**Bachelor of Education in Science STAFF HANDBOOK**

Email: ipa.fmipa@um.ac.id

Website: http://ipa.fmipa.um.ac.id/

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| Name | **Munzil** |
| Post | Development of strategies and innovative science learning media |
| Academic Career | S1 | Chemistry Education, IKIP Malang | 1992 |
| S2 | Chemistry, Teknologi Bandung (ITB) | 1997 |
| S3 | Technologi Education, Universitas Negeri Malang | 2011 |
| Employment | Lecturer | Chemistry Education, Universitas Negeri MalangScience Education, Universitas Negeri Malang | 1993-Now2015-now |
| Research and development project over the last 5 year  | Development of LMS and MOOCs for online learningDevelopment of strategies and innovative science learning media |  |
| Industry collaborations over the last 5 year  | Research Collaboration about TPACK in Indonesia With AMLI | 2018-Now |
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| Patents and proprietary right  | No | Judul/Tema HAKI | Tahun | Nomor P/ID |
| 1. | Virtual Lab Berbasis Triplet Representation (Macroscopic-Submicroscopic-Symbolic) Untuk Topik Kesetimbangan Kimia | 2019 | EC00201981450, |
| 2. | Sistem Pernapasan Manusia | 2020 | EC00202012059 |
| 3 | Sistem Pencernaan Makanan Dan Kesehatan Manusia | 2020 | EC00202009961 |
| 4 | Pengembangan Multimedia Pembelajaran Interaktif Berbasis Game Edukasi Materi Sistem Tata Surya Kelas VII SMP | 2020 | EC00202009959, |
| 5 | Media Pembelajaran Materi Sistem Peredaran Darah Manusia | 2019 | EC00201977367 |
| 6 | Ensiklopedia Digital Tabel Periodik Unsur | 2020 | EC00202016218 |
| 7 | Compound And Element | 2019 | EC00201980097 |
| 8 | Cahaya Dan Alat Optik | 2020 | EC00202012060 |
| 9 | Rekam Video Cahaya Dan Alat Optik | 2020 | EC00202009960 |
| Important publications over the last 5 year  | Analysis of Critical Thinking Skills Among Seventh Grade Students in the Solar System Topic through 5E Learning Cycle ModelAtlantis Press<https://www.atlantis-press.com/proceedings/icli-19/125941809> | 2020 |
| Development of Teaching Materials Based on Learning Cycle 5E and Enriched With Augmented Reality for Rate of Reaction TopicAtlantis Press<https://www.atlantis-press.com/proceedings/icli-19/articles?q=munzil> | 2020 |
| Analysis of Critical Thinking Skills Among Seventh Grade Students in the Solar System Topic through 5E Learning Cycle ModelAtlantis Press<https://www.atlantis-press.com/proceedings/icli-19/articles?q=munzil> | 2020 |
| Development of Guided Inquiry Based Learning Materials Enriched with Augmented Reality in Electrolysis Cell Material iJIM iJIM, Vol. 14, No. 12, 2020<https://online-journals.org/index.php/i-jim/article/view/15597> | 2020 |
| Activities in specialist bodies over the last 5 year | Association Science Teacher Indonesia | Head Of Leader East Java | 2015-now |
| Indonesian Association Of Educator And Education Developper | head of teacher training | 2014- now |