

## STAFF HANDBOOK



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| <b>Name</b>   | <b>Prof. Dr. Tukiran, M.Si.</b>  |  |                    |                                      |
| <b>Position</b>   | <b>Professor in Organic Chemistry</b>  |  |                    |                                      |
| <b>Academic Career</b>  | <b>Degree</b>  | <b>University</b>  | <b>Year</b>        |                                      |
|   | <i>Bachelor Degree<br/>(Chemistry Education)</i>   | <i>IKIP Surabaya</i>                                     | <i>1986 - 1991</i> |                                      |
|   | <i>Master Degree<br/>(Chemistry)</i>   | <i>ITB Bandung</i>                                       | <i>1995 - 1997</i> |                                      |
|   | <i>Doctoral Degree<br/>(Chemistry)</i>   | <i>ITB Bandung</i>                                       | <i>2000 - 2004</i> |                                      |
| <b>Employment</b>   | <b>Position</b>  | <b>Employer</b>  | <b>Period</b>      |                                      |
|   | <i>Professor</i>   | <i>Universitas Negeri Surabaya</i>                       |                    |                                      |
| <b>Research and Development Project Over the Last 5 Years</b> | <b>Title</b>   | <b>Funder</b>  | <b>Year</b>        | <b>Amount of Financing (million)</b> |
|   | <i>Potensi Senyawa Santo Terisoprenilasi Dari Tumbuhan Bintangor (<i>Calophyllum pseudomole</i>) dalam Menghinbisi Xanthine Oxidase</i>                                    | <i>Penelitian Kebijakan FMIPA</i>                        | <i>2023</i>        | <i>20</i>                            |
|   | <i>Potensi Pikel Bawang Putih Tunggal Sinbiotik Terfermentasi Kultur Starter <i>Lactobacillus Pantarum B1765</i> Sebagai Anti Diabet in Vivo</i>                           | <i>DRTPM</i>   | <i>2023</i>        | <i>181</i>                           |
|   | <i>Mencari Komposisi Optimum Ekstrak Kayu Secang (<i>Caesalpinia Sappan L</i>) dan Jahe Merah (<i>Zingiber Ofinale Roxb.</i>) yang Efektif Sebagai Agen Anti-Arthritis</i> | <i>Penelitian Program Desentralisasi (PDUPT) (DRTPM)</i> | <i>2022</i>        | <i>102,32</i>                        |
|   | <i>Rantai Pendek Pikel Bawang Putih Tunggal Terfermentasi <i>Lactobacillus plantarum B1765</i> Sebagai Pangan Fungsional Antidiabet</i>                                    | <i>Penelitian Kompetitif FMIPA</i>                       | <i>2022</i>        | <i>20</i>                            |
|   | <i>Potensi Paten Hasil Penelitian Dosen Daana PNBP Universitas Negeri Surabaya Tahun Anggaran 2022</i>   | <i>Penelitian Dasar LPPM</i>                             | <i>2022</i>        | <i>40</i>                            |
|   | <i>Rancang Bangun Aplikasi Sistem Informasi Manajemen Hak Kekayaan Intelektual (SIMHKI) LPPM Unesa</i>   | <i>PNBP</i>  | <i>2021</i>        | <i>25</i>                            |

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| <b>Community Service Over The Last 5 Years</b> | <i>Mencari Komposisi Optimum Ekstrak Kayu Secang (Caesalpinia Sappan L) dan Jahe Merah (Zingiber Ofinale Roxb.) yang Efektif Sebagai Agen Anti Arthritis</i>            | <i>Penelitian DRPM(Penelitian Dasar Unggulan PT)</i> | <i>2021</i>        | <i>120,865</i>                       |
|  | <i>Efikasi Minuman Suplemen Proten Multivitamin Berbahan Lokal untuk Meningkatkan Imun Pada Masa Pandemi Covid-19 Bagi Lansia</i>                                       | <i>DRPM</i>  | <i>2020 - 2021</i> | <i>152,5</i>                         |
|  | <i>Sintesis Nanopartikel Perak Menggunakan Bioreduktor Ekstrak Tumbuhan Paku Nephrolepis Radicans Sebagai Bahan Antioksidan</i>   | <i>PNBP</i>  | <i>2020</i>        | <i>40</i>                            |
|  | <i>Analisis Disinfektan Fenol Secara Siklik Voltametri</i>  | <i>PNBP</i>  | <i>2020</i>        | <i>12</i>                            |
|  | <i>Aktivitas Mukolitik in Vivo Tumbuhan Paku Perak (Pityrogramma calomelanos)</i>   | <i>Penelitian Guru Besar PNB</i>                     | <i>2019</i>        | <i>40</i>                            |
|  | <i>Mempelajari Ilmu Kimia dan Bioaktivitas Antibakteri Senyawa Hasil Isolasi dari Ekstrak Diklorometana Tumbuhan Jambu Semarang (Syzygium samarangense) (Myrtaceae)</i> | <i>Penelitian Guru Besar PNB</i>                     | <i>2019</i>        | <i>40</i>                            |
|  | <i>Pengembangan Perangkat Pembelajaran Mata Kuliah Kajian Sains Kimia III Menggunakan Model Pembelajaran Kooperatif Pada Materi Stereokimia</i>                         | <i>Penelitian Dana PNB Pascasarjana</i>              | <i>2018</i>        | <i>50</i>                            |
|  | <b>Title</b>  | <b>Funder</b>  | <b>Year</b>        | <b>Amount of Financing (million)</b> |
|  | <i>Laminar Air Flow Cabinet dan Software Akuntansi: Penunjang Keberhasilan Usaha di UKMTHANI Jamur Tiram, Magetan</i>   | <i>PKM Penugasan LPPM Batch 1</i>                    | <i>2023</i>        | <i>25</i>                            |
|  | <i>Eduaksi Diversifikasi Produk Olahan Susu Berbasis Fermentasi di Dusun Brau, Kecamatan Bumiaji, Kota Batu</i>   | <i>PKM Penugasan FMIPA</i>                           | <i>2023</i>        | <i>10</i>                            |
|  | <i>Pelatihan Pembuatan Sabun Pepaya kepada Masyarakat Desa Ngepeh Kabupaten Nganjuk untuk Mewujudkan Desa Swakarya dan Sadar Kesehatan</i>                              | <i>PKM Kebijakan FMIPA</i>                           | <i>2022</i>        | <i>10</i>                            |
|  | <i>Pemberdayaan IKM (Industri Kecil Menengah) di Kabupaten Gresik pada Gerakan Produk Makanan Sehat dan Halal.</i>  | <i>PKM Kebijakan Pascasarjana</i>                    | <i>2022</i>        | <i>15</i>                            |
|  | <i>Rancang Bangun Alat Oven Pengasap Telur Asin untuk</i>   | <i>PNBP</i>  | <i>2021</i>        | <i>28</i>                            |

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|  | <i>Meningkatkan Kualitas dan Kuantitas Produksi di UKM Telur Asin H.J., Gresik</i>   |                                   |             |             |
|  | <i>PKM Produk Hand Sanitizer non Alkoholik Berbahan Toga untuk Mencegah Penularan COVID-19 pada Santri Pondok Pesantren BMNK Pasuruan</i>                | <i>PNBP</i>                       | <i>2021</i> | <i>10</i>   |
|  | <i>Iptek bilik Sterilisasi Berbasis Sensor Sebagai Upaya Mereduksi Penyebaran Virus Covid-19 di Pascasarjana Unesa</i>                                   | <i>PKM Penugasan Pascasarjana</i> | <i>2020</i> | <i>20</i>   |
|  | <i>Pelatihan Pembuatan Hand Sanitizer Non-Alkohol untuk Mencegah Penyebara Covid-19 Pada Warga Perumahan Pondok Ridho Sidodadi Taman Sidoarjo</i>        | <i>PNBP</i>                       | <i>2020</i> | <i>7</i>    |
|  | <i>Hand Sanitizer KECE Unesa Untuk Penanggulangan Covid-19</i>   | <i>PNBP</i>                       | <i>2020</i> | <i>45</i>   |
|  | <i>Pembuatan Minuman Kesehatan Berbasis Herbal Untuk Warga Desa Kabupaten Sumenep</i>  | <i>PNBP</i>                       | <i>2019</i> | <i>15</i>   |
|  | <i>Diseminasi Pembuatan Minuman Herbal Instan Menggunakan Squeezer Machine dan Crystallization Machine Di Perumahan Graha Permata, Driyorejo, Gresik</i> | <i>DRPM Kemenristekdikti</i>      | <i>2019</i> | <i>158</i>  |
|  | <i>Pelatihan Pembelajaran Berbasis STEM Dalam Melatihkan Kemampuan Menyelesaikan Maslaah Bagi Guru-Guru IPA SMP Di Kabupaten Magetan</i>                 | <i>PNBP</i>                       | <i>2019</i> | <i>15</i>   |
|  | <i>Pelatihan Pembuatan Minuman Kesehatan Berbasis Herbal Untuk Warga Desa Kandangan, Kecamatan Kandangan, Kabupaten Kediri</i>                           | <i>BOPTN FMIPA UNESA</i>          | <i>2018</i> | <i>7,5</i>  |
| <b>Industry Collaborations Over the Last 5 Years</b> | <b>Title</b>   | <b>Partner</b>                    |             | <b>Year</b> |
|  |  |                                   |             |             |
| <b>Patents and Property Right</b>                    | <b>Title</b>   | <b>Patent ID</b>                  |             | <b>Year</b> |
|  | <i>Buku Ajar Mahasiswa Pokok Bahasan Usaha Dan Energi Dengan Model Clarity Learning</i>  | <i>000484516/ EC00202351581</i>   |             | <i>2023</i> |
|  | <i>Perangkat Pembelajaran IPA Berbasis STEAM</i>   | <i>000291159/ EC00202169825</i>   |             | <i>2022</i> |
|  | <i>Kajian Sains Kimia 3 (Stereokimia (Book))</i>   | <i>EC00202013686/DJKI</i>         |             | <i>2020</i> |
|  | <i>Sintesis Kimia Organik (Book)</i>   | <i>EC00202013685</i>              |             | <i>2020</i> |
|  | <i>Kimia Organik Lanjut: Mekanisme Reaksi (Book)</i>   | <i>EC00202013684</i>              |             | <i>2020</i> |

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|   | <i>Komposisi Minuman Kesehatan Yang Mengandung Rosella (Hibiscus Sabdariffa) Sebagai Zat Warna (Patent)</i>   | IDP000053941      | 2018 |
|   | <i>Proses Pembuatan Minuman Herbal Secang Instan (Patent)</i>   | P00201604805/DJKI | 2016 |
|   | <i>Proses Pembuatan Jamu Keji Beling Instan (Patent)</i>  | P00201604804/DJKI | 2016 |
| <b>Important Publications Over the Last 5 Years</b> | <ol style="list-style-type: none"> <li>1. S.D. Saputro, <b>Tukiran</b>, &amp; Z.A.I. Supardi. 2023. Practicality and problem analysis application of clarity learning model in physics course. <i>AIP Conference Proceeding 2023</i>, Vol. 2727, (1),020057.</li> <li>2. S.D. Saputro, <b>Tukiran</b>, &amp; Z.A.I. Supardi. 2023. Analysis of students critical thinking ability in distance learning on physics course. <i>AIP Conference Proceeding 2023</i>, Vol. 2727, (1),020057.</li> <li>3. S.D.Saputro, <b>Tukiran</b>, &amp; Z.A.I. Supardi. 2022. Design clarity learning model to improve advanced clarification ability on physics courses. <i>Cypriot Journal of Educational Sciences</i>. Volume 17, Issue 5, (2022) 1549-1566.</li> <li>4. S.D.Saputro, <b>Tukiran</b>, &amp; Z.A.I. Supardi. 2022. Effectiveness of Clarity Learning Model to Improve Students' Advanced Clarification Critical Thinking Ability in Physics Courses. <i>Pegem Journal of Education and Instruction</i>, Vol. 12, No. 3, 2022 (pp. 49-58).</li> <li>5. <b>Tukiran</b>. 2021. Aktivitas Antivirus Asam Galat Beserta Turunannya terhadap SARS-CoV-2 Mutasi Spike L452R Melalui Penambatan Molekul. <i>Prosiding Seminar SNK-2021</i>. Atlantis Press.</li> <li>6. <b>Tukiran</b>. 2021. Potensi Senyawa Terpenoid dari Daun Tanaman Maja (<i>Aegle marmelos</i>) Sebagai Inhibitor ACE2 Pada SARS-CoV-2. <i>Prosiding Seminar SNK-2021</i>. Atlantis Press.</li> <li>7. <b>Tukiran</b>. 2021. Studi Analisis Model Pembelajaran dan Penilaian Keterampilan Berpikir Kritis dan Kreatif.. <i>Prosiding Seminar SNK-2021</i>. Atlantis Press.</li> <li>8. <b>Tukiran</b>. 2021. Rancang Bangun Alat Oven Pengasap Telur Asin Di Ukm H.J. Gresik. <i>Prosiding Seminar SNK-2021</i>. Atlantis Press.</li> <li>9. L. Rohmawati, D. Alfarisi, S. Holisa, W. Setyarsih, <b>Tukiran</b>, and A. Subhan. 2021. Prototype Profile of Supercapactors with Activated Carbon/Fe3O4 Electrodes Natural Materials and Celgard Li-Ion Battery Separators. <i>E3S Web Conf</i>. Volume 328, 2021. ICST 2021.</li> <li>10. <b>Tukiran</b>. 2021. Nutritional Analysis of Non-Dairy Milk Almond-Tempeh as a Multivitamin Supplement for the Elderly. <i>MISEIC 2021. Proceedings of the International Joint Conference on Science and Engineering 2021</i>.</li> <li>11. <b>Tukiran</b>, and D.O. Putri. 2021. Chemical Profile By Lc-MS Analysis From The Selected Fraction Of Methanol Extract Of <i>Syzygium malaccense</i>. <i>Rasayan Journal of Chemistry</i>. Vol. 14, No.1, 295-305.</li> <li>12. <b>Tukiran</b> and Miranti, M.G. (2020). Description of Knowledge, Attitude, and Consumption Behavior of Supplements Drink for the Elderly to Improve the Immunity Systems. <i>Advances in Engineering Research</i>, volume 196, pp. 181-187 Atlantis press</li> <li>13. Suyatno, <b>Tukiran</b>, and Khotijah, S. (2020). Antioxydant activity of the silver nanoparticles (AgNPs) synthesized Using <i>Nephrolepisradicans</i> extract as bioreductor. <i>MISEIC 2020</i>, Vol. 1747 (2021) 012038.</li> <li>14. Suyatno and <b>Tukiran</b>. (2020). In Vitro Mucolytic Activity Assay of The Acetone Extract of The Silver Fern (<i>Pityrogramma calomelanos</i>). <i>International Conference on Research and Academic Community Services (ICRACOS 2019)</i> Atlantiss press.</li> <li>15. <b>Tukiran</b>, Mubarokah, F.A., and Nasrudin H. (2020). Improvement of Self- Efficacy and Student Learning Outcomes on Acid Base Material Using 9E Learning Cycle Model. <i>Advances in Engineering Research</i>, volume 196, pp. 199-202 Atlantis press.</li> </ol> |                   |      |

16. **Tukiran** and Putri, D.O. (2020). *Chemical Profile By LC-MS from The Selected Fraction of Methanolic Extract of Syzygium malaccense Stem Bark*. *Rasayan Journal of Chemistry* 14(01):295-305.
17. **Tukiran**, Suyatno and Safitri, F.N. (2020). *Identification of The Chemical Constituents of The Selected Fraction of The Dichloromethane Extract of Syzygium samarangense Stem Bark Using LC-ESI-MS and Evaluation Its Potential as Antifungal Agent*. *Indonesian Journal of Chemistry*, 21 (2), pp 340- 349.
18. Marjuki, Ibrahim, M., and **Tukiran**. (2019). *OCCIE Learning Model to Improve Science Process Skills and Responsibility of Senior High School Students*. *IOSR Journal of Research & Method in Education (IOSR-JRME) Volume 9, Issue 3 Ser. III. (May. - June .2019), PP 35-39*
19. Dwiningsih, K., **Tukiran**., and Sanjaya, I.G.M. (2019). *Peningkatan Kualitas Publikasi Ilmiah Dan Penelitian Bagi Guru Sma Melalui Pelatihan Pemanfaatan Software Zotero*. *Jurnal ABDI Vol 4, No.2, 85-89*
20. **Tukiran**, Wardana, A.P., Hidajati, N., and Shimizu, K. (2019). *Chemical Components and Antioxidant Activities of Methanol Extract of Syzygium polycephalum Miq. Stem Bark (Myrtaceae)*. *Indian Journal of Natural Products and Resources*, 10(2), pp 127136.
21. Erika, F., Supardi, Z.A.I., and **Tukiran**. (2019). *Development of Student Worksheet for Improving the Self-efficacy and Ability to Argue of Chemistry Teacher Candidates Study on Junior High School Students Behavior Based on Keirse Personality Type*. *Advances in Computer Science Research Vol 95, ISBN 978-94-6252-874-1, ISSN 2352-538X, MISEIC 2019*
22. Putri, P.D., **Tukiran**, and Nasrudin, H. *The Effectiveness Of Problem-Based Learning (PBL) Models Based On Socio-Scientific Issues (SSI) To Improve The Ability Of Science Literacy On Climate Change Materials*. *Jurnal penelitian Pendidikan Sains (JPPS) Vol 7, No.2, 1519-1524*
23. Syifaiyah, R., **Tukiran**, and Erman. (2018). *Development Of Chemistry Instruction Material Using Problem Based Learning Model For Increasing The Student Of Senior High School Learning Achievement*. *Jurnal penelitian Pendidikan Sains (JPPS) Vol 7, No.2, 1479-1486*
24. Nurlatifaj, S., **Tukiran**, and Erman. (2018). *The Development of Learning Material Using Learning Cycle 7E with Socio-scientific Issues Context in Rate of Reaction to Improve Student's Argumentation Skills in Senior High School*. *Advances in Intelligent System Research (AISR), volume 157. ISSN: 1951-6851, ISBN: 978-94-6251-601-3 published by Atlantis Press (Terindeks Thomson Reuters)*
25. **Tukiran** and Sanjaya, I.G.M. (2018). *Development Of Teaching Materials For Magister Study Program of Science Education Postgraduate In Indonesia*. *Journal of Science Education*, 19(2), pp. 1-13.
26. **Tukiran** and Wardana, A.P. (2018). *Thunbergia erecta L. Flower As An Alternative Acid Base Natural Indicators*. *Rasayan Journal of Chemistry*, 11(2), pp. 773 – 779.
27. Daely, N., And **Tukiran**. (2018). *Isolation and Cytotoxicity Test of Dichloromethane Extract of Syzygium malaccense*. *Advances in Engineering Research, Atlantis Press, volume 171. ISSN: 2352-5401, ISBN: 978-94-6252-591-7. (Terindeks Thomson Reuters)*
28. **Tukiran**, Wardana, A.P., Hidajati, N., and Shimizu, K. (2018). *An Ellagic Acid Derivative and Its Antioxidant Activity of Stem Bark Extracts of Syzygium polycephalum Miq. (Myrtaceae)*. *Indonesian Journal of Chemistry*, 18(1), pp. 26 – 34.
29. **Tukiran**, Wardana, A.P., Hidajati, N., and Shimizu, K. (2018). *Two Phenolic Compounds from Chloroform Fraction of Syzygium polycephalum Miq. Stem Bark (Myrtaceae)*. *Molekul*, U13(1), pp. 23 – 29.
30. Erika, F., Prahani, B.K., Supardi, Z.A.I., and **Tukiran**. (2018). *Development of a Graphic Organizer-Based Argumentation Learning (GOAL) Model for Improving*

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|  | <i>the Self-Efficacy and Ability to Argue of Chemistry Teacher Candidates. World Transactions on Engineering and Technology Education, 16(2), pp. 179-185.</i> |             |               |
| <b>Activities in Specialist Bodies Over the Last 5 Years</b> | <b>Organization</b>  | <b>Role</b> | <b>Period</b> |
|  |  |             |               |