

Citation on the research work by the applicant Dr.
Jaison Jeevanandam

The research work ‘Jeevanandam, J., Gonçalves, M., Castro, R., Gallo, J., Bañobre-López, M., & Rodrigues, J. (2023). **Enhanced alpha-amylase inhibition activity of amine-terminated PAMAM dendrimer stabilized pure copper-doped magnesium oxide nanoparticles.** *Biomaterials Advances*, 213535’, has been solely developed by the applicant. This research has been developed based on his previous line of research, which he had been working on for the past 10 years. The list of the research work in which the present work has been developed has been included below. Thus, I am happy to nominate Dr. Jaison for this excellent research work for Sun Pharma Foundation Research Fellowships 2024.

List of the applicants’ previous work on which the cited work has been developed

1. Jeevanandam, J., Chan, Y. S., & Danquah, M. K. (2017). Calcination-dependent morphology transformation of sol-gel-synthesized MgO nanoparticles. *ChemistrySelect*, 2(32), 10393-10404.
2. Jeevanandam, J., San Chan, Y., & Danquah, M. K. (2019). Effect of gelling agent and calcination temperature in sol-gel synthesized MgO nanoparticles. *Protection of Metals and Physical Chemistry of Surfaces*, 55, 288-301.
3. Thamilvanan, D., Jeevanandam, J., Hii, Y. S., & Chan, Y. S. (2021). Sol-gel coupled ultrasound synthesis of photo-activated magnesium oxide nanoparticles: Optimization and antibacterial studies. *The Canadian Journal of Chemical Engineering*, 99(2), 502-518.
4. Wong, C. W., Chan, Y. S., Jeevanandam, J., Pal, K., Bechelany, M., Abd Elkodous, M., & El-Sayyad, G. S. (2020). Response surface methodology optimization of mono-dispersed MgO nanoparticles fabricated by ultrasonic-assisted sol-gel method for outstanding antimicrobial and antibiofilm activities. *Journal of Cluster Science*, 31, 367-389.
5. Jaison, J., Balakumar, S., & Chan, Y. S. (2015, March). Sol-Gel synthesis and characterization of magnesium peroxide nanoparticles. In *IOP Conference Series: Materials Science and Engineering* (Vol. 78, No. 1, p. 012005). IOP Publishing.
6. Jeevanandam, J., Chan, Y. S., Danquah, M. K., & Law, M. C. (2020). Cytotoxicity analysis of morphologically different sol-gel-synthesized MgO nanoparticles and their in vitro insulin

resistance reversal ability in adipose cells. *Applied biochemistry and biotechnology*, 190(4), 1385-1410.

7. Tan, K. X., Jeevanandam, J., Pan, S., Yon, L. S., & Danquah, M. K. (2020). Aptamer-navigated copolymeric drug carrier system for in vitro delivery of MgO nanoparticles as insulin resistance reversal drug candidate in Type 2 diabetes. *Journal of Drug Delivery Science and Technology*, 57, 101764.

8. Jeevanandam, J., K Danquah, M., Debnath, S., S Meka, V., & S Chan, Y. (2015). Opportunities for nano-formulations in type 2 diabetes mellitus treatments. *Current pharmaceutical biotechnology*, 16(10), 853-870.

Duly acknowledged by the Nominator of Dr. Jaison,



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