Physics Department

Dr. Ir. Adi Rahwanto, M.Eng.Sc

Position	-

Academic Career	**Doctorate Course:** field of Quantum Engineering, Nagoya University (1999) **Magister Course**: field of Optoelectronics and Laser Application, University of Indonesia (UI) (1990) **Bachelor Course**: Physics, Institut ten November (ITS) (1985)
Employment	-
Research and development projects (last 5 years)	-
Collaborations (last 5 years)	-
Patents and proprietary rights	Books: 1. **Rahmad Almi Putra, S.Pd., M.Sc, T. Andi Fadly, S.T, M.Si, Muhammad Yakob,Drs.,M.Pd, Desy Monica, Vina Asmara, Adi Rahwanto , Ir., M.Eng.Sc, Dr dan Zulkarnain Jalil, S.Si, M.Si, Dr.**, 2022, *NANOMATERIAL Sintesis dan Analisis*, Purbalingga, CV.EUREKA MEDIA AKSARA, 978-623-487-230-9. 2. **Rahmad Almi Putra, T. Andi Fadly, Muhammad Yakob, Zulkarnain Jalil dan Adi Rahwanto**, 2021, *Biosensor Berbasis Surface Plasmon Resmon Resonance (SPR)*, Yogyakarta, DEEPUBLISH (group penerbit CV. Budi Utama), 978-623-02-3595-5. 3. **Rahmad Almi Putra, T. Andi Fadly, Muhammad Yakob, Zulkarnain Jalil dan Adi Rahwanto**, 2021, *Biosensor Berbasis Surface Plasmon Resmon Resonance (SPR)*, Yogyakarta, DEEPUBLISH (group penerbit CV. Budi Utama), 978-623-02-3595-5. Patents: 1. 2016, Metode Preparasi Serbuk Nano-Magnetite dari Pasir Besi Pantai untuk Katalis Material Penyimpan Hidrogen Sistem MgH2, P00201507725, Banda Aceh, Indonesia. 2. 2016, Preparasi Bijih Besi Hematite Nano Kristal menggunakan Kontainer Milling Tipe Planetary Monomill, P00201507734, jakarta, Indonesia. 3. 2012, METODE PEMBUATAN MATERIAL MgH2 DAN Ni NANOPARTIKEL SEBAGAI MATERIAL PENYIMPAN HIDROGEN, P00201000839, Universitas Syiah Kuala, Indonesia. 4. 2011, PREPARASI SERBUK NANOKRISTAL MGH2 MELALUI TEKNIK MECHANICAL ALLOYING, P00200900765, Universitas Syiah Kuala, Indonesia.
Selective Publications (last 5 years)	1. Ismail, I., Mutiara, D., Rahwanto, A., Jalil, Z., Fathmiyah, S., & Fadzullah, S. H. S. M. (2025). Effect of Filler Size on the Properties of Oil Palm Empty Fruit Bunch High-Load Filler Biocomposite. *Trends in Sciences*, *22*(4), 9374-9374. 2. Ismail, I., Marni, A., Yufita, E., Rahwanto, A., & Md Fadzullah, S. H. S. (2024). Effect of Composition on Physical, Mechanical, and Thermal Properties of Oil Palm Empty Fruit Bunch Epoxy Resin Biocomposite. *Key Engineering Materials*, *1001*, 99-109. 3. Handoko, E., Marpaung, M. A., Jalil, Z., Rahwanto, A., Aulia, T. B., Iriani, Y., ... & Alaydrus, M. (2024, October). Microwave absorption studies in X-band of magnetized barium hexaferrite. In *Journal of Physics: Conference Series* (Vol. 2866, No. 1, p. 012025). IOP Publishing. 4. Banurea, R., Frida, E., Rahwanto, A., Nasution, D. L. S., & Simbolon, T. R. (2024, March). Design a machine with technology to convert plastic waste into fuel renewable energy. In *Journal of Physics: Conference Series* (Vol. 2733, No. 1, p. 012004). IOP Publishing. 5. Zulfikar, T. M., & Rahwanto, A. (2024). Pengaruh Variasi Waktu Milling terhadap Temperatur Nano komposit Fe3O4-MgH2 sebagai bahan baku katalis pada Tabung Hydrogen Storage. *Jurnal Serambi Engineering*, *9*(1), 7873-7879.
Membership	Member of Indonesian Physical Society Profession
External Link	https://fsd.usk.ac.id/adi_rahwanto/