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List of Publications in Journals/Books

1. Joshy Joseph, Elizabeth Kuruvilla, **Asha T. Achuthan**, Danaboyina Ramaiah and Gary B. Schuster, "Tuning of Intercalation and Electron-Transfer Process between DNA and Acridinium Derivatives through steric effects." **Bioconjugate Chem** 2004, 15, 1230-1235. **(I.F- 4.818)**
2. **Asha T. Achuthan** and K.N. Maiti, "Influence of grinding on the properties of ceramic glazes," **Industrial Ceramics**, Vol.26, no.3, 2006, 181-189.
3. **Asha T. Achuthan** and K.N. Maiti "Optimizing Industrial Production of Ceramic Glazes for the best performance", **Indoceram**, Vol.43, No.3, 2006, pages 64-72.
4. V. Kumar, **Asha T. Achuthan**, K. Sivanandan, P.V. Divya and K.P. Rema, "Sol-gel Synthesis of PZT-Glass nanocomposites using a Simple System and characterization", **Journal of Applied Ceramic Technology**, 3[5], **2006**, 345-352.**(I.F-1.165)**
5. **Asha T. Achuthan** and K.N. Maiti, "Examination of Industrial Practice of Ceramic Glaze Making with Emphasis on Particle Size Distribution" **Trans. Ind. Ceram. Soc.**, 66 (2), 2007, 89-96. **(I.F- 1.04)** Cited in *Trans. Ind.Ceram.Soc.*77, 4, 192-197, 2018.
6. **A.T. Achuthan**, A. Peer Mohammed and K.N. Maiti, "Effects of precipitated silica addition to the composition of Ceramic Glazes", **Interceram**, Vol.37, No. 1, 2008, 10-15. **(I.F 0.13)**
7. K. Sivanandan, **Asha T. Achuthan**, V. Kumar and Isaku Kanno, "Fabrication and transverse piezoelectric characteristics of PZT Thick Film Actuators on Alumina Substrates, **Sensors and Actuators A: Physical**. Volume 148, Issue 1, 4 November 2008, Pages 134-137. **(I.F.2.31)**
8. **Asha Anil**, A. Peer Mohamed and K. N. Maiti, Evaluation of dry as well as thermo-Mechanical properties of porcelain compositions containing colloidal silica as an additive, **Trans. Ind. Ceram. Soc.**, Vol.68, 2009, 99-104. **(I.F- 1.04)**
9. **Asha Anil**, A. Peer Mohamed, R.M. Savsani and S.N. Misra, Crockery ware scraps incorporation in underglaze engobe formulations, **Industrial Ceramics (IND CERAM)**, Vol.31 Issue.2 99-105, **2011**.
10. **Asha Anil***, Indranil Payra and Satyendra Nath Misra, "Effect of curing temperature on surface characteristics of TiO₂-Fe₂O₃ multi oxide thin film deposited over glazed ceramic wall tiles" **Trans. Ind. Ceram. Soc.**, Vol. 73.No.3, **2014**, 221-227. **(I.F- 1.04)**

11. **Asha Anil** and S.N Misra, “Studies on Chemical Resistance of Sol-Gel Derived TiO₂-Fe₂O₃ Thin Film Coatings on Glazed Ceramic Wall Tiles” **Trans. Ind. Ceram. Soc.**, Vol. 75, Issue 1, **2016**, 53-58. DOI:10.1080/0371750X.2016.1149099. (**I.F- 1.04**)
12. **Asha Anil**, Nirendra Mohan Misra and Satyendra Nath Misra, “Characterization of some red clays from Morbi-Wankaner Region (Gujarat, India), **Trans. Ind. Ceram. Soc.**, Vol.77, No.2, pp. 73-83 (**2018**). (**I.F- 1.04**)
13. Asha Anil, “Studies on Red Clays of Gujarat Region for Its Suitability in Vitrified Ceramics”, PhD Thesis, Pandit Deendayal Petroleum University, Gandhinagar, Gujarat, November, **2020**.

Papers /Posters presented in International/National Conferences

1. **Asha Anil** and S.N. Misra, “Effect of some silane based sol towards hydrophobic characteristics and chemical resistance on glazed ceramic tiles”, *Proceedings of International Conference on Advanced Functional Materials (ICAFM)*, 9-10 December, **2009** held at NIIST, Trivandrum.
2. **Asha Anil**, *Indranil Payra and S.N. Misra*, “Alkali Resistance of Sol-Gel Derived Coloured Inorganic Oxide Composite Coatings on Glazed Wall Tiles” *Proceedings of 21st Annual General Meeting (AGM) of the Materials Research Society of India (MRSI) and Theme Symposium on Advance Ceramic Materials-Monoliths to Composites*, 09-11February, **2010**, Sardar Patel University, Vallabh Vidyanagar, Gujarat., P 67.
3. **Asha Anil**, *Indranil Payra and S.N. Misra* “Chemical resistance of sol-gel derived coatings on Sanitary ware products” *Proceedings of National Seminar on “Ceramics: Energy and Environment” & 74th Annual session of the Indian Ceramic Society* (pp-45) held on 11-13 January, **2011** at Hotel Taj Bengal, Kolkata jointly organized by CGCRI, Kolkata and Indian ceramic Society. *Technical Proceedings (138-140.)*
4. **Asha Anil and S.N. Misra** “Wet Chemical Route Based Nano Zirconia Coatings on Glazed Ceramic Tiles” Abstract book of *International Conference on “Supramolecules and Nanomaterials- Research and Applications (ICSNA 2012)”* which was held from February 6-8, **2012** at Convention Centre, Gujarat University, Ahmedabad, O-08, P58. (*Oral Paper Presented on 7.2.2012*).
5. **Asha Anil**, Bangoria Darshana R, S.N.Misra “Studies on various functional properties of Titania thin film developed on glazed ceramic wall tiles” Abstract book [ISBN: 978-93-80858-33-3] of *International Conference on Ceramics (ICC-12)* which was held from December 12-13, **2012**. C-002, P34. (*Oral Paper Presented on 12-12-2012*).

- Int. J. Mod. Phys. Conf. Ser.** 2013.22:79-92 (World Scientific) DOI: 10.1142/S2010194513009951. ISSN: 2010-1945 edited by Manoj Singh Shekhawat.
6. **Asha Anil** and S.N. Misra, "Surface Porosity Analyses of Polished Vitrified Porcelain Tiles Manufactured in Gujarat State: An Optical and Scanning Electron Microscopic study". *International Conference on Emergence of New Era in Glass and Ceramics, NEGC 2013* (17th Jan. **2013**) Ahmedabad, Gujarat, India. Pp.29.
 7. **Asha Anil** Ronak B Shah and Satyendra Nath Misra, *Studies on Surface Characteristics and Chemical Resistance of Zirconia nano Coating Developed on Glazed Ceramic Wall Tiles, International Conference on Advanced Nanomaterials & Emerging Engineering Technologies (ICANMEET-2013) Sathyabama University, Chennai, India, July 24th to 26th, 2013, 377 -382. ISBN: 978-1-4799-1377-0.Oral paper. DOI: 10.1109/ICANMEET.2013.6609312, published by IEEE.*
 8. **Asha Anil**, Rashmi Yadav and S.N. Misra, Development of Zinc Oxide Thin Films on Glazed Ceramic Surfaces by Sol-gel Method and Studies on Its Surface Characteristics, Poster 119, p189, Proceedings of Int. Conf on Ceramic & Advanced Materials for Energy and Environment (CAMEE 2015) held at Bangalore from 14th - 17th December, 2015.
 9. Parvesh Agrawal, **Asha Anil**, S.N. Misra, G.S. Grewal, U. Puntambekar, Development of Technology for the Manufacture of High Tension (HT) Porcelain Insulators Using Locally Mined Raw Materials For the Benefit of SME's in Gujarat, Poster 121, p190. Proceedings of Int. Conf. on Ceramic & Advanced Materials for Energy and Environment (CAMEE 2015) held at Bangalore from 14th -17th December, **2015**.
 10. **Asha Anil**, S.N. Misra and N.M. Misra, Studies on Thermal Reactions and Sintering Behaviour of Red Clays by Irreversible Dilatometer, Abstract book of The 2nd International Conference on Condensed Matter & Applied Physics (ICC **2017**), held at Govt. Engineering College, Bikaner, Rajasthan, India during November 24-25, 2017, p.813. Published in American Institute of Physics Conf. Proc. 1953, 090078 1-4 (**2018**); <https://doi.org/10.1063/1.5032925>.
 11. **Asha Anil**, S.N. Misra and N.M. Misra, "Viscosity of Ferruginous Clays from Gujarat Region- Effect of Minerals Present Therein. Abstract book of 81st Annual Session of Indian Ceramic Society & International Conference on Expanding Horizons of Technological Applications of Ceramics and Glasses (EH-TACAG'17), College of Engineering, Pune, during December 14-16, **2017** (Poster PPT- PI-6), p.82. (Received second prize for poster presentation).

12. **Asha Anil**, S.N. Misra and N.M. Misra, “Influence of minerals and firing temperature on the ceramic properties of red clays: Example of Morbi-Wankaner region, Gujarat, India. Abstract book of 81st Annual Session of Indian Ceramic Society & International Conference on Expanding Horizons of Technological Applications of Ceramics and Glasses (EH-TACAG’17), College of Engineering, Pune, during December 14-16, **2017**, p74.
13. **Asha Anil**, Satyendra Nath Misra and Aghera Kartik, “Some studies on Correlation between thickness and firing schedule on the field Ceramic properties of vitrified tiles, during the 82nd Annual session of Indian Ceramic Society held on 9th and 10th January **2019** at the Wave International, Jamshedpur (Abstract book- 47).
14. **Asha Anil**, S. N. Misra and N. M. Misra, “Technological Properties of Red Clay Based Vitreous Sanitary Ware Body and Matching Opaque Glaze”, National Seminar on “Propelling Innovations in Glass and Ceramics for Atmanirbhar Bharat” organized by Indian Ceramic Society, Kolkata Chapter, held during December 10-12, **2020** in online mode.
15. **Asha Anil**, Development of Glazed Ceramic Wares Using Ferruginous Clays Having Comparable Aesthetic Properties to White Wares- A few attempts”, Young Scientist Conference, India-International Science Festival (IISF, 2020), held during 22-24 December, **2020** in virtual mode under the theme Self Reliant India.

Invited Talks

1. “Application of Nanotechnology in Traditional Ceramics, An overlook on Some Commercialized Products and R&D Activities”, Meeting of Indian Ceramic Society (Gujarat Chapter) held at CSIR-CGCRI, Naroda Centre on 19.03.2010.
2. “Classification and Formulation of Ceramic Glazes”, HNSB College, Himmatnagar, Gujarat, India on 8.04.2010.
3. “Processing Parameters and Glaze Characteristics” HNSB College, Himmatnagar, Gujarat, India on 8.04.2010.