STAFF HANDBOOK

(SCOPUS) (SINTA)

Name	*Dewi Muliyati, S.Pd., M.Si., M.Sc.*
Position	*Lecturer in Bachelor Physics Education, Universitas Negeri Jakarta*
Educational Background	1. *Bachelor's degree:* *Education Physics, Universitas Negeri Jakarta, Indonesia, 2011* 2. *Master's degree:* • *Master of Science, Institut Teknologi Bandung, Indonesia, 2014* • *Master of Science, Kanazawa University, Japan, 2014*
Academic Career (Employment)	1. *Editor JPPPF (Jurnal Penelitian & Pengembangan Pendidikan Fisika), Sinta 2 National Accredited, 2015-now.* 2. *Editor SPEKTRA: Jurnal Fisika dan Aplikasinya, Sinta 3 National Accredited, 2016-now.*
Research and Development project over the last 5 years	1. *Penelitian 2022* 2. *Pengembangan Simulasi Partikel Granular Dan Implementasinya Pada Mata Kuliah Fisika Komputasi, 2021* 3. *Simulasi Partikel Granular Pada Sistem Permukaan Berpori Menggunakan Unified Particle Physics Solver, 2020* 4. *Pengembangan Media Pembelajaran Fisika Berbasis Augmented Reality, 2019* 5. *Pengembangan Web Based Learning Berbasis Multirepresentasi Dan Kontekstual Untuk Program Pendidikan Fisika, 2018*

Industry collaboration/ Community Services over the last 5 year	1. *Collaborative with SMK PKP 1 Jakarta Islamic School, 2022* 2. *Collaborative with MKKS SMA Kabupaten Pandeglang, Traning of Minimum Competency Assessment in Learning, 2021* 3. *Collaborative with Sagusaku Ikatan Guru Indonesia, Training of Qr-Code Integrated Portfolio Promotion Design For Teachers, 2020*
Patents and Intellectual Property Right (IPR)	1. *Modul Simulasi Wavebreaker: Aplikasi dan Worksheet, 2022, EC00202219396* 2. *Program Komputer Game Black Journey, 2022, EC00202219397* 3. *Program Komputer Game Fluida, 2022, EC00202219398* 4. *Buku Komik TemperaTour, 2022, EC00202219399* 5. *Modul CBT Berbasis Moodle, 2022, EC00202219400* 6. *Modul Online Pelatihan Qr-Code Untuk Guru, 2021, EC00202113877* 7. *Program Komputer Simulasi Granular Pada Kulit Berpori Secara Vertikal, 2020, EC00202032752* 8. *Program Komputer Aplikasi Augmented Reality Berbasis Android Dalam Pembelajaran Fisika Sma Kelas Xi Semester Ganjil, 2020, EC00202018390* 9. *Program Komputer Simulasi Granular pada Kulit Berpori, 2019, EC00201973289* 10. *Program Komputer Aplikasi Games Yuk Cari Tahu: PLTA, 2019, EC00201973286* 11. *Buku Komik Biografi Sir Isaac Newton, 2018, EC00201805485* 12. *Buku Komik Efek Fotolistrik: Komik Sejarah Efek Fotolistrik dari 5 Ilmuwan, 2018, EC00201805484*
Important publications over the last 5 years	1. *Development and evaluation of granular simulation for integrating computational thinking into computational physics courses, 2022* 2. *Bibliometric analysis on online physics learning during COVID-19 Pandemic: Contribution to physics education undergraduate program, 2021* 3. *The development of moodle based e-learning for newtons' law in high school physics, 2021* 4. *Development of educational adventure game on fluid physics material, 2021* 5. *'Hallwachs and the negatively charged particles'-the development of education comics, 2021* 6. *Markerless augmented reality: Display Compton scattering model, 2021* 7. *The effectiveness of breakwater shape: Fluid particle behavior simulation, 2021*

	8. *The simulation of granular attachment on the porous vertical surfaces, 2021* 9. *Radioactive decay model based on augmented reality, 2021* 10. *Teaching high school physics using PhET interactive simulation, 2021* 11. *The development of online comics to explain the "nuclear reaction" topic, 2021* 12. *The development of Android-based physics teaching materials on static fluids, 2021* 13. *The implementation of STEM learning on creative-critical thinking styles (study on pre-service physics teacher), 2021* 14. *Promoting character education through visualization using environment comic media, 2021* 15. *Exploring elasticity concept using augmented reality, 2021* 16. *Textbook with augmented reality technology: Improve critical thinking skill in elasticity concept, 2021* 17. *Augmented reality application design on geophysical encyclopedia for android smartphones, 2021* 18. *ProSim"-Designing projectile motion worksheet to support higher-order thinking skill, 2021* 19. *Designing an Android-Based Educational Game for High School Physics, 2021* 20. *Physicsmagz" the contextual learning magazine to improve science literacy skills in particle dynamics topic, 2021* 21. *The implementation of problem based learning in elasticities concept, 2021* 22. *Design of computer based test with moodle platform for high school physics class X, 2021* 23. *Animated Video: Fun physics learning, 2021* 24. *Development of Beat Frequency Practicum Device Using Arduino UNO and AD9833 Module, 2021* 25. *Relationship between information and communication technology literacy and the of english ability with learning outcomes of students of physics education program, fmipa unj, 2021* 26. *Explain the "unstable atoms" concept using the radioactive comics as physics media learning, 2021* 27. *Augmented reality in poster: Introduce sir Isaac Newton in the study of mechanics, 2021* 28. *The validation of nitrite and nitrate analysis methods in bread using p-Aminobenzoic Acid (PABA) via UV-Vis Spectrophotometry, 2021* 29. *Physics learning through video by PowToon, 2021* 30. *Educational comics to explore electromagnetic waves through the hertz story to prove the maxwells equation, 2021*

	31. *The development of 21st century skills and competence in service teacher through TPACK training workshop, 2021* 32. *The Development of Guided Inquiry Student Worksheet using Tracker Video Analysis for Kinematics Motion Topics, 2020* 33. *"tempera-Tour": Developing an Alternative Comic as Media Learning for Temperature and Heat Topics Through Traveling Story, 2020* 34. *The Design of Physics Learning Video as Joyful-Based Learning Media Enrichment by Powtoon, 2020* 35. *Train the computational thinking skill using problem-based learning worksheet for undergraduate physics student in computational physics courses, 2020* 36. *The implementation of project-based learning to enhance the technological-content-knowledge for pre-service physics teacher in ICT courses, 2020* 37. *Students worksheet with augmented reality media: Scaffolding higher order thinking skills of high school students on uniform accelerated motion topic, 2020* 38. *Student worksheet with augmented reality technology: Media to construct higher order thinking skills of high school students in elasticity topic, 2020* 39. *QR-Code Assisted Learning Book: Scientific-Based Physical Learning Solution, 2020* 40. *Physics Textbook Enriched Augmented Reality: Easy Way to Understand The Physical Concept, 2020* 41. *Module Equipped with Augmented Reality Technology: An Easy Way to Understand Concepts and Phenomena of Quantum, 2020* 42. *Student worksheet with ar videos: Physics learning media in laboratory for senior high school students, 2020* 43. *The 3D simulation of Lorentz Force based on augmented reality technology, 2019* 44. *The I-V characteristics of hydrothermal growth ZnO nanorods, 2019* 45. *The development 3-D augmented reality animation on radioactive concept, 2019* 46. *The augmented reality application for simulating electromotive force concept, 2019* 47. *The 3-D visualization of the granular particle on various diameter porous surfaces, 2019* 48. *The 3-D animation of radiation concept using augmented reality technology, 2019* 49. *Simulation of ocean waves in coastal areas using the shallow-water equation, 2019* 50. *The generator operating system automatically uses a motorized change over switch devices, 2019*

	51. *The properties of zinc sodium phosphate glass system with the various concentration of chromium oxide doped, 2019* 52. *The granular buoyant force in a two-dimensional intruder-particles bed system, 2019* 53. *Integrating augmented reality into worksheets: Unveil learning to support higher-order thinking skills, 2019* 54. *Explain the physics concepts with flood phenomena using augmented reality technology, 2019* 55. *Practice the higher-order thinking skills in optic topic through physics worksheet equipped with augmented reality, 2019* 56. *Video-enriched worksheet based on augmented reality technology: The heat experiment is easier, 2019* 57. *The development of ICT-based learning curriculum for pre-service physics teacher, 2019* 58. *The design of sound wave and optic marker for physics learning based-on augmented reality technology, 2019* 59. *Mini photovoltaic system project: Physics laboratory activities through a technology-rich learning environment, 2019* 60. *The development of an electricity book based on augmented reality technologies, 2019* 61. *Simulation of granular in two dimensions: The effect of particle velocity on rigid wall boundary, 2018* 62. *Development of student performance assessment based on scientific approach for a basic physics practicum in simple harmonic motion materials, 2018* 63. *Design of multiple representations e-learning resources based on a contextual approach for the basic physics course, 2018* 64. *Discovering and understanding the vector field using simulation in android app, 2018*
Activities in Professional organizational over the last 5 years	1. *Member of PSI: Physical Society of Indonesia, 2018-now* 2. *Member of IPTPI (Ikatan Profesi Teknologi Pendidikan Indonesia), 2015-2020* 3. *Member of Association for the Advancement of Computing in Education (AACE), 2018-2020*