

Aswathy S. P.

Assistant Professor

Updated details

Citation indices	All	Since 2020
Citations	15	15
h-index	02	02
i10-index	0	0

Seminars/Workshops attended: 18

Webinars attended: 10

ADMINISTRATIVE DISTINCTION

- Nodal Officer of AISHE –All India Survey of Higher Education, SN College, Chempazhanthy during 2016-21.
- Deputy Warden, UGC Women’s Hostel, S N College, Chempazhanthy during 2018-21.
- Chief Superintendent of University Examinations, S N College, Chempazhanthy during 2018-21.
- Programme Officer, National Service Scheme in TKMM College, Nangiarkulangara during 2014-16.
- Co-ordinator, Additional Skill Acquisition Programme (ASAP) implemented by the Higher Education Department, Govt. of Kerala during 2014-16 in TKMM College, Nangiarkulangara and 2024-25 in SN College, Varkala.
- Co-ordinator, Student Tutorial Project, an initiative of National Mission on Education through ICT, MHRD, Govt. of India to promote IT literacy through Open Source Software in TKMM College, Nangiarkulangara during 2014-16.
- District Programme Co-ordinator, Sasthrajalakom-2019 organized by the General Education Department. Govt. of Kerala and SIET, Kerala in Sree Narayana College, Chempazhanthy.
- Co-ordinator of RASATHANTHRA-2019 and RASATHANTHRA-2021, National level Quiz competition jointly organized by the PG and Research Department of chemistry, S N College, Chempazhanthy, Indian Association of Hydrogen Energy and Advanced Materials & Department of Chemistry, Kerala University.
- Nodal Officer, All state and central scholarships in SN College, Chempazhanthy during 2016-18.



“Chithiradam”, Panayil,
Chempazhanthy P.O.,
Trivandrum-695587

QUALIFICATIONS:

M.Sc., M.Phil in Chemistry,
UGC-NET in Chemical
Sciences

DATE OF JOINING:

10-10-2012

EXPERIENCE IN YEARS:

12 years

AREA OF RESEARCH:

Electrochemistry, Materials
Science, Nanochemistry

- Course Co-ordinator, IIRS-ISRO OutReach programme at Sree Narayana College, Chempazhanthy.
- Elected College Council Member for the academic year 2022-23 in Sree Narayana College, Chempazhanthy.
- Member, Internal Quality Assurance Cell and Convenor, Criteria 5 of SSR data consolidation and management, 2023-24 in Sree Narayana College, Chempazhanthy.
- Member, National Institutional Ranking Framework (NIRF) committee, Sree Narayana College, Chempazhanthy during the academic year, 2017-2018.
- Member, RUSA committee, Sree Narayana College, Chempazhanthy during the academic year, 2018-20.
- Member, Admission committee at TKMM College, Nangiarkulanagara (2014-15) and at Sree Narayana College, Chempazhanthy (2021-24).
- Member, University examination committee at Sree Narayana College, Chempazhanthy for the academic year 2021-24.
- Convenor and Member of College Science Club during 2013-16 in TKMM College, Nangiarkulangara and 2017-18 & 2022-23 in Sree Narayana College, Chempazhanthy.
- Member, Literary and Debating club, Dance and Theatre club, Performing Arts club, Quiz club.
- Convenor, Planning forum, SN College, Chempazhanthy.
- Convenor of all programmes conducted by the Chemistry Association during 2016-2017 and Secretary of the Chemistry Department in Sree Narayana College, Chempazhanthy during 2016-17.
- Member, IQAC Steering committee in Sree Narayana College, Chempazhanthy during 2018-2020.
- Member, UGC Women's Hostel committee in S N College, Chempazhanthy during 2016-17, 2020-21.
- Member, Performing Arts club and Forest club, SN College, Sivagiri, Varkala during 2024-25.
- Convenor, Skill Hub and PMKVY, SN College, Sivagiri, Varkala during 2024-25.

SEMINARS/WORKSHOPS ORGANIZED

1. Convenor, "Emerging trends in Organic chemistry" as a part of Seminar series, DARSAN 2014 on 18th February 2014.
2. Convenor, Organizing committee of the Seminar "The Story of Chemistry" organized as part of the Inauguration of Association of Chemistry and Industrial Chemistry (ACIC) at the Dept. Of Chemistry, T.K.M.M College on 30th October, 2015.

3. Convenor, organized the inauguration of Chemistry Association and Interdepartmental Quiz competition in association with the Science Club at the PG and Research Department of Chemistry, S N College, Chempazhanchy on 22nd August 2017.
4. Convenor, Chemistry Association organized the 150th Birth Anniversary celebrations of Marie Curie in association with the Science Club at the PG and Research Department of Chemistry, S N College, Chempazhanchy on 10th November 2017.
5. Programme Co-ordinator, Sasthrajalakom- 2019 organized from 5th to 7th January, 2019 at Sree Narayana College, Chempazhanchy in association with the General Education Department, Govt. of Kerala and SIET, Kerala.
6. Co-convenor, International Year of Periodic Table Celebrations 2019 and Display of Human Periodic Table on 6th March 2019.
7. Chief Editor, CHE MAG, Annual Chemistry Magazine for the year, 2019-20 released by the PG and Research Department of Chemistry, S N College, Chempazhanchy.
8. Convenor, RASATHANTHRA- 2019, a National level Quiz competition jointly organized by the PG and Research Department of chemistry, S N College, Chempazhanchy, Indian Association of Hydrogen Energy and Advanced Materials & Department of Chemistry, Kerala University on 7th Dec, 2019.
9. Convenor, Organizing committee of the Webinar “Separation Techniques” on 30th October 2020 by the PG and Research Department of Chemistry, S N College, Chempazhanchy.
10. Convenor, RASATHANTHRA- 2021, a National level Quiz competition jointly organized by the PG and Research Department of chemistry, S N College, Chempazhanchy, Indian Association of Hydrogen Energy and Advanced Materials & Department of Chemistry, Kerala University on 6th Nov, 2021.
11. Co-ordinator, Annual Departmental alumni meet, ALCHEMY 2021 held at the PG and Research Department of Chemistry, S N College Chempazhanchy on 21st March 2021.
12. Convenor, Spectrum Seminar series 2021 organized by the PG and Research Department of Chemistry, S N College Chempazhanchy on 14th December 2021.
13. Co-ordinator, National level concept test in Chemistry (CONTECH 2022-23) organised at the PG and Research Department of Chemistry, S N College Chempazhanchy in association with the Association of Chemistry Teachers (ACT), Homi Bhabha Centre for Science Education, Mumbai on 25th February 2023.
14. Co-ordinator, Invited Lecture on “Material Investigation: Spectroscopy and Chromatography” by Dr. Renjith S from SCTIMST organised at the PG and Research Department of Chemistry, S N College Chempazhanchy in association with the Association of Chemistry Teachers (ACT) for the M.Sc students of various Arts and Science Colleges affiliated to Kerala University on 17th October 2023.
15. Co-ordinator, Orientation programme to FYUGP students on Skill-based courses organized by Sree Narayana College, Sivagiri, Varkala in association with ASAP, Kerala on 30th August 2024.

16. Course Co-ordinator, DST-FIST sponsored Certificate course in “Water Quality Analysis” conducted by the PG Department of Chemistry and Geology in association with IQAC, Sree Narayana College, Sivagiri, Varkala during the academic year 2024-25.
17. Co-ordinator, Invited Lecture on “Integrated Wetland Treatment Technology: Advancing Environmental Solutions and Career Pathways” by Prof. Anil Kumar Dikshit from IIT Bombay, organised at the PG Department of Chemistry, S N College, Sivagiri, Varkala for the M.Sc students on 29th November 2024.

MEMBERSHIP IN PROFESSIONAL BODIES

- Member, Kerala University Department of Chemistry Alumni Association since 2019.
- Member, Academy of Chemistry Teachers since 2012.

ACHIEVEMENTS/AWARDS

1. **Best poster presentation award** in the National Seminar on “Advances in Chemistry- Research and Opportunities” on 5th August 2013 organized by the Dept. of Chemistry, All Saints’ College, Trivandrum.
2. **Best oral presentation award** in the National Seminar on Advanced Soft Materials, organized by the PG and Research Department of Chemistry, St. Stephens College, Pathanapuram during 22nd and 23rd March 2023.
3. **Best oral presentation award** in the National Conference on Advanced Functional Materials-2023, organized by the VTMNSS College, Dhanuvachapuram during 23rd and 24th March 2023.
4. **Best oral presentation award** in the International Conference on Nanotechnology and Materials Science, organized by the PG and Research Department of Chemistry, Mar Ivanios College (Autonomous), TVPM during 18th and 19th December 2023.
5. **Best oral presentation award** in the International Conference on Advances in Interdisciplinary Nanoscience, organized by Government College for Women, TVPM on 10th January 2024.

PUBLICATIONS

1. **Aswathy, S.P.**, Vaisakh, S.S. and George, S., (2021). Thio amino acids-modified manganese doped ZnS quantum dot probes for the photoluminescent sensing of hazardous nitro aromatics. *Materials Today: Proceedings*, 41, 628-637.
2. **Aswathy, S.P.**, Vaisakh, S.S., (2023). MPTS Modified ZnS-Mn²⁺ Quantum Dot Probes for Cu²⁺ Ions Fluorescent Sensing in Aqueous Solution. *Journal of Analytical Chemistry*, 78(2), 175-184.

3. **Aswathy, S.P.**, Geethanjali, C.V., Kumar, A.S. and Shibli, S.M.A., (2023). Tuning of iron vanadate by bismuth doping to improve galvanic zinc coatings for high corrosion resistance and NIR reflectance. *Journal of Industrial and Engineering Chemistry*, 132, 346-359.
4. **Aswathy, S.P.**, Geethanjali, C.V., Kumar, A.S., Viswanathanathan S. Saji, Shibli, S.M.A., (2023). Development of microstructurally tuned zinc phosphate coating containing bismuth-doped iron vanadate (BFV) with high NIR reflectance, corrosion resistance and thermal shielding. *Surfaces and Interfaces*, 45, 103882.
5. **Aswathy, S.P.**, Kumar, A. S., Saji, V. S., & Shibli, S. M. A. (2024). Near-Infrared Reflectance, Thermal Shielding, and Corrosion Resistance of Neodymium-Modified Zinc Aluminate Spinel-Based Zinc Phosphate Coatings. *Advanced Engineering Materials*, 2401351.

BOOKS/BOOK CHAPTERS PUBLISHED

1. Introduction to Supramolecular, Nano and Green Chemistry (ISBN No: 978-93-5291-273-5).
2. Book of Abstracts, International Conference on Advances in Interdisciplinary Nanoscience-2024 (ISBN No: 978-9391675-86-8).

ORIENTATION/REFRESHER SHORT-TERM COURSE/ TRAINING ATTENDED

1. Orientation course for NSS Program Officers by National Service Scheme, University of Kerala from 06/08/2015 to 12/08/2015 at Rajagiri College of Social Sciences, Kalamassery.
2. Orientation Programme by UGC HRDC, University of Kerala from 07/06/2017 to 05/07/2017 at University of Kerala, Kariyavattom Campus.
3. Refresher Course in Material Science by UGC HRDC, University of Kerala from 30/10/2018 to 21/11/2018 at University of Kerala, Kariyavattom Campus.
4. Two-week online certificate MOOC Course in Online learning and Content Development by Flair Kerala, Directorate of Collegiate Education, Kerala from 18/04/2020 to 02/05/2020 via online mode.
5. Online FDP programme on “GCHEM PAINT” by DKM College for Women, Tamil Nadu offered in association with the Spoken Tutorial Project, IIT Bombay, funded by the National Mission on Education through ICT, MHRD, Govt. of India from 04/05/2020 to 10/05/2020 via online mode.
6. Two-week FDP course on “Managing online classes and co-creating MOOCS 3.0”. by Teaching - Learning center, Ramanujan College, University of Delhi under the PMMMNMTT scheme of MHRD from 25/07/2020 to 10/08/2020 via online mode.

7. One-week national online FDP course on “Instrumental methods of Analysis” by Guru Angad Dev Teaching Learning centre, SGTB Khalsa College, University of Delhi under the PMMMNMTT scheme of MHRD in association with Bishop Moore College, Mavelikara from 07/10/2020 to 13/10/2020 via online mode.

8. Five days training for college teachers on “Recent Advances in Inorganic Chemistry” by Department of Chemistry, School of Physical Sciences & PMMMNMTT, School of Education, Central University of Kerala, Kasaragod from 05/03/2021 to 09/03/2021 via online mode.

9. One-week FDP course on “Academic Writing” by Teaching -Learning centre, Ramanujan College, University of Delhi under the PMMMNMTT scheme of MHRD from 10/05/2021 to 16/05/2021 via online mode.

10. Five day online Institutional Training Programme on Moodle LMS by FDP Centre, Kerala State Higher Education Council & Digital University of Kerala from 01/02/2023 to 07/02/2023 via online mode.

11. Refresher Course in Educational Technology and ICT by UGC-HRDC, University of Kerala from 06/03/2024 to 19/03/2024 at University of Kerala, Kariyavattom Campus.

12. NEP 2020 Orientation & Sensitization Programme under Malaviya Mission Teacher Training Programme (MM-TTP) of University Grants Commission (UGC) at UGC-MMTTC, University of Kerala, Kariavattom, Thiruvananthapuram from 02/09/2024 to 12/09/2024 via online mode

PAPERS PRESENTED IN NATIONAL SEMINARS

1. Participated and presented a paper entitled “Thio-modified manganese doped ZnS QD probes for the photoluminescent sensing of hazardous nitroaromatics” in the National Seminar on “Advances in Chemistry- Research and Opportunities” on 5th August 2013 organized by the Dept. of Chemistry, All Saints’ College, Trivandrum and **won the best poster presentation award**.

2. Participated and presented a poster entitled “Thio-modified manganese doped ZnS QD probes for the fluorescent sensing of copper ions” in the UGC sponsored National Seminar and Training on “Molecular Modelling and Computational Chemistry” from 7th to 9th May 2014 held at S.N College, Chengannur.

3. Participated and presented a paper entitled “ A Novel green approach for the fluorescent sensing of hazardous nitro aromatics using amino acid functionalized QDs” in the National Seminar on “Green approach to meet challenges in Chemical Industry” organized by the Dept. of Chemistry & Industrial Chemistry, Sree Narayana College, Chathannoor on 5th and 6th November, 2014.

4. Participated and presented a paper entitled “Fluorescent sensing of metal ions using MPTS functionalized ZnS-Mn QDs” in the National Seminar on “Recent and Emerging Advances in Chemical Science (REACS-2015)” organized by the Dept. of Chemistry, All Saints’ College, Trivandrum on 8th and 9th January 2015.
5. Participated and presented a paper in the UGC sponsored National Seminar “Spectroscopic techniques-present scenario NSST-2015” at Dept. of Physics, T.K.M.M College, Nangiarkulangara on September 17-19, 2015.
6. Participated and presented a paper entitled “Development and Exploration of Bismuth doped iron vanadate composite for high NIR reflectance” in the National Conference on Advanced Functional Materials-2023 organized by the VTMNSS College, Dhanuvachapuram during 23rd and 24th March 2023 and **won the best oral presentation award.**
7. Participated and presented a paper entitled “Color performance and NIR Reflectance property of Bismuth doped Iron vanadate composite based Galvanic coatings” in the National Seminar on Advanced Soft Materials, organized by the PG and Research Department of Chemistry, St. Stephens College, Pathanapuram during 22nd and 23rd March 2023 and **won the best oral presentation award.**

PAPERS PRESENTED IN INTERNATIONAL CONFERENCES

1. Participated and presented a paper entitled “Effect of TEOS derived silica interface on the Thermal, Electrical and Mechanical properties of Epoxy/Titania Composites” in the Three-day International Seminar on Intriguing aspects of Chemistry 2020 (IAC 2020) organized by the Dept. of Chemistry, Govt. Arts College, Thiruvananthapuram from 13th to 15th January 2020.
2. Participated and presented a paper entitled “Tuning of bismuth-doped iron vanadate zinc phosphate coatings for high NIR reflectance and corrosion-resistance” in the International Conference on Nanotechnology and Materials Science, organized by the PG and Research Department of Chemistry, Mar Ivanios College (Autonomous), TVPM during 18th and 19th December 2023 and **won the best oral presentation award.**
3. Participated and presented a paper entitled “Bismuth-doped iron vanadate modified galvanic zinc coatings for high NIR reflectance and corrosion-resistance” in the International Conference on Advances in Interdisciplinary Nanoscience, organized by Government College for Women, TVPM on 10th January 2024 and **won the best oral presentation award.**