UNIVERSITAS NEGERI JAKARTA
FACULTY OF MATHEMATICS AND NATURAL SCIENCES
CHEMISTRY STUDY PROGRAM

Jl. Rawamangun Muka, RT 11/RW 14, Rawamangun, Pulo Gadung,
East Jakarta City, Special Capital Region of Jakarta 13220
Phone/Fax: (021) 4894909, E-mail: kimia@unj.ac.id, http://fmipa.unj.ac.id/kimia/

STAFF HANDBOOK

Dr. Irwanto, M.Pd
irwanto@unj.ac.id

Name	**Dr. Irwanto, M.Pd**
Position	Lecturer in Chemistry Education
Academic Career	1. Bachelor's degree (Chemistry Education), Universitas Negeri Yogyakarta, Indonesia, 2014 2. Master's degree (Chemistry Education), Universitas Negeri Yogyakarta, Indonesia, 2016 3. Doctoral degree (Chemistry Education), Universitas Negeri Yogyakarta, Indonesia, 2019
Employment	Lecturer, Master's Program in Chemistry Education, Faculty of Mathematics and Natural Sciences, Universitas Negeri Jakarta, Jakarta 13220, Indonesia
Research and Development project over the last 5 years	1. 2023 - Development and Implementation of Android Mobile Game "Go-Chemist!" to Improve Learning Outcomes, Attitudes Towards Chemistry, and Self-Efficacy of SMA/MA Students in Jakarta and Aceh. 2. 2023 - Augmented Reality Game-Based Chemistry Learning (ARGCL) Model Supported by TPACK-SAMR to Improve Students' Critical Thinking, Sustainable Awareness, and Digital Literacy. 3. 2023 - Development of Mobile Learning Network for Science (MLNFS) Integrated Augmented Reality Technology to Improve Science Literacy in Learning Chemistry in Indonesia. 4. 2023 - Development and Implementation of a Self-Regulated

<table>
<tr><td></td><td>Learning Model Using Guided Inquiry Design to Improve Students Independence of Learning.
5. 2023 - Development of Steam Learning Devices of Steam Learning Devices for 21st Century Learning.
6. 2022 - Evaluation of Chemistry Learning Management Through the CIPP Model (Context, Input, Process, Product).
7. 2022 - Integration of Design Thinking with STEAM-PjBL in Chemistry Learning to Develop Students' Critical Thinking and Computational Thinking Skills.
8. 2022 - Integration of the STEAM Approach to Learning to Develop 21st Century Skills.
9. 2022 - Mobile Game Base Learning Based on Augmented Reality Technology (MGBL-AR) to Improve Literacy and Numeracy.
10. 2021 - Increasing Student Learning Independence During a Pandemic through the Application of Self-regulated Learning in Chemistry Learning.
11. 2021 - Competency Profile Survey of SD and MI Teachers in DKI Jakarta and Lampung Provinces.
12. 2021 - Development of Etnochemistry-based Teaching Materials at UIN Mataram and UNJ to Improve Critical Thinking Skills, Love for Culture, and Student Cognitive Learning Outcomes.</td></tr>
<tr><td>Industry collaboration over the last 5 year</td><td>-</td></tr>
<tr><td>Patents and proprietary rights</td><td>IPRs Link:
https://sinta.kemdikbud.go.id/authors/profile/6754022/?view=iprs</td></tr>
<tr><td>Important publications over the last 5 years</td><td>Publication Link:
https://sinta.kemdikbud.go.id/authors/profile/6754022</td></tr>
<tr><td>Activities in specialist bodies over the last 5 years</td><td>
<table>
<tr><th>Organization</th><th>Role</th><th>Period</th></tr>
<tr><td>Indonesian Chemical Society</td><td>Division Member</td><td>2021-2023</td></tr>
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