



Dr Arunima S R

Assistant Professor of Chemistry

ADDRESS & EMAIL

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QUALIFICATION

MSc, CSIR JRF, Ph.D

DATE OF JOINING

05/01/2011

EXPERIENCE IN YEARS

10years

AREA OF SPECIALIZATION

Electrochemistry, Surface science, Material Chemistry

PAPER PRESENTATIONS

- **S. R. Arunima**, S. M. A. Shibli, "Electrochemical evaluation of WO_3 based hot dip zinc coating for corrosion protection", MATCOM-2018, Sree Narayana College for Women, Kollam, Oral Presentation, (**National**).
- **S. R. Arunima**, S. M. A. Shibli, "Exploration of hydrophobicity of the developed hot dip zinc coating for corrosion prevention", ICAFM-2018, St. Berchmans College, Changanassery, Poster presentation. (**International**)
- **S. R. Arunima**, S. M. A. Shibli, "Role of metal oxides in the hydrophobic nature of hot dip zinc coating." ISAFM-2018, Mar Ivanios College, Trivandrum, Oral presentation, (**International**).
- **S. R. Arunima**, S. M. A. Shibli, "Exploration of $WO_3/BiVO_4$ composite for combating biocorrosion in hot dip zinc coating." NTAMC-2018, Department of chemistry, Govt College Attingal, Thiruvananthapuram Oral presentation, (**National**).
- **S. R. Arunima**, S. M. A. Shibli, "In-depth identification and tuning of intermetallic layers of WO_3 composite incorporated hot-dip zinc coatings by SKP-An electrochemical approach" NACS-2018, Department of chemistry, Unverisity of Kerala, Kariavattom, Poster presentation, (**National**). (**Best poster presentation**)
- **S. R. Arunima**, S. M. A. Shibli, "SKP-based surface survey of electrogalvanic active sites" NSAFM-2019, Department of chemistry, Unverisity of Kerala, Kariavattom, Oral presentation, (**National**).
- **S. R. Arunima**, S. M. A. Shibli, "A sustainable bio passivation method for protection of mild steel by *Pseudomonas putida* biofilm" GACS-2019, PG Department of Chemistry, St. Gregorios College, Kottarakkara, Oral presentation, (**National**).

- **S. R. Arunima**, S. M. A. Shibli, “Development and exploration of composite incorporated galvanic zinc coating with improved hydrophobicity” iCEE-2K19, TKM College of Arts and Science, Kollam, poster presentation, (**International**).
- Presented a paper at national seminar on “Green approaches towards chemical synthesis” organized by Dept.of Chemistry S.G .College Kottarakkara, on 7/11/2019 and 8/11/2019, Sponsored by Science and Engineering Research Board(DST-SERD) Govt.of India
- Poster presentation in International Conference on Energy and Environment at TKM College, Kollam, 12 to 14, December 2019.

PARTICIPATION IN SEMINARS/ CONFERENCES/ WORKSHOPS

- Completed two week faculty development programme on ‘Managing Online Courses and Co-creating MOOCS 2.0’ from May 18 - June 03, 2020 Teaching Learning Centre, Ramanujan College University of Delhi under the aegis of **MINISTRY OF EDUCATION PANDIT MADAN MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING.**
- Completed one week faculty development programme on ‘Open Source Tools for Research”from June 08 - June 14, 2020. Teaching Learning Centre, Ramanujan College University of Delhi sponsored by **MINISTRY OF HUMAN RESOURCE DEVELOPMENT PANDIT MADAN MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING.**
- Completed one week faculty development programme on ‘Development and Implementation of MOOCS’ from October 21 - 27, 2020. Teaching Learning Centre, Ramanujan College University of Delhi under the aegis of **MINISTRY OF HUMAN RESOURCE DEVELOPMENT PANDIT MADAN MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING.**
- Participated in the One-week Faculty Development Programme on ‘Online Education in Higher Education Institutions’ conducted by the Faculty Development Centre of **Kerala State Higher Education Council** Thiruvananthapuram through online mode from 13th to 17th July 2020.
- Completed Five Day Faculty Development Programme on ‘Effective Teaching and Learning Through Moodle’ organised by PG and Research Department of Physics

combined with IQAC Sree Narayana College Kollam in association with **Kerala State Higher Education Council** from 31st May 2012 to 4 June 2021.

- Participated in the G Chem Paint training organized at D.K.M. College for Women in January 2020 semester, with course material provided by 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. The Faculty Development Programme included hands on exposure in G Chem Paint and LibreOffice Suite Writer.
- Attended Four day workshop and hands-on- experience with the NMR instrumentation in the National Workshop on Magnetic resonance spectroscopy and Imaging (NMRSI 2019) organized by Department of Chemistry and SICC, University of Kerala, Thiruvananthapuram during 25-28 February 2019.
- Participated in ‘NAAC Sponsored National Seminar, Dec 19 & 20, 2019 Organized by SNCW, Kollam
- Has participated in Faculty Development Programme from 2020-05-25 to 2020-05-29 on Moodle Learning Management System organized by Sree Narayana College, Chengannur with course material provided by Spoken Tutorial Project, IIT Bombay. This training is offered by the Spoken Tutorial Project, IIT Bombay, funded by the National Mission on Education through ICT, MHRD, Govt. of India.
- Participated in the International Webinar on ‘Nanotechnology Against COVID-19’, Organised by Post Graduate and Research Department of Chemistry, Sree Narayana College for Women, Kollam, Kerala, India on 23 July 2020.
- Has participated in the “International Webinar on Recent Advances in Chemical Science” jointly organized by Postgraduate & Research Department of Chemistry S N College Kollam and Internal Quality and Assurance Cell (IQAC), Sree Narayana College, Kollam from 28th - 31st May 2020.
- participated in the International Webinar on 22nd July 2020 organized by the Post Graduate and Research Department of Physics, Sree Narayana College for Women, Kollam, Kerala.

PUBLICATIONS IN BOOKS OR JOURNALS

- **S. R. Arunima**, M. J. Deepa, C. V. Geethanjali, V. S. Saji, and S. M. A. Shibli, Tuning of hydrophobicity of WO₃-based hot-dip zinc coating with improved self-cleaning and anti-corrosion properties, *Applied Surface Science*, (2020) 146762.
- **S.R Arunima**, Deepa, M.J.; Elias, L.; Thara, T.A.; Geethanjali, C.V.; Shibli, S.M.A. Tuning of surface characteristics of composite (WO₃/BiVO₄) zinc phosphate coatings for industrial applications. *Applied Surface Science*, 543 (2020).148822.
- **S.R. Arunima**, Deepa, M.J.; Elias, L.; Shibli, S.M.A. Exploration of WO₃/BiVO₄ composite based hot-dip zinc coating to combat biocorrosion. *Material Science and Engineering: B*, 271 (2021) 115302.
- **S. R. Arunima**, Electrochemical characterization of different layers of composite incorporated hot-dip zinc coating, *Asian Journal of Chemistry*, 32 (2020), 1370-1378.
- Deepa, M.J.; **Arunima, S.R.**; Elias, L.; Shibli, S.M.A. Development of Antibacterial V/TiO₂-Based Galvanic Coatings for Combating Biocorrosion. *ACS Applied Biomaterials*, 4 (2021) 3332-3349.
- M. J. Deepa, **S. R. Arunima**, G. Riswana, A. H. Riyas, M. Ameen Sha, C. V. Suneesh and S. M. A. Shibli, Exploration of Mo incorporated TiO₂ composite for sustained biocorrosion control on zinc coating, *Applied Surface Science*, 494 (2019) 361-376.
- V. S. Sumi, M. Ameensha, **S. R. Arunima** and S. M. A. Shibli, Development of a novel method of NiCoP alloy coating for electrocatalytic hydrogen evolution reaction in alkaline media, *Electrochimica Acta*, 303 (2019) 67-77.
- Sreelekshmy B. R., Aarcha Vijayan, Rubina Basheer, **S. R. Arunima**, Ameen Sha M., Bhagya T. C.,Manu M. N., Shibli S. M. A. Zn Wetted CeO₂ Based Composite Galvanization: An Effective Route to Combat Biofouling, *ACS Applied Biomaterials 2* (2019) 3774-3789.

- M. J. Deepa, **S. R. Arunima**, H. Ramesh, V. S. Sumi, M. Ameen Sha, A. H. Riyas and S. M. A. Shibli, Tuning of electrochemical and topographical characteristics for enhancement of anti-corrosion performance of hot-dip TiO₂-Zn-(1%) Al composite coatings, *Corrosion Science* 177 (2020) 108944.
- V. S. Sumi, **S. R. Arunima**, M. J. Deepa, M. Ameen Sha, A. H. Riyas, M. S. Meera, V. S. Saji, and S. M. A. Shibli, PANI-Fe₂O₃ composite for enhancement of active life of alkyd resin coating for corrosion protection of steel." *Materials Chemistry and Physics* (2020) 122881.

MEMBERSHIP IN PROFESSIONAL BODIES

- **Academy of chemistry teachers (ACT)**

OTHER ACHIEVEMENTS

- Has coordinated the One Week (7 Days) online Short-Term Faculty Training Programme (Interdisciplinary) on “DIGITAL CONTENT MANAGEMENT ON E-LEARNING”, which was delivered as MOOC with four quadrants, organized by Sree Narayana College for Women, Kollam, in academic collaboration with **Kerala State Higher Education Council** from June 13th to June 19th of 2021

RESEARCH OUTPUT

- Completed UGC Sponsored Minor research Project (**MRP(S)/13-14/KLKE037/UGC-SWRO**) entitled CHITOSAN BASED POLYMER MATRIX FOR CONTROLLED DRUG RELEASE STUDIES.

CITATIONS AND INDEXING, IF ANY

- **JOURNAL CITATIONS**

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- **INDEXING (h-INDEX)**

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