LIST OF PUBLICATIONS

1. **Diana, Elizabeth J**., and Thomas V. Mathew. "Synergistic enhancement of titania nanoparticles via surface modification with functionalized Macromolecular betadex with Pyrene-3-butyric Acid: Broad spectrum photocatalytic antimicrobial and anticancer perspectives." *Inorganic Chemistry Communications* 162 (2024): 112135.

2. **Diana, Elizabeth J**., and Thomas V. Mathew. "Anticancer and photocatalytic antimicrobial assessment of surface engineered titania nanoparticles with modified β-cyclodextrin using thioctic acid." *Nano-Structures & Nano-Objects* 34 (2023): 100976.

3. **Diana, Elizabeth J**., and Thomas V. Mathew. "Synthesis and characterization of surface-modified ultrafine titanium dioxide nanoparticles with an antioxidant functionalized biopolymer as a therapeutic agent: Anticancer and antimicrobial evaluation." *Colloids and Surfaces B: Biointerfaces* 220 (2022): 112949.

4. **Diana, Elizabeth J**., Jisna Jose, and Thomas V. Mathew. "Recent development in the synthesis of imidazo [1, 5-a] indole derivatives: an in-depth overview." *Organic & Biomolecular Chemistry* (2024).

5. **Diana, Elizabeth J**., Jisna Jose, and Thomas V. Mathew. "Recent advances in transition metal-free synthesis of furo [3, 2-c] coumarin scaffolds: A comprehensive review." *Results in Chemistry* (2024): 101538.

6. **Jose, Diana Elizabeth**, U. S. Kanchana, and Thomas V. Mathew. "Recent developments of supported Palladium nanocatalyst and magnetically separable supported Palladium nanocatalysts for Heck cross-coupling reactions." *Journal of Nanoparticle Research* 24, no. 5 (2022): 89.

7. **Diana, Elizabeth J**., U. S. Kanchana, and Thomas V. Mathew. "Current developments in the synthesis of 4-chromanone-derived compounds." *Organic & Biomolecular Chemistry* 19, no. 37 (2021): 7995-8008.

8. **Jose, Diana E**., U. S. Kanchana, Thomas V. Mathew, and Gopinathan Anilkumar. "Recent developments and perspectives in the c-se cross coupling reactions." *Current Organic Chemistry* 24, no. 11 (2020): 1230-1262.

9. **Diana, Elizabeth J**., U. S. Kanchana, Thomas V. Mathew, and Gopinathan Anilkumar. "Recent developments in the metal catalysed cross-coupling reactions for the synthesis of the enone system of chalcones." *Applied Organometallic Chemistry* 34, no. 12 (2020): e5987.

10. **Jose, Diana Elizabeth**, U. S. Kanchana, Thomas V. Mathew, and Gopinathan Anilkumar. "Recent studies in Suzuki-Miyaura cross-coupling reactions with the aid of phase transfer catalysts." *Journal of Organometallic Chemistry* 927 (2020): 121538.

11. Jose, Jisna, **Elizabeth J. Diana**, U. S. Kanchana, and Thomas V. Mathew. "Recent advances in the Nickel-catalysed electrochemical coupling reactions with a focus on the type of bond formed." *Asian Journal of Organic Chemistry* 12 (2) (2023): e202200593.

12. Jose, Jisna, **Diana Elizabeth Jose**, U. S. Kanchana, and Thomas V. Mathew. "Ruthenium-Catalyzed Direct Reductive Amination of Carbonyl Compounds for the Synthesis of Amines: An Overview." *European Journal of Organic Chemistry* (2023): e202300035.

13. Jose, Vidya, **Diana Elizabeth Jose**, U. S. Kanchana, and Thomas V. Mathew. "Current trends and advancements in Ferrier and Petasis-Ferrier rearrangement." Journal of Organometallic Chemistry (2023): 122691.

14. Kanchana, U. S., **Elizabeth J. Diana**, and Thomas V. Mathew. "Recent Trends in Nickel-Catalyzed C− S Bond Formation." *Asian Journal of Organic Chemistry* 11, no. 6 (2022): e202200038.

15. Kanchana, U. S., **Elizabeth J. Diana**, Thomas V. Mathew, and Gopinathan Anilkumar. "Palladium-Catalyzed C− P Bond Forming Reactions: An Overview." *ChemistrySelect* 6, no. 7 (2021): 1579-1588.

16. Kanchana, U. S., **Elizabeth J. Diana**, Thomas V. Mathew, and Gopinathan Anilkumar. "Palladium-catalyzed cross-coupling reactions of coumarin derivatives: An overview." *Applied Organometallic Chemistry* 34, no. 12 (2020): e5983.

17. Kanchana, U. S., **Elizabeth J. Diana**, Thomas V. Mathew, and Gopinathan Anilkumar. "Cyclodextrin based palladium catalysts for Suzuki reaction: An overview." *Carbohydrate research* 489 (2020): 107954.

BOOK CHAPTER

1. PHOTOSENSITIZERS AND THEIR APPLICATIONS, (Pyrene-based photosensitizers and their applications-Chapter 11) ISBN: 978-1-68507-880-5 U. S Kanchana, Diana Elizabeth Jose, Thomas V Mathew (2022) Nova Science Publishers, Inc. 415 Oser Avenue, Suite N Hauppauge, NY, 11788 USA. (DOI:https://doi.org/10.52305/ KWAV1221) Series: Materials Science and Technologies, BISAC: SCI013040; TEC021000

PAPERS IN PROCEEDINGS

1. Diana Elizabeth Jose and Thomas V. Mathew. "ANTIMICROBIAL ACTIVITY OF UVA-ACTIVATED SURFACE-MODIFIED BIOCOMPATIBLE TITANIA NANOPARTICLE" In Proceedings of DST-SERB sponsored National Conference on Nanomaterials. Department of Science and Humanities, Providence College, 2022.
2. Diana Elizabeth Jose, U. S. Kanchana, and Thomas V. Mathew. “Antimicrobial Studies of Surface Modified Titanium Dioxide Nanoparticle with β-Cyclodextrin” In Proceedings of KSCSTE sponsored National Seminar on ‘Insights and Innovations in Smart Materials’ (IISM 2023), St Thomas College, Ranni, 2023.
3. U. S. Kanchana, Diana Elizabeth Jose, and Thomas V. Mathew. “Surface Modification of Zinc Oxide Nanoparticles Using Functionalized Beta- Cyclodextrin” In Proceedings of KSCSTE sponsored National Seminar on ‘Insights and Innovations in Smart Materials’ (IISM 2023), St Thomas College, Ranni