

## STAFF HANDBOOK



(SCOPUS)(SINTA)

Name	<i>Dr. Hadi Nasbey, S.Pd., M.Si.</i>
Position	<i>Lecturer in Physics Education Program Study, Universitas Negeri Jakarta</i>
Educational Background	<ol style="list-style-type: none"> <li>1. <i>Bachelor's Degree in Physics Education, Jakarta State University (2002)</i></li> <li>2. <i>Magister's Degree in Physics, Gadjah Mada University (2009)</i></li> <li>3. <i>Doctoral Degree in Physics, Gunma University (2019)</i></li> </ol>
Academic Career (Employment)	<ol style="list-style-type: none"> <li>1. <i>2002 – 2005 Physics subject teacher of Laboratory Highschool Jakarta</i></li> <li>2. <i>2005 – Now Lecturer of Physics Education Program, Jakarta State University</i></li> <li>3. <i>2018-2019 Wakil Dekan III Bidang Kemahasiswaan</i></li> <li>4. <i>2020-Now Koorprodi Pendidikan Fisika</i></li> </ol>
Research and Development project over the last 5 years	<ol style="list-style-type: none"> <li>1. <i>2020- PENINGKATAN KEMAMPUAN BERPIKIR KRITIS SISWA MELALUI MODEL PEMBELAJARAN SELF-ORGANIZED LEARNING ENVIRONMENTS (SOLE) BERBANTUAN PHET SIMULATION PADA MATERI TEORI KINETIK GAS</i></li> <li>2. <i>PENGEMBANGAN MEDIA PEMBELAJARAN ASINKRON MANDIRI BERBASIS TRANSFORMATIVE LEARNING BERBANTUAN GOOGLE CLASSROOM PADA MATERI FLUIDA DINAMIS</i></li> <li>3. <i>STUDI PENDAHULUAN PREPARASI DAN FABRIKASI BRIKET TEMPURUNG KELAPA BERPEREKAT TEPUNG TAPIOKA</i></li> <li>4. <i>DESAIN TURBIN SAVONIUS DENGAN VARIASI KELENGKUNGAN SUDU BERBAHAN KALENG CAT</i></li> <li>5. <i>SISTEM PENDETEKSIAN KECEPATAN KENDARAAN MENGGUNAKAN HAAR CASCADE BERBASIS RASPBERRY PI</i></li> <li>6. <i>PREPARASI DAN PEMBUATAN BRIKET ARANG TEMPURUNG KELAPA DENGAN PEREKAT TEPUNG TERIGU</i></li> </ol>

7. PENGEMBANGAN APLIKASI ANDROID SEBAGAI MEDIA PEMBELAJARAN TOPIK GERAK MELINGKAR BERBASIS TRANSFORMATIVE LEARNING
8. PENGEMBANGAN BUKU PENGAYAAN PENGETAHUAN MATERI HUKUM ARCHIMEDES BERBASIS PENDEKATAN STEM
9. PENGEMBANGAN MODUL ELEKTRONIK DENGAN PENDEKATAN STEM (SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS) PADA MATERI VEKTOR DAN KINEMATIKA GERAK LURUS FISIKA
10. *Objek Pembelajaran Digital Fisika (DiLO-Phy): bahan ajar multi representasi menggunakan sway*
11. *2021- Design and Development a Wind Tunnel using the Honeycomb as a Wind Turbine Characterization Instrument*
12. *Electrodeposition of Ni-Nitride composite coatings: A review of recent study*
13. *Learning Media Development using Transformative Learning Strategy Android Application as a Distance Learning Support on Static Fluid*
14. *An Optical Heterodyne Technique for Dynamic Eddy-Current Damping Force Evaluation*
15. *Observation of chemicals evaporation (ethanol, methanol and 2-propanol) using vibrated microcantilever*
16. *Digital Text Security with Steganography Least Significant Bit and Audio Feature Extraction*
17. *A hybrid power plant development (a combination of wind and solar energy) as an alternative energy to faculty of mathematics and natural sciences Universitas Negeri Jakarta*
18. *Development of learning material in the form of a smartphone application on the subject of temperature and heat by inquiry-based learning (IBL) for physics high school subject*
19. *Interactive Book Augmented Reality (IBAR) for Lesson Physics on STEM*
20. *Synthesis of Ni-TiN/Si<sub>3</sub>N<sub>4</sub> nanocomposite layers using the electrodeposition method*
21. *Interactive Book Augmented Reality (IBAR) for Lesson Physics on STEM*
22. *A hybrid power plant development (a combination of wind and solar energy) as an alternative energy to faculty of mathematics and natural sciences Universitas Negeri Jakarta*
23. *Development of learning material in the form of a smartphone application on the subject of temperature and heat by inquiry-based learning (IBL) for physics high school subject*
24. 2020- PENGARUH VARIASI TEMPERATUR TERHADAP MORFOLOGI BERBAGAI LAPISAN KOMPOSIT: SEBUAH KAJIAN

	<p>25. KAJIAN PENGARUH VARIASI TEMPERATUR PADA PROSES ELEKTRODEPOSISI TERHADAP MORFOLOGI LAPISAN KOMPOSIT Matrik Logam</p> <p>26. KAJIAN PENGARUH VARIASI TEMPERATUR TERHADAP STRUKTUR KRISTAL BERBAGAI LAPISAN KOMPOSIT NIKEL</p> <p>27. 2019- Effect of Europium (<math>\text{Eu}^{3+}</math>) to the optical properties of the cullet glass <math>\text{Na}_2\text{O-Eu}_2\text{O}_3</math></p> <p>28. Unveil of virtual physics laboratory (VPL) with battery microscopic simulation (BMS) to promote of problem solvi</p> <p>29. 2018 Adsorption and Pore of Physical-Chemical Activated Coconut Shell Charcoal Carbon</p> <p>30. Dynamic response of sand particles impacted by a rigid spherical object</p> <p>31. Adsorption and Pore of Physical-Chemical Activated Coconut Shell Charcoal Carbon</p>
Industry collaboration/ Community Services over the last 5 year	<p>1. 2022- Pelatihan Pembuatan Alat Praktikum Sederhana Materi Fisika Berbasis Project-based Learning di MAN 2 Jakarta</p> <p>2. 2021- Pelatihan Pembuatan Aplikasi Android Sebagai Media Pembelajaran IPA Berbasis PROBLEM BASE LEARNING</p> <p>3. 2020- Pelatihan Pembuatan Mini Microhidro Bagi Pelajar SMA</p>
Patents and Intellectual Property Right (IPR)	<p>1. 2022- Video Pembelajaran Analisis Osilasi Harmonis Melalui Percobaan Dan Simulasi Untuk Pembelajaran Fisika Jarak Jauh EC00202242512</p> <p>2. 2021- Program Pengenal Nada Alat Musik Kromong Menggunakan Convolutional Neural Networks EC00202169712</p> <p>3. 2019- Fisika Modern Teori dan Aplikasinya EC00201932488</p>
Important publications over the last 5 years	<p>2022</p> <p>1. Mechanical and Tribology Properties of Electrodeposited Ni-TiN/Si<sub>3</sub>N<sub>4</sub> Composite Coatings</p> <p>2. Development of Online Learning Tools for Elasticity Materials Using the 7E Learning Model in Class XI Senior High School</p> <p>3. Student responses to the development of online learning device based guided inquiry in mechanical waves matter</p> <p>4. Structure evolution due to heat treatment of aluminum nanoparticle with different sizes: A molecular dynamics study</p> <p>5. Thermodynamic and structure properties of aluminum nanoparticle due to heat treatment: A molecular dynamics study 2021</p> <p>6. Digital text security with steganography least significant bit and audio feature extraction</p> <p>7. Design and development a wind tunnel using the honeycomb as a wind turbine characterization instrument</p> <p>8. Development of video education using problem-based learning (PBL) to support M-learning on the kinetic gas</p>

	<p>9. <i>An Optical Heterodyne Technique for Dynamic Eddy-Current Damping Force Evaluation</i></p> <p>10. <i>Investigating the groundwater usage for environmental education: Case study at 35 high school in Jakarta</i></p> <p>11. <i>The effect of the Q factor on the air humidity in the microcantilever sensorocantilever sensor</i></p> <p>12. <i>Development of learning material in the form of a smartphone application on the subject of temperature and heat by inquiry-based learning (IBL) for physics high school subject</i></p> <p>13. <i>The technology of interactive book augmented reality (IBAR) for facilitating student 21-century skills</i></p> <p>14. <i>Interactive Book Augmented Reality (IBAR) for lesson physics on STEM</i></p> <p>15. <i>Digital text security with steganography least significant bit and audio feature extraction</i></p> <p>16. <i>Design and development a wind tunnel using the honeycomb as a wind turbine characterization instrument</i></p> <p>17. <i>Development of video education using problem-based learning (PBL) to support M-learning on the kinetic gas</i></p> <p>18. <i>An Optical Heterodyne Technique for Dynamic Eddy-Current Damping Force Evaluation</i> 2019</p> <p>19. <i>Unveil of virtual physics laboratory (VPL) with battery microscopic simulation (BMS) to promote of problem solving activity</i></p> <p>20. <i>Effect of Europium (Eu<sup>3+</sup>) to the optical properties of the cullet glass Na<sub>2</sub>O-Eu<sub>2</sub>O<sub>3</sub></i> 2018</p> <p>21. <i>Adsorption and Pore of Physical-Chemical Activated Coconut Shell Charcoal Carbon</i></p> <p>22. <i>Dynamic response of sand particles impacted by a rigid spherical object</i></p> <p>23. <i>New technique for dynamic calibration of a force transducer using a drop ball tester</i></p>
<p>Activities in Professional organizational over the last 5 years</p>	<p>1. Member of Physical Society of Indonesia (PSI)</p>