

STAFF HANDBOOK



Name	Prof. Dr. Erman, M.Pd.			
Position	Lecturer at Science Education, Universitas Negeri Surabaya (UNESA)			
Academic Career	Degree	University	Year	
	<i>Bachelor Degree</i>	<i>Chemical Education, IKIP Ujung Pandang</i>	<i>Graduated 1994</i>	
	<i>Master Degree</i>	<i>Chemical Education, IKIP Malang</i>	<i>Graduated 1998</i>	
	<i>Doctoral Degree</i>	<i>Natural Science Education, UPI Bandung</i>	<i>Graduated 2012</i>	
Employment	Position	Employer	Period	
	<i>Lecturer</i>	<i>Universitas Negeri Surabaya – Indonesia</i>	<i>1991-Now</i>	
Research and Development Project Over the Last 5 Years	Title	Funder	Year	Amount of Financing (million)
	<i>Optimizing Student Science Process Skills for Science Learning based on Blended Learning</i>	<i>Penelitian Kompetitif Dasar FMIPA</i>	<i>2022</i>	<i>20</i>
	<i>Strategy of scientific argumentation of college student to explain focal issues in a connection with socio-scientific issues</i>	<i>Penelitian Kompetitif Kolaborasi FMIPA</i>	<i>2022</i>	<i>60</i>
	<i>Characteristics of Student Chemical Literacy in Biological Systems: Identifying Chemical Aspects to Explain Phenomena at the Cell Level</i>	<i>Penelitian Dasar LPPM</i>	<i>2022</i>	<i>50</i>
	<i>An intensive scaffolding in addressing macroscopic socio-scientific issues to help college students learning science at microscopic level</i>	<i>Penelitian PNBPP(Penelitian Kolaboratif Internasional</i>	<i>2021</i>	<i>75</i>

		(ASIIN))		
	<i>Student mental models on thermodynamics material: guided inquiry perspective</i>	<i>Penelitian PNB(Penelitian Kebijakan FMIPA)</i>	<i>2021</i>	<i>20</i>
	<i>Development of the Chancellor's Regulation regarding Unesa's symbols and Attributes as well as the Board of Trustees' Regulations Regarding Interorganizational Work Procedures of Unesa PTNBH</i>	<i>Penelitian PNB(Penelitian Kebijakan Strategis Univ (PTNBH))</i>	<i>2021</i>	<i>50</i>
	<i>Effect of technological, pedagogical, and content knowledge mastery of MIPA teacher candidates on self-efficacy for teaching during the Covid-19 pandemic</i>	<i>Penelitian Kebijakan FMIPA</i>	<i>2020</i>	<i>12</i>
	<i>Spiritual practice-based learning Dzikrulloh "Silent Cipto Meditation" to Build a Strong Body Immune System, On the Topic of Cell Health in Life Course at the Cell Level</i>	<i>Penelitian Kebijakan FMIPA</i>	<i>2020</i>	<i>12</i>
	<i>Learning Form Home (LFH) with the Discussion method via Whatsapp Group (WAG) to Train Students' Questioning Ability</i>	<i>Penelitian Kebijakan FMIPA</i>	<i>2020</i>	<i>12</i>
	<i>Deep learning of superior and nonsuperior students of the Unesa Science Education study program</i>	<i>Penelitian Kebijakan FMIPA</i>	<i>2019</i>	<i>10</i>
	<i>Science communication in various media in Indonesia is viewed from the ability of scientific thinking and language of community</i>	<i>PNBP Pascasarjana Unesa</i>	<i>2018</i>	<i>50</i>
Community Service Over The Last 5 Years	Title	Funder	Year	Amount of Financing (million)
	<i>Differentiated Learning Design Training According to the Independent Curriculum Framework for Science Teachers</i>	<i>PKM Kebijakan FMIPA</i>	<i>2022</i>	<i>10</i>
	<i>Blended Learning Training with a Scientific Approach for Science Learning for Middle School Teachers in Gresik Regency</i>	<i>PKM Kebijakan FMIPA</i>	<i>2021</i>	<i>10</i>
	<i>Public Education about the Benefits of Wearing Cloth Masks for Handling Covid-19</i>	<i>PKM Kebijakan FMIPA</i>	<i>2020</i>	<i>7</i>
	<i>Assistance in the Development of National Standardized Multiple Choice Questions for Science Teachers at Middle Schools in Lamongan Regency</i>	<i>PNBP FMIPA Unesa</i>	<i>2019</i>	<i>7,5</i>
	<i>STEM-Based Learning Training in Training Ability to Solve Problems for Middle School Science Teachers in Magetan Regency</i>	<i>PNBP Pascasarjana</i>	<i>2019</i>	<i>15</i>

	<i>Workshop on Assistance in Making Student Worksheets (LKS) Baqi Discovery Models for Science Teachers in East Lombok Regency</i>	<i>PNBP Pascasarjana</i>	<i>2018</i>	<i>20</i>
	<i>Assistance for Science Teachers in Kediri Regency in Making Authentic Predictive Assessment Instruments for Students' Science Literacy through Science Learning</i>	<i>PNBP FMIPA</i>	<i>2018</i>	<i>7,5</i>
Industry Collaborations Over the Last 5 Years	Title	Partner		Year
	<i>Reviewer in national accredited Journal</i>			<i>Since 2018</i>
	<i>Teacher trainer officer of East Java</i>	<i>USAID Prioritas</i>		<i>2015-2017</i>
	<i>Reviewer of Journal of Chemical Education</i>	<i>American Chemical Society Publisher</i>		<i>2019</i>
	<i>Reviewer of International Journal of Instruction</i>			<i>2020</i>
	<i>Reviewer of Instructional Studies</i>	<i>Taylor & Francis Publisher)</i>		<i>2018</i>
	<i>Reviewer of Jurnal Pendidikan IPA Indonesia</i>			<i>2020</i>
Patents and Property Right	Title	Patent ID		Year
	<i>Model scaffolding pembelajaran IPA berbasis socio-scientific issues</i>			<i>2021</i>
	<i>Model CTBL (Critical Thinking Blended Learning) Untuk Meningkatkan Keterampilan Berpikir Kritis Siswa Dalam Pembelajaran IPA Di SMP</i>	<i>000190409</i>		<i>2020</i>
	<i>Bahan Ajar Siswa Berbasis Edmodo Pada Materi Suhu Dan Kalor Kelas VII SMP/MTs</i>	<i>000190577</i>		<i>2020</i>
Important Publications Over the Last 5 Years	<ol style="list-style-type: none"> <i>Dewi, A. I. K. , Suyono, S., & Erman, E. (2023). Effectiveness of Socioscientific Issues (SSI) Based Learning to Improve Argumentation Skills. Jurnal Penelitian Pendidikan IPA, 9(1), 279–283. https://doi.org/10.29303/jppipa.v9i1.2866</i> <i>Muawana, A., & Erman, E. (2023). Identifikasi Miskonsepsi Dalam Materi Sistem Pernapasan Pada Siswa Smp. Pensa: E-Jurnal Pendidikan Sains, 11(1), 1-7. Retrieved from https://ejournal.unesa.ac.id/index.php/pensa/article/view/46235</i> <i>Nur Wakhidah & Erman Erman (2022) Examining environmental education content on Indonesian Islamic religious curriculum and its implementation in life, Cogent Education, 9:1, DOI: 10.1080/2331186X.2022.2034244</i> Erman, B. Pare, E. Susiyawati, Martini, & H. Subekti. 2021. Re-examining a classical issue: Integrating cognitive processes in scientific-5M approach to learn science in Indonesia. Vol 15 No.4, pp 871-888. The Asia Pacific Education Researcher, Early View (Springer Nature). <i>A. Sholahuddin, E. Susilowati, B.K. Prahani, & Erman. 2021. Using a cognitive style-based learning strategy to improve students' environmental knowledge and scientific literacy. Vol 14 (4), pp 791-808. International Journal of Instruction</i> <i>N. Suprpto, Sukarmin, R.P. Puspitawati, Erman, D. Savitri, C.H. Ku,H. Mubarak. 2021. Research trend technological pedagogical content knowledge (TPACK) through bibliometric analysis (2015-2019). Vol 10(4), pp 1375-1385. International Journal of Evaluation and Research in Education.</i> <i>M. Isdianti, H. Nasrudin, & Erman. 2021. The effectiveness of STEM based</i> 			

inquiry learning packages to improving students' critical thinking skills. Journal for the Education of Gifted Young Scientist, Vol 9(3), pp. 223-232.

8. **E. Erman, L. Liliasari, Maelita Ramdani, N. Wakhidah. 2020.** *Addressing macroscopic issues: Helping students form association between biochemistry and sports and aiding their scientific literacy (International Journal of Science and Mathematics Education (IJSME) 18(5).*
9. **S. Wahyuni, Erman, S. Sadika, B. Jatmiko. 2020.** *Edmodo-based interactive teaching materials as an alternative media for science learning to improve critical thinking skills of junior high school student. ijIM, 14(9), pp. 166-181.*
10. **E. Erman, D A P Sari. 2019.** *Science in A Black Box: Can Teachers Address Science from Socio-Scientific Issues? (Journal of Physics)*
11. **S. Wahyuni, I.G.M. Sanjaya, Erman, & B. Jatmiko. 2019.** *Edmodo-based blended learning model as an alternative of science learning to motivate dan improve junior high school students' scientific thinking skills, IJET, 14(7), pp. 98-109.*
12. **D. Koranto, M.Madlazim, & E. Erman. 2019.** *Project based laboratory learning as an alternative learning model to improve science process skills and creativity of physic teacher candidate (Journal of Physics)*
13. **E. Erman, N. Wakhidah. 2019.** *Predicting teachers' familiarity on high order thinking skills through common keywords in science learning: A preliminary study (EAI EBSCO)*
11. **T Santoso, L Yuanita and E Erman. 2018.** *The role of student's critical asking question in developing student's critical thinking skills (Journal of Physics)*
12. **E. Erman, W. Wasis, E. Susantini, & U. Azizah. 2018.** *Scientific thinking skills: why junior high school science teachers cannot use discovery and inquiry models in classroom (Atlantis Press)*
13. **Erman. 2017.** *Factors contributing to students' misconceptions in learning covalent bonds, Journal of Research in Science Teaching/JRST, 54(4), 2017*

Activities in Specialist Bodies Over the Last 5 Years	Organization	Role	Period
	Perkumpulan Pendidik IPA Indonesia (PPII)	Member	2010-Now
	Postgraduate student's response to the textbook draft of local wisdom-based learning of science: A preliminary study Dec. 3-4, 2021, Lombok Indonesia	Speaker	2021
	2Examining students' learning in connecting to biochemistry ideas to address socio-scientific issues in virtual classroom, Nov 6, 2021. Yogyakarta Indonesia	Speaker	2021
	3STEM-based learning of science: Challenges for Indonesian educational systems, Sept 30, 2021. (Bandung, Indonesia)	Plenary Speaker	2021
	Addressing socio-scientific issues for sustainable development: A learning strategy and predominant research in science education, Sept. 4, 2021, (Surabaya Indonesia)	Keynote Speaker	2021
	Reflection online learning during pandemic and new normal: Barriers, readiness, solution, and teacher innovation, 9-10 March 2021. (UTM,	Speaker	2021

	<i>Malaysia)</i>		
	Writing textbook: <i>Scaffolding Pembelajaran Berbasis Socio-scientific issues: Konsep dan Implementasi</i>		<i>2021</i>
	Writing textbook: <i>Pembelajaran sains berbasis kearifan local</i>		<i>2021</i>
	Writing textbook: <i>Model Critical thinking blended learning (CTBL)</i>		<i>2020</i>
	<i>Designing a quality question to improve students' high order thinking skills in chemistry classroom (Mumbai, India)</i>	<i>Keynote Speaker</i>	<i>2020</i>
	<i>Predicting Teachers' Familiarity on High Order Thinking Skills Through Common Keywords in Science Learning: A Preliminary Study</i>	<i>Speaker</i>	<i>2019</i>