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<b>Name</b>	Dr.rer.nat Bambang Heru Iswanto, M.Si.
<b>Position</b>	Lecturer in Physics Education
<b>Educational Background</b>	<ol style="list-style-type: none"> <li>1. Bachelor's degree (Physics Education), IKIP Jakarta.</li> <li>2. Master's degree (Physics), ITB Bandung.</li> <li>3. Doctoral degree (Artificial Intelligence) – Technische Universitaet Berlin (TU Berlin), Jerman</li> </ol>
<b>Academic Career (Employment)</b>	Lecturer, Master of Physics Study Program, Faculty Mathematics and Natural Sciences, Jakarta State University, Jakarta 13220, Indonesia.
<b>Research and Development project over the last 5 years</b>	<ol style="list-style-type: none"> <li>1. 2021 - Simulation Of The Movement Of The Covid-19 Virus Droplets Using The Monte Carlo Method.</li> <li>2. 2021 - Improving Tea Leaf Detection Based On Computer Vision Using Wavelet And Fuzzy Fusion.</li> <li>3. 2020 - Introduction To Tea Plant Quality Using Digital Image And Machine Learning Methods.</li> <li>4. 2019 - Machine Learning Analysis Of Magnetic Properties And Soil Geochemical.</li> <li>5. 2019 - Development Of Quantum Cryptography-Based Document Security System Using The Event By Event Method.</li> <li>6. 2018 - Development Of Quantum Cryptography-Based Document Security System Using The Event By Event Method.</li> </ol>
<b>Industry collaboration/ Community Services over the last 5 year</b>	<ol style="list-style-type: none"> <li>1. 2021 - Literacy And Ict Skills Development For Indonesia Workers In Singapore.</li> <li>2. 2021 - Using Audiosonic To Improve Quality Of Physics Learning In High Schools In Jatisampurna District, Bekasi City, West Java.</li> <li>3. 2020 - Computer Simulation Programming Training For Physics Teacher In Bogor District.</li> <li>4. 2019 - Ict Study In Physics Learning.</li> </ol>

<b>Patents and Intellectual Property Right (IPR)</b>	<ol style="list-style-type: none"> <li>1. 2021 - Learning Media.</li> <li>2. 2020 - Tea Leaf Image Feature Extraction Program With DTCWT-GLC in Matlab.</li> <li>3. 2020 - Magnetic Force Demonstration on Cylinder Metal in Straws.</li> </ol>
<b>Important publications over the last 5 years</b>	<ol style="list-style-type: none"> <li>1. 2021 - Study Of Tofu Wastewater Treatment Using Anaerobic Baffled Reactor: Laboratory Scale</li> <li>2. 2021 - Wastewater Treatment For Tofu Home Industries In Semanan, West Jakarta Using Electrocoagulation Method With Electrode Al-Stainless Steel</li> <li>3. 2021 - Virtual Test Instruments To Measure Scientific Literacy Of High School Students On Work And Energy</li> <li>4. 2021 - Visualization Lorentz Force With Tea Leaves For Studying Magnetic Field In Senior High School</li> <li>5. 2021 - Website Of Physics Instructional (Wopi): Learning Physics From Home During COVID-19</li> <li>6. 2021 - Feature Extraction Of Tea Leaf Images Using Dual-Tree Complex Wavelet Transform And Gray Level Co-Occurrence Matrix</li> <li>7. 2021 - Augmented Reality Geometrical Optics (AR-Gios) For Physics Learning In High Schools</li> <li>8. 2021 - Virtual Microscopic Simulation (VMS) For Physics Learning Of The Photoelectric Effect In High School</li> <li>9. 2021 - Development Of Android Physics Applications (APA) As Learning Media On Dynamic Fluid Concepts</li> <li>10. 2021 - Four Tier Test (FTT) Development In The Form Of Virtualization Static Fluid Test (VSFT) Using Rasch Model Analysis To Support Learning During The Covid-19 Pandemic</li> <li>11. 2021 - Determination Of Springs Constant By Hooke's Law And Simple Harmonic Motion Experiment</li> <li>12. 2021 - Using Accelerometer Smartphone Sensor And Phyphyox For Friction Experiment In High School</li> <li>13. 2021 - Video Based Experiment To Determine Focal Length Of A Positive Lens In Physics Learning</li> <li>14. 2021 - Faraday's Law Teaching Aids Using Magnetometers On Smartphone And Infrared Sensors For Electromagnetic Induction Learning</li> <li>15. 2021 - MIX Reality Based Media Prototype For Learning Physics Of Gravity And Kepler's Law</li> <li>16. 2021 - Spring Oscillator As Case Based Learning (CBL) Device</li> <li>17. 2021 - Development Of Sensor-Based Learning Tool For The Study Induction Magnetic Force For High School Students</li> <li>18. 2021 - The Dynamics Of A Hockey Player Body On Passing The Ball</li> <li>19. 2021 - Analysis On Interest Motivation Instrument (Iim) For Measure Of Interest And Motivation Of Study Doctoral Physics Education Using Rapidminer</li> <li>20. 2021 - The Effect Of Inquiry Models And Motivation To Study On Students' Cognitive Learning Outcomes In Straight Motion Learning At Senior High School (A Case Study)</li> </ol>

21. 2021 - Sound Resonance Practice Device Based On Arduino Uno To Improve The Science Process Skills Of High School Students
22. 2021 - "Osci-Meter": The Practice Device For Oscillation Motion Experiment Using Accelerometer In Smartphone To Improve High School Students' Analytical Thinking Skills
23. 2021 - Leaf Flakes For Learning Electric Fields In Senior High School
24. 2020 - Development Of Genetically Improved Farmed African Catfish, *Clarias Gariepinus*; A Review And Lessons Learned From Indonesian Fish Breeding Program
25. 2020 - Magnetic Susceptibility Of River Sediment In Polluted Area Of Traditional Gold Mining In Kuris Sumbawa Indonesia
26. 2020 - Identification Of Environments Based On Magnetic Susceptibility And Geochemical Data Using Multivariate Statistical Analysis
27. 2020 - Development Of Standardized Online Test To Assess The Students 21st Century Skills
28. 2020 - Development Of A PCR Marker For The Identification Of Resistance To Motile Aeromonad Septicemia Disease In African Catfish (*Clarias Gariepinus*)
29. 2020 - The Significance Of Tropical Microalgae *Chlorella Sorokiniana* As A Remediate Of Polluted Water Caused By Chlorpyrifos
30. 2019 - Removal Of Heavy Metal ( $\text{Cu}^{2+}$ ) By *Thiobacillus* Sp. And *Clostridium* Sp. At Various Temperatures And Concentration Of Pollutant In Liquid Media
31. 2019 - Delignification And Determination Of Sugar Concentration In Fertilizer As The Preliminary Process Of Bioethanol Production By *Aspergillus Fumigatus*
32. 2019 - Mobile Digital Education (MDE) For Increasing Competence Of Students Based On E-Characters Mental Revolution (E-CMR)
33. 2019 - Designing MOOCS With Virtual Microscopic Simulation (VMS) For Increasing Of Student's Levels Of Understanding
34. 2019 - Expected Likelihood Based Query For Active Learning Of Gaussian Mixture Models Based Classifiers
35. 2019 - The Simulation Of One-Time-Pad Quantum Key Distribution
36. 2019 - Kalman Filtering To Real-Time Trace Water Level Measurements Using Ultrasonic Sensor
37. 2019 - Selection Method To Identify The Dominant Elements That Contribute To Magnetic Susceptibility In Sediment
38. 2019 - Developing Practicum Device Using Magnetic Sensor For Circular Motion At Senior High School
39. 2019 - Bioremediation Of Soil Polluted With Copper ( $\text{Cu}^{2+}$ ) By Mixed Culture Bacteria *Thiobacillus* Sp. And *Clostridium* Sp.
40. 2018 - The Simulation Of A Symmetric Quantum Key Distribution
41. 2018 - Sentiment Analysis On Bahasa Indonesia Tweets Using Unigram Models And Machine Learning Techniques

	<p>42. 2018 - Early Warning System Of Flood Disaster Based On Ultrasonic Sensors And Wireless Technology</p> <p>43. 2018 - Development Of Thermal Radiation Experiments Kit Based On Data Logger For Physics Learning Media</p> <p>44. 2018 - Batch Leachate Treatment Using Stirred Electrocoagulation Reactor With Variation Of Residence Time And Stirring Rate</p> <p>45. 2018 - Distribution Patterns Study Of Escherichia Coli As An Indicator For Ground Water Quality At Matraman District, East Jakarta</p> <p>46. 2018 - Waste Utilization Of Red Snapper (Lutjanus Sp.) Fish Bone To Improve Phosphorus Contents In Compost.</p>
<p><b>Activities in Professional organizational over the last 5 years</b></p>	