

Mukhayyarotin Niswati Rodliyatul Jauhariyah, S.Pd., M.Pd.

Position	***Assessment and Curriculum Study Lecturer in Physics Education***		
	Assistant Professor in Assessment of Physics Learning		
	Degree/Non-Degree	***University/Institution***	***Year***
Academic career	Bachelor Program at Physics Education Study Program	Universitas Negeri Surabaya (Unesa)-Indonesia	2005-2010
	Master Program at Science Education Study Program	Sebelas Maret University Surakarta-Indonesia	2011-2013
	Government Employer at Ministry of Education and Culture as a Lecturer Institution (now Ministry of Education and Culture, Research, and Technology)	Unesa-Indonesia	2014-now
	Certificate of Competence in the Area of Instructure Methodology with Qualification/Competency: Face to Face Training Programme Implementation	Professional Certification Body of National Trainer and Instructors	2020 (valid for 3 (three) years
Employment	***Position***	***Employer***	***Period***
	Physics Teacher	MtsU Amanatul Ummah for Acceleration Programme (Siwalankerto-Surabaya) – Indonesia	2010-2011
	Physics Teacher	MtsU Amanatul Ummah for Acceleration Programme (Pacet-Mojokerto) – Indonesia	2010-2012
	Physics Teacher	MAU Amanatul Ummah for Acceleration Programme (Pacet- Mojokerto) – Indonesia	2010-2013
	Lecturer on Physics Education Study Program	Unesa-Indonesia	2014-2018
	Assistant Professor in Physics Education	Unesa-Indonesia	2018-now
	Secretary of Quality Assurance Unit in Physics Department	Unesa-Indonesia	2014-2015
	Data and IT Division in Physics Department	Unesa-Indonesia	2014-2015
	Manager of Reading Room in Physics Department	Unesa-Indonesia	2014-2019
	Member of the management	Unesa-Indonesia	2015-2020

	team of the excellent class of the Faculty of Mathematics and Natural Sciences Unesa		
	Journal of Physics Research and Its Application (JPFA) editorial team	Unesa-Indonesia	2016-now
	The Physics Department Website Team	Unesa-Indonesia	2020-now
	Member of Quality Assurance Unit in Physics Department	Unesa-Indonesia	2021-now
	Coordinator of Excellent Class Development Sub Laboratory in Physics Department	Unesa-Indonesia	2021-now
Workshops	***Workshop***	***Organizer***	***Period***
	Spectrophotometer UV-Vis Perkin Elmer Lamda-25 Training	Integrated Science Laboratory of FMNS Sebelas Maret Unibersity	18-19 July 2013
	Pendidikan dan Pelatihan Prajabatan Golongan III *(Class III Pre-Service Education and Training)*	Pusat Pengembangan Tenaga Kependidikan Kemdikbud *(Ministry of Education and Culture Education Personnel Development Center)*	22 October – 14 November 2014
	Internal Quality Audit Training based on ISO 9001:2008 & ISO 19011:2011	PT First Consulting Indonesia	29 January 2015
	Pelatihan Peningkatan Keterampilan Dasar Instruksional (PEKERTI) dan Applied Approach (AA) *(Basic Instructional Skills Improvement Training and Applied Approach)*	Program Pengembangan Profesi Guru (P3G) Unesa *(Teacher Professional Development Program of Unesa)*	25-29 August 2014 and project until 22 Desember 2014
	Summer Intensive English Course	ESL Program, The Ohio State University and Universitas Negeri Surabaya	1-20 June 2014
	Workshop Pengambilan Gambar Microteaching untuk Crew Laboratoriun Pembelajaran *(Microteaching Image Capture Workshop for Crew Learning Laboratories)*	FMNS Unesa	26-27 March 2015
	Workshop on Neutron and Sinkrotron Application in the Material Research and Industry	Physical Society of Indonesia (Branch of Surabaya)	19 June 2019
	Workshop on Statistic Software: Lisrel, Smart PLS, Stata, and Mendeley	NV Consultant Indonesia	21 September 2019
	Installation and Operator Training of PASCO Product Below: PASPORT Voltage/Current Sensor, SPARKLABS for Earth	PT Kurniajaya Muktisentosa	22 October 2019

	Science, Modeling and Simulation, Advanced Structured Set, Basic Optics, Photoelectric Effect, Ratio of Specific Heats, Heat Engine Cycle, Archimedes Principle, Measurement Tool.		
	Pelatihan Teknis Bidang Metodologi Instruktur *(Instructor Methodology Technical Training)*	KADIN Institute collaborated with Universitas Negeri Surabaya	23-27 November 2020
Patents and Proprietary Rights	***Title/Theme***	***Kind/ID Number/Creator***	***Year***
	Buku Model Collaborative Physics Solving (CPS) untuk Meningkatkan Kemampuan Pemecahan Masalah dan Kolaborasi Siswa *(Model Book of Collaborative Physics Solving (CPS) to Improve Students' Problem Solving and Collaboration Ability)*	Book/EC00201984124/ Budi Jatmiko, Elok Sudibyo, Binar Kurnia Prahani, **Mukhayyarotin Niswati Rodliyatul Jauhariyah**	2019
	Perangkat Pembelajaran Fisika Berbasis Collaborative Physics Solving (CPS) untuk Meningkatkan Kemampuan Pemecahan Masalah dan Kolaborasi Siswa *(Learning Materials of Collaborative Physics Solving (CPS) to Improve Students' Problem Solving and Collaboration Ability)*	Book/EC00201984125/ Budi Jatmiko, Elok Sudibyo, Binar Kurnia Prahani, **Mukhayyarotin Niswati Rodliyatul Jauhariyah**	2019
	Buku Elektronik Evaluasi Belajar dan Pembelajaran Topik Taksonomi Bloom *(E-Book of Learning Evaluation and Learning Bloom's Taxonomy Topic)*	Computer Program/ EC00202048963/ **Mukhayyarotin Niswati Rodliyatul Jauhariyah**, Wasis, Titin Sunarti, Woro Setyarsih, Abu Zainuddin, Samsul Hidayat	2020
Research and Development Projects Over the Last 5 Years	**2021:** The Development of Higher-Order Thinking Skills (HOTS) Assessment Instrument – IDR 20,000,000 (Member of Researcher) **2020:** Development of an Android E-Book for Undergraduate Physics Education Students During the Study From Home Period During the COVID-19 Pandemic on the Topic of Bloom's Taxonomy – IDR 12,000,000 (Lead of Researcher) **2019**: The Development of Environment-Based Learning for Basic Natural Science Lecture Using Vi-Learn - Unesa's Research project of e-learning research - IDR 20,000,000 (Lead of Researcher) **2019:** The Assessment of Prospective Physics Teachers' Creativity in		

	Analysing Curriculum Based on Education for Sustainable Development - Faculty of Mathematics and Natural Sciences Research Project - IDR 10,000,000 (Lead of Researcher) **2019**: Identification of New College Students' Misconceptions in The Physics Education Study Program in 2019/2020 - Faculty of Mathematics and Natural Sciences Research Project - IDR 10,000,000 (Member of Researcher) **2019:** The Effectivenes of English Course in Improving English Ability of Excellent Class Students in the Faculty of Mathematics and Natural Sciences - Faculty of Mathematics and Natural Sciences Research Project - IDR 10,000,000 (Member of Researcher) **2018:** Mapping of Final Project Profile Physics Education Study Program Students as an Effort to Equalize and Optimize Final Projects in All Fields of Research Study - Faculty of Mathematics and Natural Sciences Research Project - IDR 10,000,000 (Member of Researcher) **2018:** Development of School Curriculum Analysis Textbooks for Excellent Class Students in Physics Education Study Program, Surabaya State University - Faculty of Mathematics and Natural Sciences Research Project - IDR 10,000,000 (Lead of Researcher) **2017:** Input and Output Analysis of Physics Department as an Effort to Mapping Student Characteristics at the Ecopreneurship Campus, Surabaya State University - Faculty of Mathematics and Natural Sciences Research Project - IDR 10,000,000 (Member of Researcher) **2017:** Development of KKNI-Based School Curriculum Study Textbook for Physics Education Study Program Students at Surabaya State University - Faculty of Mathematics and Natural Sciences Research Project - IDR 10,000,000 (Lead of Researcher) **2016:** Development of KKNI-Based Learning Theory Subjects Textbook for Physics Education Study Program Students at Surabaya State University - Faculty of Mathematics and Natural Sciences Research Project - IDR 10,000,000 (Member of Researcher) **2016:** Optical Properties Characterization of Erbium Doped Tellurite Glass for Laser Applications - Faculty of Mathematics and Natural Sciences Research Project - IDR 10,000,000 (Lead of Researcher)	
Important publications over the last 5 years	***Information of Publication***	***Year***
	Mukhayyarotin Niswati Rodliyatul Jauhariyah, Mita Anggaryani, and Ahmad Marzuki. 2021. Research Trend on Erbium-Doped Tellurite Glasses Based on Scopus Database. *E3S Web Conf.* Volume 328 *International Conference on Science and Technology* (ICST 2021). DOI: https://doi.org/10.1051/e3sconf/202132804018 (https://www.e3s-conferences.org/articles/e3sconf/abs/2021/104/e3sconf_icstunkhair2021_04018/e3sconf_icstunkhair2021_04018.html)	2021
	Sharvina Yudatika, **Mukhayyarotin Niswati Rodliyatul Jauhariyah**. 2021. Meta-Analysis of Inquiry Learning Models in	2021

	Physics Learning. Jurnal Ilmiah Pendidikan Fisika 5(3) 437-447. DOI: https://doi.org/10.20527/jipf.v5i3.3993 (http://ppjp.ulm.ac.id/journals/index.php/jipf/article/view/3993)	
	A Kholiq, I Sucahyo, T Sunarti, DH Kusumawati, **MNR Jauhariyah**. 2021. E-LS on The Subject of Temperature: The First Work of a Science-Physics Teacher at Siti Aminah Junior High School Surabaya. *Journal of Physics: Conference Series* 2110(1) 012025. doi:10.1088/1742-6596/2110/1/012025 (https://iopscience.iop.org/article/10.1088/1742-6596/2110/1/012025/meta)	2021
	Suliyanah, BD Adelia, **MNR Jauhariyah**, S Mahtari, A Saregar, UA Deta. 2021. A Bibliometric Analysis of Minimum Competency Assessment Research with VOSViewer Related to the Impact in Physics Education on 2019-2020. *Journal of Physics: Conference Series* 2110(1) 012022. doi:10.1088/1742-6596/2110/1/012022 (https://iopscience.iop.org/article/10.1088/1742-6596/2110/1/012022/meta)	2021
	B Jatmiko, BK Prahani, N Suprapto, S Admoko, UA Deta, NA Lestari, **MNR Jauhariyah**, M Yantidewi, D Muliyati. 2021. Bibliometric Analysis on Online Physics Learning during COVID-19 Pandemic: Contribution to Physics Education Undergraduate Program. Journal of Physics: Conference Series 2110(1) 012018. doi:10.1088/1742-6596/2110/1/012018 (https://iopscience.iop.org/article/10.1088/1742-6596/2110/1/012018/meta)	2021
	Irda Sukmawati Dewi, **Mukhayyarotin Niswati Rodliyatul Jauhariyah**. 2021. Analisis Bibliometrik Implementasi Pembelajaran Fisika Berbasis STEM pada Tahun 2011-2021 (Bibliometric Analysis of Physics Learning Implementation Based on STEM During 2011-2021). *Jurnal Ilmiah Pendidikan Fisika* 5(3) 368-387. DOI: https://doi.org/10.20527/jipf.v5i3.3904 (http://ppjp.ulm.ac.id/journals/index.php/jipf/article/view/3904)	2021
	Hanifah Roihana Labibah, **Mukhayyarotin Niswati Rodliyatul Jauhariyah**. 2021. Meta-Analysis of Discovery Learning Model in Physics Learning. Jurnal Ilmiah Pendidikan Fisika 5(3) 317-327. DOI: https://doi.org/10.20527/jipf.v5i3.4035 (http://ppjp.ulm.ac.id/journals/index.php/jipf/article/view/4035)	2021
	Azuminatun Nadhifah, **Mukhayyarotin Niswati Rodliyatul Jauhariyah**. 2021. The Use of The Quizizz Application in The Scientific Literacy Assessment of High School Students on Global Warming Material. *Jurnal Ilmiah Pendidikan Fisika* 5(2) 162-174. DOI: https://doi.org/10.20527/jipf.v5i2.3309 (http://ppjp.ulm.ac.id/journals/index.php/jipf/article/view/3309)	2021
	Nabila Ayunda Putri, **Mukhayyarotin Niswati Rodliyatul Jauhariyah**. 2021. Penilaian Higher-Order Thinking Skills (HOTS) Menggunakan Quizizz pada Materi Usaha dan Energi *(Higher-Order Thinking Skills (HOTS) Assessment Uding Quizizz on Work and Energy)*. Kappa Journal 5(1) 88-101. DOI: https://doi.org/10.29408/kpj.v5i1.3661 (https://e-journal.hamzanwadi.ac.id/index.php/kpj/article/view/3661	2021

	Reny Dwi Astutik, **Mukhayyarotin Niswati Rodliyatul Jauhariyah**. 2021. Studi Meta Analisis Problem Based Learning Dalam Pembelajaran Fisika. ORBITA: Jurnal Kajian, Inovasi dan Aplikasi Pendidikan Fisika 7(1) 159-168. (http://journal.ummat.ac.id/index.php/orbita/article/view/4525/2786)	2021
	A Marzuki, R A Zikri, **M N R Jauhariyah**, and D E Fausta. 2021. Effect of Na_2O/PbO substitution on physical and optical properties of Er^{3+} -doped tellurite glasses. *Journal of Physics: Conference Series* Vol. 1912 (1) 012038. doi:10.1088/1742-6596/1912/1/012038 (https://iopscience.iop.org/article/10.1088/1742-6596/1912/1/012038/pdf)	2021
	M N R Jauhariyah, T Sunarti, Wasis, Supardiyono, W Setyarsih, and A Zainuddi. 2021. Analysis of physics questions based on HOTS criteria: the result of physics teacher training. *Journal of Physics: Conference Series* Vol. 1805 (1) 012023. doi:10.1088/1742-6596/1805/1/012023 (https://iopscience.iop.org/article/10.1088/1742-6596/1805/1/012023/pdf)	2021
	N A Lestari, R Ambarsari, B K Prahani, **M N R Jauhariyah**, M Yantidewi, and U A Deta. 2021. A Preliminary Study of Environmental Learning to Improve Students' Higher Order Thinking Skills in Physics. *Journal of Physics: Conference Series* Vol. 1805 (1) 012033. doi:10.1088/1742-6596/1805/1/012033 (https://iopscience.iop.org/article/10.1088/1742-6596/1805/1/012033/pdf)	2021
	T Sunarti, Wasis, Supardiyono, and **MNR Jauhariyah**. 2021. Train the skills of making HOTS-based physics questions to physics teachers in Mojokerto. *Journal of Physics: Conference Series* Vol. 1805 (1) 012027. doi:10.1088/1742-6596/1805/1/012027 (https://iopscience.iop.org/article/10.1088/1742-6596/1805/1/012027/pdf)	2021
	N Hikmah, N A Putri, K Nisa', and **M N R Jauhariyah**. 2021. Using Quizizz to Develop an Assessment of Physics Learning: An Alternative Way for Physics Learning Assessment in the Covid-19 Pandemic Era. *Journal of Physics: Conference Series* Vol. 1805 (1) 012021. doi:10.1088/1742-6596/1805/1/012021 (https://iopscience.iop.org/article/10.1088/1742-6596/1805/1/012021/pdf)	2021
	Suliyanah, U A Deta, F K Kurniawan, N A Lestari, M Yantidewi, **M N R Jauhariyah**, and B K Prahani. 2021. Literature Review on The Use of Educational Physics Games in Improving Learning Outcomes. *Journal of Physics: Conference Series* Vol. 1805 (1) 012038. doi:10.1088/1742-6596/1805/1/012038 (https://iopscience.iop.org/article/10.1088/1742-6596/1805/1/012038/pdf)	2021
	M N R Jauhariyah, B K Prahani, K Syahidi, U A Deta, N A Lestari and E Hariyono. 2021. ESD for physics: how to infuse education for sustainable development (ESD) to the physics curricula? *Journal of Physics: Conference Series* Vol. 1747 (1) 012032. doi:10.1088/1742-6596/1747/1/012032 (https://iopscience.iop.org/article/10.1088/1742-6596/1747/1/012032/pdf)	2021

	Mukhayyarotin Niswati Rodliyatul Jauhariyah, Wasis Wasis, Titin Sunarti, Woro Setyarsih, Abu Zainuddin, Samsul Hidayat. 2021. Need Assessment Of Physics Learning Evaluation Course On Covid-19 Pandemic Era In Bloom's Taxonomy Topic. *Berkala Ilmiah Pendidikan Fisika* Vol 9 (1) 57-71 DOI:10.20527/bipf.v9i1.9874 (https://ppjp.ulm.ac.id/journal/index.php/bipf/article/view/9874)	2021
	B K Prahani, E Susiawati, U A Deta, N A Lestari, M Yantidewi, **M N R Jauhariyah**, M A Mahdiannur, E Candrawati, Misbah, S Mahtari, Suyidno, J Siswanto. 2021. Profile of Students' Physics Problem-Solving Skills and the Implementation of Inquiry (Free, Guided, and Structured) Learning in Senior High School. *Journal of Physics: Conference Series* Vol. 1747 (1) 012012. doi:10.1088/1742-6596/1747/1/012012 (https://iopscience.iop.org/article/10.1088/1742-6596/1747/1/012012/pdf)	2021
	B K Prahani, U A Deta, N A Lestari, M Yantidewi, **M N R Jauhariyah** , V P Kelelufna, J Siswanto, M Misbah, S Mahtari, Suyidno. 2021. A profile of senior high school students' science process skills on heat material. *Journal of Physics: Conference Series* Vol. 1760 (1) 012010. doi:10.1088/1742-6596/1760/1/012010 (https://iopscience.iop.org/article/10.1088/1742-6596/1760/1/012010/pdf)	2021
	M N R Jauhariyah, S N Rohmah and N Y Permatasari. 2020. The Students' Understanding Profile on Nature of Science (NOS) of Physics. *Journal of Physics: Conference Series* Vol 1491 (1) 012056. doi:10.1088/1742-6596/1491/1/012056 (https://iopscience.iop.org/article/10.1088/1742-6596/1491/1/012056/pdf)	2020
	M N R Jauhariyah, E Hariyono, E N Abidin, and B K Prahani. 2019. Fostering Prospective Physics Teachers' Creativity in Analysing Education for Sustainable Development Based Curricula. *Journal of Physics: Conference Series* Vol. 1417 (1) 012086. doi:10.1088/1742-6596/1417/1/012086 (https://iopscience.iop.org/article/10.1088/1742-6596/1417/1/012086/pdf)	2019
	I Zulfa, S Kusairi, E Latifah, **MNR Jauhariyah**. 2019. Analysis of student's conceptual understanding on the work and energy of online hybrid system. *Journal of Physics: Conference Series* 1171 (1) 012045. doi:10.1088/1742-6596/1171/1/012045 (https://iopscience.iop.org/article/10.1088/1742-6596/1171/1/012045/pdf)	2019
	N Suprapto, UA Deta, NA Lestari, A Kholiq, AS Adam, H Mubarok, **MNR Jauhariyah**. 2018. Pre-service physics teachers' understanding on total lunar eclipse: A response of supermoon on January 31st 2018. *Journal of Physics: Conference Series* 1108 (1) 012097. doi :10.1088/1742-6596/1108/1/012097 (https://iopscience.iop.org/article/10.1088/1742-6596/1108/1/012097/pdf)	2018
	MNR Jauhariyah, I Zulfa, Z Harizah, W Setyarsih. 2018. Validity of student's misconceptions diagnosis on chapter Kinetic Theory of Gases using three-tier diagnostic test. *Journal of Physics: Conference Series* 1006 (1) 012005. doi :10.1088/1742-	2018

	6596/1006/1/012005 (https://iopscience.iop.org/article/10.1088/1742-6596/1006/1/012005/pdf)	
	MNR Jauhariyah, N Suprapto, S Admoko, W Setyarsih, Z Harizah, I Zulfa. 2018. The students' misconceptions profile on chapter gas kinetic theory. *Journal of Physics: Conference Series* 997 (1) 012031. doi :10.1088/1742-6596/997/1/012031 (https://iopscience.iop.org/article/10.1088/1742-6596/997/1/012031/pdf)	2018
	N Suprapto, BK Prahani, **MNR Jauhariyah**, S Admoko. 2018. Exploring physics concepts among novice teachers through CMAP tools. *Journal of Physics: Conference Series* 997 (1) 012011. doi :10.1088/1742-6596/997/1/012011 (https://iopscience.iop.org/article/10.1088/1742-6596/997/1/012011/pdf)	2018
	BK Prahani, N Suprapto, S Suliyanah, NA Lestari, **MNR Jauhariyah**, S Admoko, S Wahyuni. 2018. The effectiveness of collaborative problem based physics learning (CPBPL) model to improve student's self-confidence on physics learning. *Journal of Physics: Conference Series* 997 (1). doi :10.1088/1742-6596/997/1/012008 (https://iopscience.iop.org/article/10.1088/1742-6596/997/1/012008/pdf)	2018
	N Suprapto, A Abidah, K Dwiningsih, **MNR Jauhariyah**, A Saputra. 2018. Minimizing Misconception of ionization energy through three-tier diagnostic test. *Periodico Tche Quimica* 15 (30) 387-396.	2018
	MNR Jauhariyah, Z Harizah, I Zulfa, H Mulyastuti, W Setyarsih, N Suprapto. 2018. Learn Physics Using Interactive Demonstration to Reduce The Student's Misconceptions on Mechanical Wave. *Advances in Intelligent System Research*, volume 157 (MISEIC 2018)	2018
	MNR Jauhariyah, Wasis. 2018. Student's Reasoning on Physics Related to Visual Representation Case Study of College Students. *Atlantis Highlights in Engineering (AHE)*, volume 1 (ICST 2018). https://dx.doi.org/10.2991/icst-18.2018.182 (https://www.atlantis-press.com/proceedings/icst-18/55910967)	2018
	Setyo Admoko, Titin Sunarti, **Mukhayyarotin Niswati Rodliyatul Jauhariyah**, Suliyanah Suliyanah, Nadi Suprapto. 2018. Analysis of College Students' Misconception on Geometrical Optics. *Atlantis Highlights in Engineering (AHE)*, volume 1 (ICST 2018). https://dx.doi.org/10.2991/icst-18.2018.181 (https://www.atlantis-press.com/proceedings/icst-18/55910966)	2018
	MNR Jauhariyah, W Setyarsih, M Yantidewi, A Marzuki, Cari. 2017. Refractive index measurement of tellurite glasses by using Brewster angle method. *Proceeding-2016 International Seminar on Sensors, Instrumentation, Measurement, and Metrology, ISSIMM 2016* (IEEEXplore). **DOI:** 10.1109/ISSIMM.2016.7803725 (https://ieeexplore.ieee.org/abstract/document/7803725)	2017
	MNR Jauhariyah, Cari, A Marzuki. 2016. Optical properties of erbium doped tellurite glasses. *Materials Science Forum* 864 37-41. https://doi.org/10.4028/www.scientific.net/MSF.864.37 (https://www.scientific.net/MSF.864.37)	2016

Professional	***Organization***	***Position***	***Period***

Organization			
	Physical Society of Indonesia	Member	2018 – Now