVE DISTINCTION

- Member of College Calendar and Handbook committee
- Member of College Union Election committee
- Member of Admission Committee- UG and PG admissions

PAPER PRESENTATIONS

- Paper entitled “*Solar Energy - Technology Feasibility*”, Presented in One day National Seminar on “Energy Efficient Systems for Environmental protection (EEEP-14)” on 27th October 2014.
- Paper entitled *Structural studies of Zinc oxide thin film by sol-gel dip coating method*, Presented in 31st Kerala Science Congress, held at Famita Mata National College, Kollam on 02-03 February 2019.
- Paper entitled “*Deposition of tin oxide thin film by sol-gel dip coating technique and its characterization*”, Presented in INTERNATIONAL CONFERENCE ON ADVANCED MATERIALS (ICAM2019), during 12-15 June 2019, at Nirmalagiri College, Kannur, Kerala, India.

- Paper entitled, *Influence of deposition parameter on the optical properties of ZnO thin films by dip coating method*, Presented in International Conference on Physics of Materials and Nanotechnology (ICPN 2019) Organized by Department of Physics, Mangalore University, Karnataka ,during September 19-21, 2019
- Paper entitled, “*Effect of annealing temperature on structural and optical properties of nickel oxide thin films by sol-gel dip coating method*” Presented in International Conference on Energy and Environment (ICEE-2019) held at TKMCAS, Kollam, during 12-14 December 2019.
- Paper entitled, “*Optical properties of sol-gel derived Zinc oxide thin films: Effect of thickness*” Presented in International Conference on Energy and Environment (ICEE-2019) held at TKMCAS, Kollam, during 12-14 December 2019.
- Paper entitled, *Effect of deposition parameter on structural and optical properties of Sol-gel derived tin oxide thin films*, Presented in International Conference on Energy and Environment (ICEE-2019) held at TKMCAS, Kollam, during 12-14 December 2019.
- Paper entitled “*Bio-synthesis and Characterization of ZnO Nanoparticles: Structural, Optical and antimicrobial studies*” Presented in International Conference on Energy and Environment (ICEE-2019) held at TKMCAS, Kollam, during 12-14 December 2019.

PARTICIPATION IN SEMINARS/ CONFERENCES/ WORKSHOPS

- Participated in Orientation Course organized by UGC-HRDC, University of Kerala, TVPM
- Participated in Refresher Course in Higher Education and Women Managers organized by UGC-HRDC, University of Kerala, TVPM
- Participated in Science Academies’ Refresher Course in Experimental Physics organized by Bishop Moore College, Mavelikara.
- Participated in UGC sponsored National Seminar on Research Instrumentation for Interdisciplinary Science: RIISc-2014 organized by Iqbal College, Peringamala on 22-23 January 2014.
- Participated in UGC sponsored National Seminar on Applications of Advanced Nanomaterials(NSNANO-2014) organized by S N College, Kollam on 25-26 February 2014.

- Attended the ‘Walkathon 2014’ organized by Students for Palliative care Initiative of Alpha Palliative care on 15th October 2014 at Kollam.
- Participated in UGC sponsored National Seminar on Fitness and Life style disease management organized by S N College for Women, Kollam on 26-27 March 2015
- Participated in One day Seminar held in connection with the 100th birthday celebration of Bohr Atom Model organized by S N College for Women, Kollam on 21st January 2015.
- Participated in One day National Seminar on “Energy Efficient Systems for Environmental protection (EEEP-14)” supported by Kerala State Council for Science, Technology and Environment, on 27th October 2014.
- Participated in UGC sponsored National Seminar on Spectroscopic Techniques-Present Scenario (NSST-2015) organized by T K M M College, Nangiarkulangara on 17-19 September 2015.
- Participated in Spectrum Seminar Series 2015-2016 organized by Department of Physics, S N College, Chempazhanthy on 3rd March 2016.
- Participated in a Workshop on “Crystal Growth of Functional and Exotic materials” organized by Centre for High Pressure Research, Department of Physics, Bharathidasan University, Thiruchirappalli, during 6-10 August 2018.
- Participated in Science Academies’ Lecture Workshop on “Quantum theory of Angular momentum, hosted by T K M College of Arts and Science, Kollam during 14-16 March 2018.
- Participated in UGC sponsored National Seminar on Interdisciplinary Approaches in Materials and Biological Research, organized by Mahatma Gandhi College, Thiruvananthapuram on 16-17 February 2018.
- Participated in 31st Kerala Science Congress, held at Fanita Mata National College, Kollam on 02-03 February 2019.
- Participated in INTERNATIONAL CONFERENCE ON ADVANCED MATERIALS (ICAM2019), during 12-15 June 2019, at Nirmalagiri College, Kannur, Kerala.
- Participated in International Conference on Physics of Materials and Nanotechnology (ICPN 2019) Organized by Department of Physics, Mangalore University, Karnataka ,during September 19-21, 2019
- Participated in International Conference on Energy and Environment (ICEE-2019) held at

TKMCAS, Kollam, during 12-14 December 2019.

- Participated in One-day workshop on Computer Interfaced Science Experiments with ExpEyes-17 at TKM College of Arts and Science, Kollam on 18th October 2019.
- Participated and successfully completed in Two Day National Faculty Development Programme on “Need for Examination Reforms in Changing Scenario” on 12-13 August, 2020 organized by Bishop Moore College, Mavelikara.
- Participated and successfully completed in Two Weeks Faculty Development Programme on "MANAGING ONLINE CLASSES and CO-CREATING MOOCS:2.0" from May 18 - June 03, 2020 organized by Teaching Learning Centre, Ramanujan College, University of Delhi.
- Participated and successfully completed in One Week Faculty Development Programme on "Open Source Tools for Research" from June 08 - June 14, 2020, organized by Teaching Learning Centre, Ramanujan College, University of Delhi.
- Participated in Two Weeks Faculty Development Programme on "ADVANCED CONCEPTS FOR DEVELOPING MOOCS" from July 02 - July 17, 2020, organized by Teaching Learning Centre, Ramanujan College, University of Delhi.
- Participated and successfully completed in One Week online Short term Faculty Development Programme (Interdisciplinary) on “Towards a Digital Era of Teaching and Learning”, organized by UGC-HRDC, University of Kerala, Thiruvananthapuram in collaboration with KSMDDB College, Sasthamcotta from August 12-18, 2020.
- Participated and successfully completed the One Week online Short term Faculty Development Programme on “Implementation of Information and Communication Technology in Teaching” , organized by School of Legal Studies , Cochin University of Science and Technology in collaboration with The Kerala State Higher Education Council from July 18-24 , 2020.
- Participated and successfully completed the One Week online Short term Faculty Development Programme on “ICT Tools for Teaching Learning Process- Post Pandemic Educational Strategies ” organized by Department of Physics and IQAC Sree Narayana College Kollam in collaboration with The Kerala State Higher Education Council from August 17-23 , 2020.
- Participated in a Two Day Online National level Faculty Development Program on “Virtual

Physics Labs” on 4th & 5th June 2020 organized by MALLA REDDY INSTITUTE OF ENGINEERING AND TECHNOLOGY, Hyderabad.

- Participated in Moodle Learning Management System training organized at Sree Narayana College, Chengannur in January 2020 semester, with course material provided by the Spoken Tutorial Project, IIT Bombay.
- Participated and successfully completed the One Week Online Short-Term Faculty Development Programme on “PEDAGOGICAL AND E-LEARNING TOOLS FOR TEACHING” organized by Sanatana Dharma College, Alappuzha in collaboration with The Kerala State Higher Education Council from 04th -10th August 2020.
- Participated and successfully completed in Two Weeks Faculty Development Programme on "ICT Based New Paradigms of E- Teaching and E –Learning " during September 16-30, 2020 organized by Mats Sundari College for Women in association with Teaching Learning Centre, Ramanujan College, University of Delhi.
- Participated in One Week Online FDP on "Research Ethics & Characterization Techniques in Materials Science" during 9-15 September 2020 organized by Bishop Moore College Mavelikara in association with St. John's College Agra and Guru Angad Dev Teaching Learning Centre of MHRD , PMMMMNMTT (SGTB Khalsa College, Delhi University).
- Participated in One Week E-summer school on Advanced Functional materials for Energy Harvesting, Storage and Biomedical Applications during 13-19 May 2020 organized by Bishop Moore College, Mavelikara in association with The Kerala State Higher Education Council.

PUBLICATIONS IN BOOKS OR JOURNALS

- Aswathy B R, K. Vinay, M. Arjun, and P. K. Manoj, *Structural studies of Zinc oxide thin film by sol-gel dip coating method*, published in 31st Kerala Science Congress Proceedings, 214-215.
- B. R. Aswathy, K. Vinay, M. Arjun, and P. K. Manoj, “*Deposition of tin oxide thin film by sol-gel dip coating technique and its characterization*” , Published in AIP Conference Proceedings 2162, 020134 (2019);

<https://doi.org/10.1063/1.5130344> Published Online: 29 October 2019.

- Aswathy B R and P K Manoj, "*Influence of deposition parameter on the optical properties of ZnO thin films by dip coating method*", Published in AIP Conference Proceedings 2244, 110003 (2020); <https://doi.org/10.1063/5.0009213> , Published Online: 26 June 2020.
- Meenakshi L J , Aswathy B R , P K Manoj , "*Effect of annealing temperature on structural and optical properties of nickel oxide thin films by sol-gel dip coating method*" -Presented a paper in International Conference on Energy and Environment (ICEE-2019) held at TKMCAS, Kollam,
- B. Sreelakshmi, S. Induja, P.P. Adarsh, H.L. Rahul, S.M. Arya, S. Aswana, R. Haripriya ,B.R. Aswathy, P.K. Manoj, Dalia Vishnudasan, "*Drought stress amelioration in plants using green synthesized iron oxide Nanoparticles*" , Materials Today: Proceedings, <https://doi.org/10.1016/j.matpr.2020.05.801>.

MEMBERSHIP IN PROFESSIONAL BODIES

- Life Member in Academy of Physics Teachers (APT), Kerala
- Life Member in Indian Academy of Physics Teachers(IAPT)
- Life Member in Kerala Academy of Sciences (KAS)

OTHER ACHIEVEMENTS

- Organizing member of One day Seminar - "Aesthetics of Smallness" on 8th February 2013, organized by Department of physics, T K M M College Nangiarkulangara.
- *Organizing member of One day Workshop " Experiments in Physics" for higher secondary students of Alappuzha (Dist.) organized by Department of Physics, T K M M College, on 26th July 2013.*
- *Convener of One day National Seminar on "Energy Efficient Systems for Environmental protection(EEEP-14)" supported by Kerala State Council for Science, Technology and Environment, on 27th October 2014.*

- *Organizing member of Science Exhibition “Callidus-2014” for high school students of Alappuzha (Dist.) organized by Department of Physics, T K M M College, on 10th January 2014 .*
- *Organizing member of One day Training Programme on “Human Rights” on 18th March 2015, organized by Department of Physics, T K M M College, Nangiarkulangara*
- *Organizing Member of International Seminar on “Laser: A non-conventional tool for medical diagnosis and treatment” on 25th August 2017 at S N College for Women, Kollam*
- *Organizing Member of One day Workshop on “Space Science Programme” on 4th October 2018 at S N College for Women, Kollam*
- *Organizing Member of National Science Day celebrations -2018, “ Technology Transfer from Lab to Land for Sustainable Development” on 26th and 27th February 2018 organized by Science Club, S N College for Women.*
- *Stage Manager of Kerala University Youth Festival, held at Kollam during the academic year 2017-18*
- *Faculty member of Scholar Support Programme (SSP) in S N College for Women, Kollam during the academic year 2017-18, 2018-2019 and 2019-2020.*
- *Resource Person of KSITM course” Capacity Building in IT for Girls” at S N College for Women, Kollam during the academic year 2017-18, 2018-2019 and 2019-2020.*
- *Appointed as SPOC of Swayam - NPTEL Online courses: July –December 2020*