Physics Department

Dini Rizqi Dwi Kunti Siregar, M.Si

Position	Fundamental Physics; Material Physics (Bachelor Degree of Physics Study Programme)

Academic Career	**Magister Course**: Universitas Sumatera Utara (USU), Indonesia- Physics Department (2018-2021); **Bachelor Course**: Universitas Sumatera Utara (USU), Indonesia- Physics Department (2013-2017)
Employment	Expert Assistant of Physics Dept., FMIPA, USK (2024 – present)
Research and development projects	1. Development of MgB2 Intermetallic Alloy-Based Multifilament Wire as a High Magnetic Field Generator for Medical Brain Tumor Scanning Devices / Research and Innovation Funding Program for Advanced Indonesia organized by the National Research and Innovation Agency (RIIM–BRIN) / 2025. 2. Master's Thesis Research - Analysis of Superconductivity of Bi-2223 Dopan Carbon Nanoparticles and Carbon Nanotubes Using the Sol-Gel and Repeated Sintering Methods / Funded by the National Research and Innovation Agency of the Republic of Indonesia / 2020 3. The Effect of Mg Addition on the Heat Treatment of MgB2 Superconductors / Funded by the Indonesian Institute of Sciences of Indonesia / 2017
Collaborations (last 5 years)	1. Development of Superconductor Technology in Increasing MRI Efficiency and Medical Applications / National Research and Innovation Agency (BRIN) / 2024 2. Innovation of Copper and Ferric Oxide-Based Superconducting Materials for Sustainable Energy Solutions / National Research and Innovation Agency (BRIN) / 2020
Patents and proprietary rights	-
Selective Publications (last 5 years)	1. Yohana br Ginting, D., Rahmi Danur, S., Putro Utomo, D., Feby Ronauli Lubis, E., Novida Sari, S., & **Rizqi Dwikunti Siregar, D**. (2025). Application of Multi-Objective Optimization Method On The Basis Of Ratio Analysis In Decision Support System for Beauty Clinic Employee Performance Assessment. Bulletin of Information Technology (BIT), 5(3), 211 - 216. **2.** **Dini R. D. K. Siregar**, Sigit D. Yudanto, Nono Darsono, Septian A. Chandra, Eka F. R. Lubis, Syahrul Humaidi (2022) The influence of carbon addition on the superconducting properties of BPSCCO. *AIP Conf. Proc.* 31 October 2022; 2563 (1): 050023. 3. Eka F. R. Lubis, Sigit D. Yudanto, Nono Darsono, Septian A. Chandra, **Dini R. D. Siregar**, Syahrul Humaidi (2022) The effect of Al2O3 and MgO addition on the superconducting properties of Bi, Pb-2223. *AIP Conf. Proc.* 31 October 2022; 2563 (1): 050015. **4.** **D. R. D. Siregar**, S. D. . Yudanto, S. A. Chandra, E. F. R. Lubis, S. Humaidi, and N. Darsono (2021) Improvement of the superconducting properties of carbon addition on Bi1.6Pb0.4Sr2 Ca2Cu3O10+δ prepared through the two-step sintering process, *J Met Mater Miner*, vol. 31, no. 4, pp. 76–81, Dec. 2021.
Membership	Physical Society of Indonesia (PSI) (2020/2025)
External Link	https://fisika.usk.ac.id/dini-rizqi-dwi-kunti-siregar-s-si-m-si/