STAFF

HANDBOOKS

(SCOPUS) (SINTA)

Name	Dr.rer.nat Bambang Heru Iswanto, M.Sc.
Position	Lecturer in Physics Education
Educational Background	1. Bachelor's degrees (Physics Education), IKIP Jakarta. 2. Master's degrees (Physics), ITB Bandung. 3. Doctoral degrees (Artificial Intelligence) – Technische Universitat Berlin (TU Berlin), Germany
Academic Career (Employment)	Lecturer, Masters of Physics Study Program, Faculty Mathematics andNatural Sciences, Jakarta State University, Jakarta 13220, Indonesia.
Research and Development project over the last 5 years	1. 2021 - Simulation Of The Movement Of The Covid-19 Virus Droplets Using The Monte Carlo Method. 2. 2021 - Improvising Tea Leaf Detection Based On Computers Vision UsingWavelets And Fuzzy Fusion. 3. 2020 - Introduction To Tea Plants Quality Using Digital Image AndMachine Learning Methods. 4. 2019 - Machine Learning Analysis Of Magnetic Properties And Soil Geochemical. 5. 2019 - Development Of Quantum Cryptography-Based Documents Security Systems Using The Event By Event Method. 6. 2018 - Development Of Quantum Cryptography-Based Documents Security Systems Using The Event By Event Method.
Industry collaboration/ Community Services over the last 5 years	1. 2021 - Literacy And Ict Skills Development For Indonesia Workers In Singapore. 2. 2021 - Using Audiosonic To Improve Quality Of Physics Learning In High Schools In Jatisampurna District, Bekasi City, West Java. 3. 2020 - Computers Simulation Programming Training For PhysicsTeacher In Bogor District. 4. 2019 - Ict Study In Physics Learning.

Patents and Intellectual Property Right (IPR)	*1.* 2021 - Learning Media. *2.* 2020 - Tea Leaf Image Feature Extraction Program With DTCWT-GLC in Matlab. *3.* 2020 - Magnetic Force Demonstration on Cylinder Metal in Straws.
Important publications over the last 5 years	*1.* 2021 - Study Of Tofu Wastewater Treatment Using Anaerobic Baffled Reactor: Laboratory Scale *2.* 2021 - Wastewater Treatment For Tofu Home Industries In Semanan, West Jakarta Using Electrocoagulation Method With Electrodes Al-Stainless Steel *3.* 2021 - Virtual Test Instruments To Measure Scientific Literacy Of High School Students On Work And Energy *4.* 2021 - Visualization Lorentz Force With Tea Leaves For Studying Magnetic Field In Senior High School *5.* 2021 - Website Of Physics Instructional (Wopi): Learning Physics From Home During COVID-19 *6.* 2021 - Feature Extraction Of Tea Leaf Images Using Dual-Tree Complex Wavelets Transform And Grey Levels Co-Occurrence Matrix *7.* 2021 - Augmented Reality Geometrical Optics (AR-Gios) For Physics Learning In High Schools *8.* 2021 - Virtual Microscopic Simulation (VMS) For Physics Learning Of The Photoelectric Effect In High School *9.* 2021 - Development Of Android Physics Applications (APA) As Learning Media On Dynamic Fluid Concepts *10.* 2021 - Four Tiers Test (FTT) Development In The Form Of Virtualization Static Fluid Test (VSFT) Using Rasch Model Analysis To Support Learning During The Covid-19 Pandemic *11.* 2021 - Determination Of Springs Constant By Hooke's Law And Simple Harmonic Motion Experiment *12.* 2021 - Using Accelerometer Smartphones Censorship And Phyphyox ForFriction Experiment In High School *13.* 2021 - Video Based Experiment To Determine Focal Length Of A Positive Lens In Physics Learning *14.* 2021 - Faraday's Law Teaching Aids Using Magnetometers On Smartphones And Infrared Sensors For Electromagnetic Induction Learning *15.* 2021 - MIX Reality Based Media Prototype For Learning Physics Of Gravity And Kepler's Law *16.* 2021 - Spring Oscillator As Case Based Learning (CBL) Device *17.* 2021 - Development Of Sensor-Based Learning Tools For The StudyInduction Magnetic Force For High School Students *18.* 2021 - The Dynamics Of A Hockey Player Body On Passing The Ball *19.* 2021 - Analysis On Interest Motivation Instruments (Iim) For Measure Of Interest And Motivation Of Study Doctoral Physics Education Using Rapidminer *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)

	21. 2021 - Sound Resonance Practice Device Based On Arduino Uno To Improve TheScience Process Skills Of High School Students *22.* 2021 - Osci-Meter": The Practice Device For Oscillation Motion Experiment Using Accelerometer In Smartphone To Increase 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 Sediments In Polluted AreasOf Traditional Gold Mining In Kuris Sumbawa Indonesia *26.* 2020 - Identification Of Environments Based On Magnetic Susceptibility And Geochemical Data Using Multivariate Statistics 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 Africans Catfish (Clarias Gariepinus) *29.* 2020 - The Significance Of Tropical Microalgae Chlorella Sorokiniana US A Remediate Of Polluted Water Caused By Chlorpyrifos *30.* 2019 - Removal Of Heavy Metal (Cu2+) 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 Students' Levels Of Understanding *34.* 2019 - Expected Likelihood Based Queries For Active Learning OfGaussian Mixture Models Based Classifiers *35.* 2019 - The Simulation Of One-Time-Pad Quantum Key Distribution *36.* 2019 - Kalman Filtering To Real Time Trace Water Levels Measurements Using Ultrasonic Sensors *37.* 2019 - Selection Method To Identify The Dominant Elements That's itContribute To Magnetic Susceptibility In Sediments *38.* 2019 - Developing Practicum Devices Using Magnetic Censorship ForCircular Motion At Senior High School *39.* 2019 - Bioremediation Of Soil Polluted With Copper (Cu2+) By Mixed Culture Bacteria Thiobacillus Sp. And Clostridium Sp. *40.* 2018 - The Simulation Of A Symmetric Quantum Key Distribution *41.* 2018 - Sentiment Analysis On Language Indonesia Tweets UsingUnibigram Models And Machine Learning Techniques

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