

STAFF HANDBOOK



Name	Prof. Dr. Nita Kusumawati, M.Sc.		
Position	Lecturer on Analytical Chemistry		
Academic Career	Degree	University	Year
	Bachelor Degree (Analytical Chemistry)	ITS, Indonesia	2004
	Master Degree (Analytical Chemistry)	UGM, Indonesia	2008
	Doctoral Degree (Analytical Chemistry)	Universitas Airlangga, Indonesia	2013
Employment	Position	Employer	
	Professor	Universitas Negeri Surabaya	
Research and Development Project Over the Last 5 Years	Title	Funder	Year
	Standarisasi Produk Hand Sanitizer Berbasis Etanol (HSBE) Berbahan Baku Komoditas Lokal dan Limbah Lignoselulosa untuk Mereduksi Potensi Pemalsuan dalam Pencegahan Penularan Covid-19	DRPM	2021
	Fabrikasi Skala Pilot Eco-Batik Unesa Sebagai Upaya Mewujudkan Sustainable Development Goals (SDGs) 2030	PBNP	2021
	Application of Polyvinylidene fluoride-Hexafluoropropylene Membranes as a Supporting Layer to Prevent Electrolyte Leaks and Electrode Corrosion in Dyes Sensitized Solar Cell Based on Natural Pigment	Hibah Penelitian Terapan DRPM Dikti Kemendikbud	2020
	Development of Herbal-Based Food Processes as Immunostimulant and Anti-Microbial Products to Prevent the Spread of COVID-19 Infection	Hibah Penelitian Pengembangan Prototipe Industri	2020
	Standardization of Natural Dyes and Encapsulation of <i>Psidium guajava</i> , <i>Syzygium aqueum</i> , <i>Garcinia</i>	Hibah Penelitian Terapan Unggulan Perguruan Tinggi	2019

	<i>mangostana</i> as Leading Green Technology of the Textile Industry		
	Utilization of Pad Steam Dyeing Technology (PSD) to Increase the Effectiveness and Efficiency of Universitas Negeri Surabaya Eco-Batik Pilot Line Fabrication Scale	Hibah Penelitian Pengembangan Prototipe Industri	2019
	Standardization of High-performance Membranes with Coating and Blending Techniques using Polyvinylidene fluoride, Polysulfone and Polyetherimide as Industry's Leading Multifunctional Technology	Hibah Penelitian Unggulan Perguruan Tinggi	2018
	Standardization of High Performance Membranes with Coating and Blending Techniques Using Polivinylidene Fruoride, Polysulfone and Polyetherimide As Industry's Leading Multi-Function Technology	Penelitian Terapan Unggulan Perguruan Tinggi	2018
	Optimization of High-Performance Ultrafiltration Membrane Engineering with Phase / Immersion-Precipitating and Blending Inversion Techniques using Polyvinylidene Fluoride, Polysulfone and Polyetherimide as Superior Multifunction Technology (Third Year)	Hibah Penelitian Unggulan Perguruan Tinggi	2017
	Optimization of Raw Materials through Reuse of Batik Remaining Night to Zero Waste Management as an Effort to Develop Batik Industry in Java Economic Corridor (Third Year)	Hibah Penelitian Prioritas Nasional MP3EI DP2M	2017
	Optimization of Raw Materials through Reuse of Batik Remaining Night to "Zero Waste Management" as an Effort to Develop the Java Economic Corridor Batik Industry Mainstay (Second Year)	Hibah Penelitian Prioritas Nasional MP3EI DP2M	2016
	Optimization of High-Performance Ultrafiltration Membrane Engineering with Phase / Immersion-Precipitating and Blending Inversion Techniques using Polyvinylidene Fluoride, Polysulfone and Polyetherimide as Superior Multifunction Technology (Second Year)	Hibah Penelitian Unggulan Perguruan Tinggi	2016
	Community Service	Title	Funder
	PKM Usaha Batik Tulis Pewarna	DRPM Kemenristek	2020

Over The Last 5 Years	Alam Pakandangan Sumenep Madura Natural Color Written Batik Business SMEs in Pakandangan Sumenep Madura	Dikti	
	Community Service of Batik Paciran SMEs	DRPM Kemenristek Dikti	2019
	Community Service of Food & Beverage SMEs in Gondanglegi Kulon Village, Gondanglegi District, Malang Regency	DRPM Kemenristek Dikti	2018
	Science for Community of Dishwashing Soap Producers SMEs	DRPM Kemenristek Dikti	2017
	Science for Community of Batik Pacitan SMEs	DRPM Kemenristek Dikti	2016
Industry Collaborations Over the Last 5 Years	Title	Partner	Year
Patents and Property Right	Title	Patent ID	Year
	Herbal Tea Based on Spacebars and Methods of Manufacture	P00202008953	2020
	Making Herbal Sweet Based on Spres and The Method of Its Making	P00202008958	2020
	Method for Making Hand Sanitizer Gel, Spray, and Tissue Based on Bioethanol	P00202009047	2020
	Method of Making Herbal Jelly Drink Based on Ginger, Curcuma, and Galangal	P00202008956	2020
	Coloring and Encapsulation <i>Psidium guajava</i> , <i>Syzygium aqueum</i> , <i>Garcinia mangostana</i> as The Leading Green Technology of The Textile Industry	P00202008955	2020
	Method of Making Halal Gelatin with Polysulfone (PSf) Membrane Filtration	P00202008959	2020
	Method of Making Herbal Tea Products Based on Ginger, Curcuma, and Galangal	P00202008954	2020
	Instant Herbal Drinking Based on Spaces and The Method of Its Making	P00202008960	2020
	Manufacture of Water Based Natural Dyes and Application Methods using Pad Steam Dyeing Technology	P00202004895	2019
	Halal Gelatin and the Method of Making it	P00201606112	2018
		P00201805325	2018
	Herbal Empon-empon Powder and Manufacturing Method	P00201810039	2018
	Making Water-Based Natural Dyes	P00201810035	2018

	and Their Application Methods		
	Modified Batik Night (Wasp Night, Night Waste, Gondorukem, Kendal) and Its Manufacturing Methods	P00201606112	2016
	Making Batik Natural Dyes from Mangosteen Skin Waste Material and Its Application in Cotton Fabric Staining	P00201606113	2016
	The Making of Batik Natural Dyes from the Citrus Skin Waste Material and Its Application in Staining Cotton Fabric	P00201606111	2016
	Polysulfone Composite Membrane (PSf) - Polyvinylidene fluoride (PVDF) and its method of manufacture	P00201606108	2016
	Polyetherimide (PEI) Asymmetry Membrane and Manufacturing Method	P00201606109	2016
Important Publications Over the Last 5 Years	<ol style="list-style-type: none"> 1. Bahar, A., and Kusumawati, N. (2021). Comparison of the Physico-Chemical Properties of Type-B Halal Gelatin from Bovine and Goat Skin Material. <i>IOP Conference Series: Earth and Environmental Science</i> 709 (1), 012033 2. Kusumawati, N., Muslim, S. (2021). Exploration and Standarization of Coconut Fiber Waste Utilization in Batik Dyeing Process. <i>IOP Conference Series: Earth and Environmental Science</i> 709 (1), 012034 3. Kusumawati, N., Muslim, S., and Kistyanto, A. (2021). Utilization of Teak Leaf Waste as an Environmentally Friendly Dyes. <i>IOP Conference Series: Earth and Environmental Science</i> 709 (1), 012026 4. Kusumawati, N., Rahmadyanti, E., and Sianita M.M. (2021). Batik became two sides of blade for the sustainable development in Indonesia. <i>Green Chemistry and Water Remediation: Research and Applications</i>, 59-97 5. Bahar A., Kusumawati, N., and Muslim, S. (2020). Preparation and Characterization of Goatskin Gelatin as Halal Alternative to Bovine Gelatin. <i>RASAYAN Journal of Chemistry (RJC). Vol. 12 No. 2</i> 6. Kusumawati, N., Samik, S. and Muslim, S. (2020). New Natural Dyes Development: <i>Caesalpinia sappan L.-Curcuma Longa</i> Blended Dyes. <i>RASAYAN Journal of Chemistry (RJC). Vol. 12 No. 2</i> 7. Kusumawati, N., Santoso A.B., Wijastuti, A. and Muslim, S. (2020). Extraction, Optimization, and Dyeing Standardization using Fresh Orange Citrus Peel on Cotton Fabrics. <i>International Journal of Advanced Science, Engineering, and Information Technology (IJASEIT). Vol. 10 No. 3</i> 8. Kusumawati, N. et.al. (2019). The Development of PVDF/PEI Blended Membrane: Effect of Stirring Time on Membrane Characteristics and Performance. <i>RASAYAN Journal of Chemistry (RJC). Vol. 12 No. 2</i> 9. Bahar A., Kusumawati, N., Rusijono, R. (2019). The Effect of Curing and Extraction Time against Yield and Quality of Type B Gelatin from Goat Bone. <i>National Seminar on Chemistry (SNK 2019). Vol. 1</i> 10. Purwidiani, N., Setiarso, P., and Kusumawati, N. (2019). Increased Storage and Nutrition Content of Processed Foods through Vacuum Packaging. <i>National Seminar on Chemistry (SNK 2019). Vol. 1</i> 11. Kusumawati, N., and Kistyanto, A. (2019). Quality Improvement of 		

- ABBS Hand Writing Batik Production through Standardization of Natural Dyeing using Water Guava and Mango Leaves. *National Seminar on Chemistry (SNK 2019). Vol. 1*
12. **Kusumawati, N.**, and Kistyanto, A. (2019). Exploration of Natural Dyes by Using a Combination of *Caesalpinia sappan* and *Leucaena leucocephala* L. Leaves. *National Seminar on Chemistry (SNK 2019). Vol. 1*
 13. **Kusumawati, N.**, Samik, S. and Muslim, S. (2019). Extraction and Application of Natural Dyes from Brazilwood and Water guava leaves. *National Seminar on Chemistry (SNK 2019). Vol. 1*
 14. Setiarso, P., Bahar, A., and **Kusumawati, N.** (2019). Standardization of Herbal Tea Quality Production Baureno Bojonegoro Society. *National Seminar on Chemistry (SNK 2019). Vol. 1*
 15. Samik, S., Santoso, A.B., and **Kusumawati, N.** (2019). Diversification of "NAJWA" Hijab Staining using Tie-Dye Method Based on Natural Dyes. *National Seminar on Chemistry (SNK 2019). Vol. 1*
 16. **Kusumawati, N.** et.al. (2018). Synergistic Ability of PSf and PVDF to Develop High-Performance PSf/PVDF Coated Membrane for Water Treatment. *RASAYAN Journal of Chemistry (RJC). Vol. 11 No. 1*
 17. **Kusumawati, N.** et.al. (2018). Transport Properties, Mechanical Behavior, Thermal and Chemical Resistance of Asymmetric Flat Sheet Membrane Prepared from PSf/PVDF Blended Membrane on Gauze Supporting Layer. *Indonesian Journal of Chemistry (IJC). Vol. 18 No. 2, 2018*
 18. **Kusumawati, N.**, Setiarso, P., and Muslim, S. (2018). Polysulfone/Polyvinylidene fluoride Composite Membrane: Effect of Coating Dope Composition on Membrane Characteristics and Performance. *RASAYAN Journal of Chemistry (RJC). Vol. 11 No. 3*
 19. Bahar, A., Rusijono, R., and **Kusumawati, N.** (2018). Extraction and Characterization of The Base Halal Gelatin Based on Bovine Bone. *Advances in Engineering Research, Atlantis Press. Vol 171. ISSN: 2352-5401, ISBN: 978-94-6252-591-7*
 20. **Kusumawati, N.** et.al. (2018). Development of Textile Natural Dyeing using Hybrid Dyes from Mango Leaves Turmeric. *Advances in Engineering Research, Atlantis Press, . Vol 171. ISSN: 2352-5401, ISBN: 978-94-6252-591-7*
 21. Setiarso, P., **Kusumawati, N.**, Rusijono, R. and Samik, S. (2018). The Production and Characterization of *Kaempferia Galangal* L-based Herb Powder: Blanching and Drying Procedure Influence on Proximate, Metal, and Microbial Contamination Level. *Advances in Engineering Research, Atlantis Press, . Vol 171. ISSN: 2352-5401, ISBN: 978-94-6252-591-7*
 22. Setiarso, P., **Kusumawati, N.**, Santoso, A.B., Wibawa, S.C. (2018). The Development of New Composite Polymer Membrane: Polysulfone (PSf) Polyetherimide (PEI) Coated Membrane. *Advances in Engineering Research, Atlantis Press, . Vol 171. ISSN: 2352-5401, ISBN: 978-94-6252-591-7*
 23. **Kusumawati, N.** et.al. (2018). The Development of PVDF/ PEI Blended Membrane: Effect of Stirring Time on Membrane Characteristic and Performance. *Proceeding of The International Conference on Science and Technology (ICST 2018). Vol 1*
 24. Setiarso, P., **Kusumawati, N.** and Muslim, S. (2018). Optimazation of Slice Thickness, Drying Method, and Temperature of Turmeric Rhizome

(Curcuma Longa L) Based on Water Content and Functional Compound Degradation. *Proceeding of The International Conference on Science and Technology (ICST 2018). Vol 1*

25. **Kusumawati, N.** Setiarso, P., and Sianita, M.M. (2017). Pengaruh Komposisi Larutan Cetak dan Temperatur Pengadukan Terhadap Karakteristik Fisik, Mekanik dan Permeabilitas Air Murni Membran Polyether Imide (Effect of Print Solution Composition and Stirring Temperature on Physical, Mechanical and Permeability Characteristics of Pure Water Polyether Imide Membranes). *Indonesian Chemistry and Application Journal (ICAJ) . Vol 1 No.1*
26. **Kusumawati, N.**, Kostiari, T., and Santoso, A.B. (2017). The influence of Washing Process Using TRO on Indigosol Dyeing Quality, Leaching Percentage, and Mechanical Strength of Mori Fabric. *Research Journal of Pharmaceutical, Biological and Chemical Sciences (RJPBCS). Vol 8 No. 6*
27. **Kusumawati, N.** et.al. (2017). Product Standarization of Ginger (Zingiber officinale Rosc.) and Red Ginger (Zingiber officinale var. Rubrum) Simplicia through Washing Time, Slice Thickness and Raw Materials Drying Process Optimization. *International Journal of Advanced Science, Engineering, and Information Technology (IJASEIT). Vol. 7 No. 1*
28. **Kusumawati, N.** et.al. (2017). Extraction, Characterization and Application of Natural Dyes from the Fresh Mangosteen (Garcinia mangostana L.) Peel. *International Journal of Advanced Science, Engineering, and Information Technology (IJASEIT). Vol. 7 No. 3*
29. **Kusumawati, N.**, Kistyanto, A., and Muslim, S. (2017). The Effect of Blending Composition Against Latched Power and the Resistance of Batik Wax Against Cracking and Alkaline Chemicals. *International Journal of Advanced Science, Engineering, and Information Technology (IJASEIT). Vol. 7 No. 4*

Activities in Specialist Bodies Over the Last 5 Years	Organization	Position	Period