

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	**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) **2020:** Pengaruh Proses Double Boiler Pada Pengolahan Daun Sirih (Piper Betle L.) Untuk Menjaga Kandungan Zat Tanin Sebagai Antiseptik Alami Dalam Pembuatan Hand Sanitizer Untuk Mencegah Penyebaran Covid-19 – Universitas Negeri Surabaya (Unesa) Project – IDR 12,000,000 (research member) **2021:** Karakteristik Nanopartikel Fe_3O_4 dari Pasir Mineral Tulungagung sebagai Material Antibakteri pada Gigi – Universitas Negeri Surabaya (Unesa) Project – IDR 20,000,000 (research chair) **2021:** Aplikasi Nanopartikel TiO2@PDA sebagai Pemutih Gigi yang Ramah Lingkungan - Universitas Negeri Surabaya (Unesa) Project – IDR 40,000,000 (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
	Uji Aktivitas Antibakteri Ekstrak Sirih Hijau (*Piper Betle Linn*) Asal Nganjuk, Sidoarjo Dan Batu Terhadap Pertumbuhan Bakteri *Escherichia Coli* (Atcc 8739), *Salmonella Sp*. (Atcc 14028), *Staphylococcus Aureus* (Atcc 6538) Dan *Pseudomonas Aeruginosa* (Atcc 9027), Patent Number: **P00202010640 (registered)**	2020
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	2018

	carbon/PVDF with polymer electrolyte. *Journal of Physics: Conference Series*, Volume 997, conference 1	
	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 based on natural material. *Journal of Physics: Conference Series*, Volume 1171, conference 1	2019
	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
	Istiqomah Istiqomah, A Putri, T Patmawati, **L Rohmawati**, W Setyarsih. 2019. Ekstraksi Titanium Dioksida (TiO_2) Anatase Menggunakan Metode Leaching dari Pasir Mineral Tulungagung. *Akta Kimia Indonesia*, Volume 4, Nomor 2.	2019
	V Wardani, **L Rohmawati**, W Setyarsih, D Alfarisi, A Subhan. 2020. Analysis of Charging/Discharging Supercapacitor Active Carbon/rGO Based on Natural Materials. *Journal of Physics: Conference Series*, Volume 1491, conference 1.	2020
	M. Munasir, **L. Rohmawati**, A. Taufiq, Darminto. 2020. Amorphous SiO2 nanoparticles from natural sands: Structure and porosity. Chiang Mai University Journal of Natural Sciences, Volume 19, Nomor 3.	2020
	W. Setyarsih, **L. Rohmawati**. 2020. Edukasi Robotika Siswa SDN Kecamatan Gayungan Surabaya Dan Pengembangan Softskillnya. Jurnal ABDI: Media Pengabdian Kepada Masyarakat, Volume 6, Nomor 1.	2020
	L. Rohmawati, N. Anggraini, S. Holisah SP, S. H. Intifadhah, W. Setyarsih. 2021. Effect of Polyaniline Mass Composition on Electrochemical of Active Carbon/Polyaniline as Supercapacitor Electrode. IOP Conference Series: Materials Science and Engineering, Volume 1125, conference 1.	2021
	L Rohmawati, W Setyarsih, A Hefdea, E Wulancahayani. 2021. Application Titanium Dioxide Nanotube from Natural Source as Tooth Whitening. Journal of Physics: Conference Series, Volume 1805, conference 1.	2021

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