

Lydia Rohmawati, S.Si., M.Si.

Position	***Lecturer of Materials Physics***		
	Assistant Professor in Materials of Physics		
	Degree	***University***	***Year***
Academic career	Bachelor program at Physics Study Program	Institut Teknologi Sepuluh Nopember (ITS), Surabaya-Indonesia	2002 - 2006
	Master Program at Physics Study Program	Institut Teknologi Sepuluh Nopember (ITS), Surabaya-Indonesia	2007 - 2009
	Pendidikan dan Pelatihan Prajabatan Golongan III	Pusat Pengembangan Tenaga Kependidikan Badan PSDNP dan PMP Kementerian Pendidikan Nasional - Indonesia	2011
	Peningkatan Keterampilan Dasar Teknik Instruksional (PEKERTI) dan Applied Approach (AA)	Unesa - Indonesia	2013
	Workplace Assessor Training	Unesa - Indonesia	2018
	Government Employer at Ministry of Research, Technology and Higher Education as a Lecturer Institution (now Ministry of Education and Culture)	Unesa - Indonesia	2009 - now
Employment	***Position***	***Employer***	***Period***
	Lecturer on Physics Study Program	Unesa, Indonesia	2009-2017
	Assistant Professor in Physics Department	Unesa, Indonesia	2017-Now
	Coordinator of library in Physics Department	Unesa, Indonesia	2012-2014
	Coordinator of the Experiment Laboratory in Physics Department	Unesa, Indonesia	2014-2015
	Coordinator of the Magnetic Current laboratory in Physics Department	Unesa, Indonesia	2016-2018
	Coordinator of eco campus in MIPA faculty	Unesa, Indonesia	2016-2018
	Coordinator of the Modern Physics laboratory in Physics Department	Unesa, Indonesia	2018-2019
	Assessor of Competency	Unesa, Indonesia	2018-now

	Chair of Laboratory in Physics Department	Unesa, Indonesia	2019-now

Research and development projects over the last 5 years

2014: Pengembangan Bahan Ajar Mata Kuliah Bahan Paduan Berbasis Experiential Learning Untuk Membentuk Karakter Enterpeneur Dan Life Skill Mahasiswa (first years) – DIPA Unesa - IDR 145,000,000 (research member)

2014: Sintesis Komposit PVDF/ SiO_2 Bahan Alam untuk Bahan Dielektrik Superkapasitor – DIPA Unesa – IDR 75,000,000 (research member)

2015: Pengembangan Bahan Ajar Mata Kuliah Bahan Paduan Berbasis Experiential Learning Untuk Membentuk Karakter Enterpeneur Dan Life Skill Mahasiswa (last years) – DIPA Unesa - IDR 162,500,000 (research member)

2015: Karakterisasi Komposit Polianilin/Oksida Logam Sebagai Bahan Penyerap Gelombang Mikro (first year) – BOPTN Unesa – IDR 65,000,000 (research member)

2016: Karakterisasi Komposit Polianilin/Oksida Logam Sebagai Bahan Penyerap Gelombang Mikro (last year) – BOPTN Unesa – IDR 50,000,000 (research member)

2016: Karakteristik Pelapis Tahan Korosi Berbahan Kalsit Cangkang Kerang – Faculty of Mathematics and Natural Sciences Project - IDR 10,000,000 (research member)

2017: Superkapasitor dengan Elektroda Berbasis Bahan Alam (first years) – DRPM Dikti project - IDR 55,321,000 (research chair)

2018: Superkapasitor dengan Elektroda Berbasis Bahan Alam (last years) – DRPM Dikti project - IDR 95,000,000 (research chair)

2019: Aplikasi Nanopartikel Bahan Alam (Dolomit Bangkalan) Untuk Mendukung Ketersediaan Agen Antibakteri Pada Rongga Mulut (first years) – DRPM Dikti project – IDR 116,190,000 (research chair)

2019: Aplikasi TiO_2 Nanotube Bahan Alam (Residu Pasir Ilmenit) Sebagai Agen Antibakteri dan Pemutih Pada Gigi (first years) - Universitas Negeri Surabaya (Unesa) Project - IDR 50,000,000 (research chair)

Patents and proprietary rights

Tittle	Year
Metode pencampuran basah dan sintering singkat nanokristalisasi superkonduktor keramik Bi-Sr-Ca-Cu-O berfasa 2212 dan 2223, Patent Number: **P00200800809 (granted)**	2017
Metode pembuatan bahan antibacterial pada rongga mulut, Patent Number: **P00201704516 (registered)**	2017
Proses pembuatan elektroda superkapasitor karbon aktif tempurung kelapa dan Fe_3O_4 dari pasir besi Lumajang, Patent Number: **P00201803114 (registered)**	2018
Proses pembuatan komposit dari karbon aktif tempurung kelapa dan polianilin sebagai bahan elektroda superkapasitor, Patent Number: **P00201803104 (registered)**	2018
Komposit karbon aktif/rGO sebagai elektroda superkapasitor, Patent Number: **P00201803106 (registered)**	2018
Material antibakteri dari pasir dolomit Bangkalan, Patent Number: **P00201909336 (registered)**	2019

	Sintesis Titanium Dioksida Nanotube Metode Hidrotermal dari Pasir Mineral Tulungagung, Patent Number: **PID201906630 (registered)**	2019
	Pengantar dan Pembuatan Superkapasitor Bahan Alam, Monograph, Copyright-Number: **EC00201981292**	2019
Important publications over the last 5 years	YN Fidiyanti, **L Rohmawati**, NP Putri, W Setyarsih. 2016. Analisis Nilai Kapasitansi Spesifik Pada Elektroda Karbon Aktif/PVDF. *Jurnal Sains & Matematika*, **4** (2)	2016
	L Rohmawati, I Sucahyo, A Arief, M Anggaryani. 2016. Pelatihan penggunaan alat ukur dan pengukuran bagi guru IPA SMP Wilayah Sidoarjo. *Jurnal ABDI: Media Pengabdian Kepada Masyarakat*, **1** (1)	2016
	DK Maharani, D Savitri, **L Rohmawati**. 2017. Peningkatan efisiensi proses pewarnaan melalui pemberian agen fiksasi ramah lingkungan pada kelompok batik tulis Pasuruan. *Jurnal ABDI: Media Pengabdian Kepada Masyarakat*, **2** (2).	2017
	RI Sholikah, W Setyarsih, Istiqomah, A Hefdea, E Wulancahayani, **L Rohmawati**. 2017. Stabilitas Termal dan Kristalinitas Komposit Polyvinylidene Fluoride) PVDF/SiO_2 Pasir Vulkanik Kelud. *Jurnal Sains & Matematika*, **5** (2).	2017
	N Mufida, **L Rohmawati**, Istiqomah, A Hefdea, E Wulancahayani, W Setyarsih. 2017. Karakteristik Dielektrik Komposit Poly (Vinylidene Fluoride) PVDF/SiO_2 Pasir Vulkanik Kelud. *Jurnal Sains & Matematika*, **6** (1).	2017
	L Rohmawati, W Setyarsih, N Anggraini, SH Intifadhah, S Holisa SP. 2018. Capacitance Stability of Supercapacitor from Activated Carbon/PVDF Electrode. *Atlantis Highlights in Engineering (AHE)*, volume 1.	2018
	S H Intifadhah, **L Rohmawati**, W Setyarsih and Tukiran. 2018. The Effect of rGO Mass Composition on The Performance of Activated Carbon/rGO Supercapacitor Electrode Based on Coconut Shell (Cocos nucifera). *Journal of Physics: Conference Series*, Volume 1108, conference 1.	2018
	Z. Jannah, H. Mubarok, F. Syamsiyah, AAH Putri and **L Rohmawati**. 2018. Preparation of Calcium Carbonate (from Shellfish)/Magnesium Oxide Composites as an Antibacterial Agent. *IOP Conference Series: Materials Science and Engineering*, Volume 367, conference 1	2018
	L Rohmawati, W Setyarsih and T Nurjannah. 2018. Variation sweep rate cyclic voltammetry on the capacitance electrode activated carbon/PVDF with polymer electrolyte. *Journal of Physics: Conference Series*, Volume 997, conference 1	2018
	Suliyanah, H N P A Putri and **L Rohmawati**. 2018. Identification student's misconception of heat and temperature using three-tier diagnostic test. *Journal of Physics: Conference Series*, Volume 997, conference 1	2018
	L Rohmawati, W Setyarsih, NP Putri. 2019. Pembuatan Kit Sederhana Kalorimeter dari Bahan Bekas Bagi Guru IPA Fisika. *Jurnal ABDI: Media Pengabdian Kepada Masyarakat*, **4** (2).	2019
	S P Sholicha, W Setyarsih, G J Sabrina and **L Rohmawati**. 2019. Preparation of $CaCO_3$/MgO from Bangkalan's dolomite for raw biomaterial. *Journal of Physics: Conference Series*, Volume 1171, conference 1	2019
	N Anggraini, **L Rohmawati** and W Setyarsih. 2019. Cycle stability of activated carbon/PANi composite as supercapacitor electrode	2019

	based on natural material. *Journal of Physics: Conference Series*, Volume 1171, conference 1	
	L Rohmawati, S H Intifadhah, W Setyarsih and Tukiran. 2019. Specific capacitance of composite electrode activated carbon/rGO of coconut shell (Cocos nucifera) as supercapacitor electrode. *Journal of Physics: Conference Series*, Volume 1171, conference 1	2019
	Munasir , Lydia Rohmawati, Ahmad Taufiq, and Darminto. 2020. Amorphous SiO2 Nanoparticles from Natural Sands: Structure and Porosity. Chiang Mai University Journal of Natural Sciences Vol. 19 (3), 563-579. http://DOI:10.12982/CMUJNS.2020.0073	2020
	V Wardani, L Rohmawati, W Setyarsih, D Alfarisi and A Subhan. Analysis of Charging/Discharging Supercapacitor Active Carbon/rGO Based on Natural Materials. Journal of Physics: Conference Series Vol 1491. https://iopscience.iop.org/article/10.1088/1742-6596/1491/1/012044	2020

Activities in specialist bodies	***Organization***	***Position***	***Period***
	Physics Society of Indonesia (PSI)	Member	2018 - now