

## Staff Handbook

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|-----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|--------------------------------|-----------------------------|
| Name                                                                                                                                                | Abd. Kholiq                                     |                                |                             |
| Post                                                                                                                                                | Master degree in Regulatory Systems Engineering |                                |                             |
| Academic career                                                                                                                                     |                                                 |                                |                             |
| Academic                                                                                                                                            | Institution                                     | Year                           |                             |
| Initial Academic Appointed as lecturer/instructor in Physics Educations                                                                             |                                                 |                                |                             |
| Doctoral                                                                                                                                            |                                                 |                                |                             |
| Master of Regulatory Systems Engineering                                                                                                            | Institut Teknologi Sepuluh Nopember             | 2011-2016                      |                             |
| Bachelor of Physics Education                                                                                                                       | Universitas Negeri Surabaya                     | 1995-2000                      |                             |
| Employment                                                                                                                                          |                                                 |                                |                             |
| Position                                                                                                                                            | Employer                                        | Period                         |                             |
| Professor                                                                                                                                           |                                                 |                                |                             |
| Associate Professor                                                                                                                                 | Universitas Negeri Surabaya                     |                                |                             |
| Assistant Professor                                                                                                                                 | Universitas Negeri Surabaya                     |                                |                             |
| Lecturer/ Instructor                                                                                                                                | Universitas Negeri Surabaya                     |                                |                             |
| Research and development projects over the last 5 years                                                                                             |                                                 |                                |                             |
| Name of Project or Research                                                                                                                         | Period                                          | Partner (Mitra/ if applicable) | Amount of Financing         |
| DEVELOPMENT OF A MICROCONTROLLER EDUCATION KIT AS A LEARNING MEDIA FOR THE COURSE MICROPROCESSOR AND MICROCONTROLLER                                | 2021                                            |                                | IDR 20.000.000<br>(€ 1,039) |
| DEVELOPMENT OF E-MLIST (E-MODULE BASED ON SCIENCE LITERACY) IN THE BASIC PHYSICS 1 COURSE, KINEMATICS OF MOTION MATERIAL                            | 2022                                            |                                | IDR 20.000.000<br>(€ 1,039) |
| DEVELOPMENT OF MODFIA (DIGITAL PHYSICS MULTIMEDIA MODULE): AS AN EFFORT TO IMPLEMENT SDGS IN MULTIMEDIA LECTURES IN PHYSICS DEPARTMENT, FMIPA UNESA | 2023                                            |                                | IDR 20.000.000<br>(€ 1,039) |
| ANALYSIS OF MULTIREPRESENTATION ABILITY OF PROSPECTIVE PHYSICS TEACHERS ASSISTED BY EYE TRACKING TECHNOLOGY:                                        | 2023                                            |                                | IDR 88.700.000<br>(€ 4,608) |

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| INNOVATION IN STEAM LEARNING BASED ON MBKM IN HIGHER EDUCATION                                                                                               |                                                                                            |                  |                             |
| PIONEER DEVELOPMENT OF SMART PHYSICS INTERACTIVE EDUCATIONAL TOOLS “SPINET”: DIGITAL LEARNING INNOVATION IN THE IMPLEMENTATION OF THE INDEPENDENT CURRICULUM | 2024                                                                                       |                  | IDR 75.000.000<br>(€ 3,896) |
| DEVELOPMENT OF INTERACTIVE PHYSICS MULTIMEDIA ORIENTED ON LOCAL CULTURE TO IMPROVE CONCEPTUAL UNDERSTANDING                                                  | 2024                                                                                       |                  | IDR 20.000.000<br>(€ 1,039) |
| RENEWABLE ENERGY LEARNING TECHNOLOGY (RELT): A TOOL FOR COMMUNICATING RENEWABLE ENERGY IN KSDAL LECTURES                                                     | 2024                                                                                       |                  | IDR 20.000.000<br>(€ 1,039) |
| Industry collaborations over the last 5 years                                                                                                                |                                                                                            |                  |                             |
| Project title                                                                                                                                                |                                                                                            | Partners         |                             |
| -                                                                                                                                                            |                                                                                            |                  |                             |
| Patents and proprietary rights                                                                                                                               |                                                                                            |                  |                             |
| Title                                                                                                                                                        |                                                                                            |                  | Year                        |
| How a Portable Dispenser Works in One Hand                                                                                                                   |                                                                                            |                  | 2021                        |
| ELITE (Science Literacy-Based e-Book) for Junior High School Students on the Solar System                                                                    |                                                                                            |                  | 2022                        |
| Mikka (Physics Comic) Based on HOTS (High Order Thinking Skills) Fluid Dynamics Topic                                                                        |                                                                                            |                  | 2022                        |
| E-MLIST (e-Module Based on Science Literacy) Basic Physics Course 1 Topic Kinematics of Motion                                                               |                                                                                            |                  | 2022                        |
| Web-FIST (STEM-Based Physics Website) to train high school students' critical thinking on the topic of parabolic motion                                      |                                                                                            |                  | 2023                        |
| ELSA 3D (3D E-Book Based on Science Literacy) to Train High School Students' Science Literacy on Temperature and Heat Material                               |                                                                                            |                  | 2023                        |
| PHYSGED (Physics E-book with Game Education)                                                                                                                 |                                                                                            |                  | 2024                        |
| Audio Visual Physics                                                                                                                                         |                                                                                            |                  | 2024                        |
| ERIKA (PHYSICS E-Module Based on Local Wisdom of the Dadhak Merak Reog Ponorogo Dance)                                                                       |                                                                                            |                  | 2024                        |
| Important publications over the last 5 years                                                                                                                 | Total number= 156 publications<br>total publications since the last 5 year=73 publications |                  |                             |
| Title and Author                                                                                                                                             | Publisher/ Journal name                                                                    | Publication date | Vol/Issue/ Page Number      |
| Infant Warmer Equipped with Digital Weight Scales                                                                                                            | Jurnal Teknokes                                                                            | 2021             | 14 (2), 68-72               |

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| MJ Al'Aziz, BG Irianto, A Kholiq                                                                                                                                                            |                                                                                       |      |                  |
| Getting to Know the Last Five Years Trend on Microcontroller Research: A Bibliometric Analysis<br>M Yantidewi, B Jatmiko, I Sucahyo, A Kholiq, NA Lestari, UA Deta                          | Journal of Physics: Conference Series                                                 | 2021 | 2110 (1), 012006 |
| E-LS on The Subject of Temperature: The First Work of a Science-Physics Teacher at Siti Aminah Junior High School Surabaya<br>A Kholiq, I Sucahyo, T Sunarti, DH Kusumawati, MNR Jauhariyah | Journal of Physics: Conference Series                                                 | 2021 | 2110 (1), 012025 |
| Research on physics of photography: A bibliometric study (2000-2020)<br>N Suprpto, A Kholiq, BK Prahani, UA Deta                                                                            | Journal of Physics: Conference Series                                                 | 2021 | 2110 (1), 012017 |
| Critical epistemology: a study of Jurgen Habermas's hermeneutic thought<br>A Kholiq, MK Fatih                                                                                               | Al Furqan: Jurnal Ilmu Al Quran dan Tafsir                                            | 2021 | 4 (2), 174-185   |
| Analysis of Temperature Sensors with Proportional and Derivative Controls Applied to Infant Incubators<br>A Kholiq, L Lamidi                                                                | Journal of Biomimetics, Biomaterials and Biomedical Engineering                       | 2022 | 55, 216-225      |
| Study of Surah Al-Baqarah Verse 183 in the Education of the Whole Person<br>A Kholiq                                                                                                        | Awwaliyah: Journal of Elementary School Teacher Education                             | 2022 | 5 (1), 112-121   |
| Development of augmented reality media to train high school students' abstract thinking skills on magnetic field material<br>RAR Yovan, A Khaliq                                            | PENDIPA Journal of Science Education                                                  | 2022 | 6 (1), 80-87     |
| Development of MolBEST (STEM-Based Mobile Learning) on Elasticity Materials<br>NDA Warsa, A Kholiq                                                                                          | Prisma Sains: Jurnal Pengkajian Ilmu dan Pembelajaran Matematika dan IPA IKIP Mataram | 2022 | 10 (3), 618-627  |
| Implementation of Al-Hikmah in the Da'wah Method in Surah An-Nahl Verse 125<br>A Kholiq, S Shofiyah                                                                                         | Alamtara: Journal of Islamic Communication and Broadcasting                           | 2022 | 6 (2), 164-172   |
| Analysis of the pre-service physics teacher's ability to develop SDGs-oriented multimedia<br>A Kholiq, I Sucahyo, M Anggaryani, M Satriawan, M Habibbulloh                                  | E3S Web of Conferences                                                                | 2023 | 450, 01008       |

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| <p>The role of digital ethics in improving the quality of Islamic religious education in the technological era.</p> <p>A Kholiq</p>                                                 | <p>Sasana: Journal of Islamic Religious Education</p>                                                                                                                | <p>2023</p> | <p>2 (1), 86–91</p>           |
| <p>Controlling the Temperature of PID System-Based Baby Incubator to Reduction Overshoot</p> <p>BG Irianto, AM Maghfiroh, M Sofie, A Kholiq, SD Musvika, DA Akbar</p>               | <p>Proceeding of the 3rd International Conference on Electronics, Biomedical Engineering, and Health Informatics: ICEBEHI 2022, 5–6 October, Surabaya, Indonesia</p> | <p>2023</p> | <p>529-541</p>                |
| <p>The role of digital ethics in improving the quality of Islamic religious education in the technological era</p> <p>A Kholiq</p>                                                  | <p>Al-Musthofa: Journal of Sharia Economics</p>                                                                                                                      | <p>2023</p> | <p>2 (1), 71-76</p>           |
| <p>The role of digital ethics in improving the quality of Islamic religious education in the technological era</p> <p>A Kholiq</p>                                                  | <p>Sasana: Journal of Islamic Religious Education</p>                                                                                                                | <p>2023</p> | <p>2 (1), 71-76</p>           |
| <p>Fuzzy logic temperature control on baby incubator transport battery efficiency</p> <p>YC Co'o, IDGH Wisana, A Kholiq</p>                                                         | <p>Journal of Health Technology</p>                                                                                                                                  | <p>2024</p> | <p>17 (1), 29-36</p>          |
| <p>Development of Adaptive PD Control for Infant Incubator Using Fuzzy Logic</p> <p>A Kholiq, L Lamidi, F Amrinsani, T Triwiyanto, HA Mahdy, R Nazila, V Abdullayev</p>             | <p>Journal of Robotics and Control (JRC)</p>                                                                                                                         | <p>2024</p> | <p>5 (3), 756-765</p>         |
| <p>Community Assistance to Improve Knowledge and Skills in Embalming Corpses According to Islamic Sharia in Talun Rejoso Village, Nganjuk</p> <p>MI Khosyiin, M Yusuf, A Kholiq</p> | <p>JANAKA: Journal of Community Service</p>                                                                                                                          | <p>2024</p> | <p>6 (2), 28-38</p>           |
| <p>The use of eye movement technology in education: a review and bibliometric study</p> <p>N Suprpto, A Kholiq, FY Yang, SR Hakim, RRHP Agusti, ..</p>                              | <p>Multidisciplinary Reviews</p>                                                                                                                                     | <p>2024</p> | <p>7 (9), 2024214-2024214</p> |
| <p>Ocean wave energy learning project (OWELP): a program to communicate alternative energy technology</p> <p>M Satriawan, Rosmiati, E Hariyono, A Kholiq</p>                        | <p>Research in Science &amp; Technological Education,</p>                                                                                                            | <p>2024</p> | <p>1-24</p>                   |

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| The Role of DPC ASPETRI Surabaya in Improving Community Health through the Distribution of Jamu at the Health Post in Joyoboyo Terminal<br><br>TS Wibowo, C Wulansari, N Hidayati, A Kholiq | Jurnal Pengabdian West Science                                   | 2025          | 4 (04), 512-523 |
| Temperature response analysis between PD and PI controls applied to infant incubators<br><br>A Kholiq, L Lamidi, F Amrinsani, AYM Argumery, HA Mahdy                                        | TELKOMNIKA (Telecommunication Computing Electronics and Control) | 2025          | 23 (2), 495-506 |
| The Urgency of Developing Android-Based Learning Applications as Interactive Media to Train Critical Thinking on Sound Wave Material<br><br>DV Sari, A Kholiq                               | Innovation in Physics Education                                  | 2025          | 4 (2), 132-138  |
| Bibliometric Analysis: The Role of Augmented Reality in Transforming Physics Learning for<br><br>Science MKL, A Andriyani, A Kholiq                                                         | Innovation in Physics Education                                  | 2025          | 14 (2), 192-200 |
| Exploration of Fluid Physics Concepts into Local Wisdom Petik Laut Lamongan: Cultural and Scientific Perspectives<br><br>N Desysetyowati, A Kholiq                                          | Scientific Journal of Physics Education                          | 2025          | 9 (3), 354-365  |
| <b>Activities in specialist bodies over the last 5 years</b>                                                                                                                                |                                                                  |               |                 |
| <b>Organization</b>                                                                                                                                                                         | <b>Role</b>                                                      | <b>Period</b> |                 |
| -                                                                                                                                                                                           |                                                                  |               |                 |