Staff Handbook



Name	*Dr. Emmy Yuanita., S.Si., M.Si*		
Post	*Organic Chemistry, Synthesis Organic, Drugs Design, Medicinal Chemistry, Associate Professor*		
Academic career	*Initial academic appointment*	*University of Mataram*	*2008*
	Doctorate (Chemistry)	*Gadjah Mada University*	*2017*
	Master (Chemistry)	*Institut Teknologi Sepuluh Nopember*	*2006*
	Undergraduate (Chemistry)	*Brawijaya University*	*2003*
Employment	*Position*	*Employer*	*Period*
Research and development projects over the last 5 years	1. *Design, Synthesis and Biological evaluation of hydroxyxanthone-hydrazone derivatives as Promising Theraupertic Candidates MRSA (**2026**, Fellowship Program- University Of mataram, 60.000.000)* **2.** *Metal Insertion into Tetraphenylporphyrin and Computational Study for the Characterization of Antibacterial Photodynamic Therapy **(2025,** PDP – University of Mataram (PNBP)**).*** **3.** *Isolation of Secondary Metabolites from Endophytic Fungi Associated with* **Dysoxylum densiflorum** *Roots and Evaluation of Their Antibacterial Activity through* **In Vitro** *and* **In Silico** *Studies **(2025,** Fundamental Research Grant – Ministry of Education, Culture, Research and Technology**).*** **4.** *Green One-Pot Synthesis of Sulfonamide-Substituted Hydroxyxanthone Derivatives as Anti-Tuberculosis Drug Candidates through* **In Vitro** *and* **In Silico** *Approaches (Year 2) **(2024,** Fundamental Research Grant – Ministry of Education, Culture, Research and Technology**;** Funding: IDR 136,540,000**).*** **5.** *Identification of Secondary Metabolites from the Stem Bark of* **Sandoricum koetjape** *Collected from Mount Rinjani National Park and Evaluation of Their Antioxidant Activity **(2024,** PPLK – University of Mataram (PNBP)**).*** **6.** *Functional Bacterial Cellulose Composite for Tetracycline Hydrochloride Drug Delivery Systems **(2024,** PPK – University of Mataram (PNBP)**).*** **7.** *Immobilization of Thermostable Lipase in Sodium Alginate from Hot Spring Bacteria of Mount Rinjani National Park **(2024,** PDP – University of Mataram (PNBP)**).***		

	8. *Synthesis of Porphyrin Derivatives via MacDonald Condensation of 4-Phenyldipyrromethane and Their Application as Fluoroprobes* ***(2024,*** *PDP – University of Mataram (PNBP)****).*** **9.** *Green One-Pot Synthesis of Sulfonamide-Substituted Hydroxyxanthone Derivatives as Anti-Tuberculosis Drug Candidates through* **In Vitro** *and* **In Silico** *Approaches (Year 1)* ***(2023,*** *Fundamental Research Grant – Ministry of Education, Culture, Research and Technology****;*** *Funding: IDR 206,400,000****).*** **10.** *Development of Novel Iodoxanthone Derivatives as Antibacterial Agents against Antibiotic Resistance through Synthesis, Biological Evaluation, QSAR, and Molecular Docking* ***(2023,*** *Research and Innovation for Advanced Indonesia (RIIM Batch 4) – National Research and Innovation Agency (BRIN)****).*** **11.** *Green Synthesis of Porphyrin Derivatives Using Silica Support Isolated from Biomass Waste* ***(2023,*** *Accelerated Associate Professor Research Grant – University of Mataram****;*** *Funding: IDR 20,000,000****).*** **12.** *Isolation of Secondary Metabolites and Antibacterial Activity of* **Stylotella** *sp. from Saleh Bay, Sumbawa* ***(2023,*** *University of Mataram (PNBP)****).*** **13.** *Engineering of Alginate/Graphene Oxide-Enriched Eugenol Composite as a Drug Delivery Material Using Multivalent Ion Crosslinking* ***(2022,*** *Accelerated Professorship Research Grant – University of Mataram****;*** *Funding: IDR 37,500,000****).*** **14.** *Synthesis of Eugenol-Based Xanthone Derivatives from Clove Leaf Biomass as Potential Anticancer Agents through* **In Vitro** *and* **In Silico** *Approaches* ***(2021,*** *Accelerated Professorship Research Grant – University of Mataram****;*** *Funding: IDR 40,000,000****).*** **15.** *Design of Graphene–Alginate Hybrid from Brown Seaweed Biomass of Lombok Island as a Drug Delivery System for Xanthone-Based Anticancer Compounds (Year III)* ***(2021,*** *Excellent Applied University Research (PTUPT) – Ministry of Research and Technology****;*** *Funding: IDR 269,578,000****).***
Industry collaborations over the last 5 years	*Project title* *Partners*
Patents and proprietary rights	*Title* *Year*
Important publications over the last 5 years	1. Sabil, M. I., Namira, A. W., Dzahabiyyaa, N., Aini, D. M., & Yuanita, E. . (2026). In silico comparative study of substituted xanthone derivatives with hydrazone, ester, and ether groups as antituberculosis agents. *Acta Chimica Asiana*, *9*(1), 845–851. https://doi.org/10.29303/aca.v9i1.281 2. Aini, D. M., Irmayanti, F. A., Yuanita, E., **Septiyana, M**., & Ratnasari, B. D. (2025). Molecular docking study of mutant levansucrase (E342A) from Bacillus subtilis as a receptor for D-glucopyranose and β-D-fructofuranose ligands. *Acta Chimica Asiana*, *8*(2), 698–707. https://doi.org/10.29303/aca.v8i2.262 3. Yuanita, E., Tamara, C. C., Dharmayani, N. K. T., **Septiyana, M**., Ulfa, M., & Lestarini, I. A. (2025). *Bromination of C-butylcalix[4]resorcinarene: Synthesis and antioxidant activity evaluation*. 090001. https://doi.org/10.1063/5.0305707 4. **Septiyana, M**., Yuanita, E., Ulfa, M., Dharmayani, N. K. T., Ningsih, B. N. S., Nursofia, b. I., Ramdhani, R. A., Ningsih, A., Tsani, M. K., Putri, B. Y. A., Budiana, I. (2025). Training and Implementation of Environmentally Friendly Filtration Technology for the Treatment of Songket Dyeing Wastewater at Ungga Creative MSME, Central Lombok. *Jurnal*

Pengabdian Inovasi Masyarakat Indonesia , *4*(2b), 340-345. https://doi.org/10.29303/4mhjgv27

5. Yuanita, E., Eryani, F., **Septiyana, M.**, Lestarini, I. A., Komang, N., Dharmayani, T., & Sugara, T. H. (2025). Enhanced Methods for Synthesizing Hydroxyxanthone Using Eaton and ZnCl 2 Catalyst with Microwave Irradiation. *Science and Technology Indonesia*, *10*(2). https://doi.org/10.26554/sti.2025.10.2
6. Yuanita, E., Lestarini, I. A., Dharmayani, N. K. T., Ningsih, B. N. S., **Septiyana, M.**, Ulfa, M., Sudirman, ., & Sugara, T. H. (2025). Sulfonated Hydroxyxanthone as Anti-Tuberculosis Agent: One-Step Sequence Synthesis, Characterization, And Molecular Docking Preevaluation. *Jordan Journal of Pharmaceutical Sciences*, *18*(2), 305–316. https://doi.org/10.35516/jjps.v18i2.2850
7. Yuanita, E., Rohmana, A., Ulfa, M., Ningsih, B. N. S., Sudirman, S., Dharmayani, N. K. T., Lestarini, I. A., **Septiyana, M.**, & Ratnasari, B. D. (2025). Synthesis and characterization of 2,4,6-trihydroxy benzophenone and its activity as sunscreen. *Acta Chimica Asiana*, *8*(1), 541–547. https://doi.org/10.29303/aca.v8i1.175
8. Dharmayani, N. K. T., Garnasih, I., Yuanita, E., Ulfa, M., Sudirman, S., Darmayanti, M. G., & **Septiyana, M**. (2022). Antibacterial Test and Isolation of Xanthones from Pericarps Mangosteen (Garcinia mangostana L.) using Calcium Oxide (CaO) as a Vacuum Liquid Chromatography (VLC) Stationary Phase. *Acta Chimica Asiana*, *5*(1), 181–185. https://doi.org/10.29303/aca.v5i1.117
9. Cahyani, N. W. C. P., Yuanita, E., Dharmayani, N. K. T., Sudirman, S., Sudewianingsih, N. M., & Ulfa, M. (2024). Modified Bacterial Cellulose-Based Composite Profile for Drug Release of Tetracycline Hydrochloride. *Jurnal Kimia Valensi*, 76-85.
10. Sudirman, S., Ardiansyah, M., Dharmayani, N. K. T., Yuanita, E., Kusuma, S. S., Hidayat, R., & Ulfa, M. (2024). Strong and Environmental-Friendly Adhesive Glass Based on Chitin Nanoparticles. *Nano Hybrids and Composites*, *45*, 11-18.
11. Nafiir, M. F., Yuanita, E., Arshad, S. E., Lusiana, R. A., & Ulfa, M. (2024). Synthesis and characterization of bacterial cellulose composite with graphite and TiO2-ZnO: structural and functional analysis. *Acta Chimica Asiana*, *7*(2), 478-486.
12. Sukmaningrum, A. D., Yuanita, E., DHARMAYANI, N., Sudirman, S., SUDEWIANINGSIH, N., & Ulfa, M. (2024). Profile of a Composite Based on Bacterial Cellulose and Polyvinyl Alcohol as a Drug Release Matrix for Tetracycline Hydrochloride. *JURNAL RISET KIMIA Учредители: Universitas Andalas*, *15*(2), 84-96.
13. Anjartikasari, N., Yuanita, E., Dharmayani, N. K., Sudirman, S., Sudewianingsih, N. M., & Ulfa, M. (2024). Profiling of modified chitosan-based composites as tetracycline hydrochloride drug release systems. *J Akta Kimia Indones*, *1*, 1-2.
14. Izzaty, A. N., Yuanita, E., Al Faris, M., & Ulfa, M. (2024). Effect of Different Treatments During Synthesis on Physical and Chemical Properties of Bacterial Cellulose/Chitosan Composite Film. *Journal of Pure & Applied Chemistry Research*, *13*(2).
15. Yuanita, E., Hidayah, N., Umami, M. R., Ningsih, B. N. S., Ulfa, M., Sudirman, & Dharmayani, N. K. T. (2024, February). Simple synthesis

	and characterization of sulfonate ester-substituted hydroxyxanthone. In *AIP Conference Proceedings* (Vol. 3055, No. 1, p. 030003). AIP Publishing LLC. 16. Ulfa, M., Noviani, I., Yuanita, E., & Dharmayani, N. K. T. (2023). Synthesis and Characterization of Composites-Based Bacterial Cellulose by Ex-Situ Method as Separator Battery. *Jurnal Penelitian Pendidikan IPA*, *9*(6), 4647-4651. 17. Dharmayani, N. K. T., Ulfa, M., Yuanita, E., & Sariningsih, B. N. (2023). Antibacterial Activity of Marine Sponge (Stylotella sp.). *Jurnal Penelitian Pendidikan IPA*, *9*(6), 4801-4805. 18. Yuanita, E., Jannah, B. K., Ulfa, M., Ningsih, B. N. S., & Dharmayani, N. K. T. (2023). C-prenylation of 1, 3 dihydroxyxanthone: synthesis, characterization and antibacterial activity. *Acta Chimica Asiana*, *6*(1), 279-286. 19. Muliasari, H., Sopiah, B., Yuanita, E., & Ningsih, B. N. S. (2023). Free-radical scavenging activity and total phenolic compounds of red and green Poinsettia leaves (Euphorbia pulcherrima Willd.) from Lombok Island. *Makara Journal of Science*, *27*(4), 3. 20. Yuanita, E., Sudirman, S., Dharmayani, N. K. T., Ulfa, M., Hadisaputra, S., & Syahri, J. (2022). Molecular docking of xanthone derivatives as therapeutic agent for Covid-19. *Molekul*, *17*(1), 1-9. 21. Yuanita, E., Ulfa, M., Sudirman, S., Sumarlan, I., Sudarma, I. M., Dharmayani, N. K. T., ... & Jumina, J. (2021). Synthesis, cytotoxic evaluation and molecular docking of bromo-substituted 1, 3, 6-trihydroxyxanthone as protein tyrosine kinase inhibitor. *J. Chem*, *23*, 24-32. 22. Syahri, J., Nurohmah, B. A., & Yuanita, E. (2021). Effectivity of Remdesivir and some compounds as therapeutic potential drugs for anti-SARS-CoV-2: in silico study. *Jordan Journal of Pharmaceutical Sciences*, *14*(1).
Activities in specialist bodies over the last 5 years	*Organisation* *Role* *Period* *Membership without a specific role need not be mentioned*