

Fiola Oktaweni

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Summary

A professional researcher and project leader with experience in analytical research, applied biological science, and sustainability-driven research and development across academia, industry, and international collaborations. Proven ability to lead end-to-end R&D projects, secure competitive funding, deliver peer-reviewed publications, and translate complex scientific insights into practical, compliant, and high-impact solutions. Strong strengths in cross-sector stakeholder collaboration, quality and regulatory frameworks, and leading multidisciplinary teams to deliver measurable outcomes aligned with global sustainability goals.

EDUCATION

Gadjah Mada University – Yogyakarta, Indonesia

Master of Science in Biology, 3,99/4,00 (Cum Laude)

Aug 23 – Jul 25

- Academic focus on Environmental Biology, Plant Histochemistry, and Analytical Research, with specialization in Sustainability and Product Innovation.
- Oral Presenter, The 9th International Conference on Biological Sciences (ICBS), Oct 2025.
- Awardee, Beasiswa Unggulan — Ministry of Education, Culture, Research, and Technology, Aug 2024.
- Participant, The 11th International Conference on Science and Technology, Jul 2025.

Bachelor of Science in Biology, 3,93/4,00 (Cum Laude)

Aug 17 – Jul 21

- Concentration in Bioactive Compound Analysis and Propolis Diversity Data Mapping, with emphasis on Functional Ingredients and Consumer Health Products.
- Oral Presenter, The 7th International Conference on Biological Sciences (ICBS), Oct 2021.
- **Awardee**, Digital Talent Scholarship — Ministry of Communication and Information Technology, Mar 2021.
- **Awardee**, Community Development Research Grant (Hibah Bina Desa) — Ministry of Research and Technology, Aug 2019.
- **Awardee** of Ruangguru Academy Scholarship Program for University, March 2021
- **Awardee**, Academic Excellence Scholarship (PPA), Feb 2018.

PROFESSIONAL EXPERIENCES

Academic Excellence Enhancement Program Directorate of Research, Gadjah

Mada University – Indonesia

Lead Researcher

Jun 24 – Jun 25

- Secured competitive research funding and led an end-to-end, interdisciplinary study on Chrysanthemum-based bio-filtration for industrial batik wastewater treatment, integrating anatomical, histochemical, and performance analyses to address sustainability challenges.
- Directed full project lifecycle execution, including research design, budget management, advanced laboratory experimentation, cross-institutional coordination, and delivery of high-quality technical reports, international conference presentations, and journal manuscripts.
- Drove multi-sector collaboration across industry (Batik Nakula Sadewa), laboratories (BBL Balai Besar Laboratorium Kesehatan Masyarakat), and biodiversity research institutions, achieving validated filtration efficacy, oral presentation at the 9th ICBS, and two forthcoming Scopus-indexed publications.

International Campaign of Research and Innovation (ICRI), PT. Ebiz Prima

Nusa – Indonesia

Project Officer

Jun 24 – Nov 24

- Executed a national campaign promoting youth literacy in research and scientific innovation, strengthening public awareness and engagement across student and early-career audiences.
- Coordinated campaign planning, content delivery, and stakeholder communication to ensure consistent messaging and smooth execution.
- Supported outreach strategy and reporting activities to track progress and optimize campaign effectiveness.

Research Collaboration, Diponegoro University & Gadjah Mada University –

Indonesia

Project Coordinator

Dec 22 – Dec 23

- Led a multi-university collaborative research project on biotic and abiotic factors influencing tropical orchid acclimatization and ex-situ conservation, strengthening national biodiversity preservation efforts.
- Managed full project lifecycle including strategic resource allocation, synthesis of 30+ peer-reviewed studies, systematic data analysis, and manuscript development, while mentoring a junior research team from BIOSC UGM.
- Delivered validated acclimatization protocols and produced a peer-reviewed publication in Jurnal Biologi Tropis, providing practical guidance for sustainable orchid conservation and commercial cultivation.

UN Environment Programme – Indonesia

Anatomy of Actions Challenge

Jan 21 – Jun 21

- Led a digital advocacy campaign using the UN “Anatomy of Action” framework to promote SDGs 2030, driving public adoption of sustainable lifestyle practices through coordinated online engagement.
- Produced 15+ evidence-based digital contents translating complex climate and sustainability targets into practical daily actions across five lifestyle domains (Food, Stuff, Move, Money, Fun).
- Increased community awareness and participation in the #ActNow initiative, bridging scientific sustainability data with actionable environmental stewardship, particularly aligned with SDG 12: Responsible Consumption and Production.

Faculty of Biology, Gadjah Mada University –Indonesia

Laboratory Teaching Assistant

Aug 18 – Jun 24

- Led and mentored 500+ undergraduate students in end-to-end laboratory research and practical sessions, ensuring strong comprehension and performance outcomes.
- Improved lab execution efficiency by implementing structured workflows and data-driven analysis, reducing operational bottlenecks.
- Drove digital learning adoption by developing 16 instructional videos and 69 learning modules, significantly increasing student engagement and knowledge retention.

LEADERSHIP & ORGANIZATIONAL EXPERIENCES

Keluarga Mahasiswa Pascasarjana (KMP) Biology Gadjah Mada University, Indonesia

Project Officer

Dec 23 – Dec 24

- Audited organizational reports and documentation to ensure data accuracy, compliance, and accountability across programs.
- Acted as a communication bridge between internal committees and external stakeholders to enable seamless cross-departmental coordination.
- Ensured on-time project delivery by implementing structured timelines, workflow monitoring, and progress tracking.

Student Research Grant (KDM) Directorate of Research, Gadjah Mada University – Yogyakarta, Indonesia

Lead Researcher

Jun 20 – Jun 21

- Secured competitive KDM research funding to study stingless bee (*T. laeviceps*) propolis and pollen diversity for functional ingredients in natural medicine.
- Led full-cycle research activities—from proposal development and budgeting to field sampling, GC-MS analysis, technical reporting, and publication-ready manuscripts.
- Delivered high-impact findings by identifying up to 42 bioactive compounds (terpenoids, phenolics, alkaloids), published in an international peer-reviewed journal (Atlantis Press) and adopted for industry standardization discussions.

Biology Orchid Study Club (BiOSC), Indonesia

Research Coordinator

Dec 19 – Dec 20

- Audited organizational reports and documentation to ensure data accuracy, compliance, and accountability across programs.
- Acted as a communication bridge between internal committees and external stakeholders to enable seamless cross departmental coordination.
- Ensured on time project delivery by implementing structured timelines, workflow monitoring, and progress tracking.

Student Executive Board (BEM KM Biologi UGM), Indonesia

SME for Human Resource Division

Oct 18 – Dec 19

- Standardized recruitment and training processes for 100+ candidates, ensuring competency alignment with organizational standards.
- Monitored monthly performance metrics and SOP compliance to maintain operational efficiency and workforce quality.
- Managed HR databases and reporting systems to enhance data accuracy, transparency, and team productivity.

PROFESSIONAL CERTIFICATION & OTHERS ACTIVITIES

Certification

- Research & Development (R&D) in Food Industry (2026) — Mindo Education
- Quality Control (QC) & Quality Assurance (QA) Technical in Food Industry (2026) — Mindo Education
- Integrated Food Regulatory Compliance: BPOM, SNI & Halal (2026) — Makin Ahli
- Food Safety System Certification FSSC 22000 Version 6.0 (2026) — Makin Ahli
- Food Safety Management System ISO 22000:2018 (2026) — Makin Ahli
- Good Laboratory Practice (GLP) (2026) — Mindo Education
- Factory Hygienic Design to Prevent Pest Infestation (2022) — PT. Mitra Kualitas Abadi
- Good Manufacturing Practices (GMP) (2022) — Makin Ahli
- Hazard Analysis and Critical Control Point (HACCP) (2022) — Makin Ahli
- Gas Chromatography–Mass Spectrometry (GC-MS) Instrument Certification (2020) — LPPT UGM
- Scanning Electron Microscope (SEM) Certification (2020) — LPPT UGM
- SPSS Statistics for Data Analysis (2020) — E-Bizmark
- Workshop on Vegetable Genetic Resources Bank Management (2019) — PIAT UGM

Project

- **2024–2025 | Lead Researcher, Universitas Gadjah Mada**
Conducted R&D on **Chrysanthemum bio-filter efficacy** for industrial wastewater treatment; funded by the Directorate of Research UGM
- **2024 | LautSehat.ID × KMP Biology UGM**
Organized a collaborative environmental advocacy event promoting **marine conservation and sustainable blue economy**.
- **2024 | National Scientific Discussion (KMP Biology UGM)**
Spearheaded a national forum enabling postgraduate students to exchange insights on **biodiversity and biotechnology research**.
- **2023 | KMP Biology UGM Community Outreach**
Managed health initiatives including a **blood donation drive**, successfully collecting **40+ blood bags** with PMI Yogyakarta.
- **2022–2023 | Project Coordinator, UNDIP & UGM**
Led collaborative research on **tropical orchid conservation** and published acclimatization protocols in *Jurnal Biologi Tropis*.
- **2020 | BiOSC Research Project**
Screened secondary metabolites of *Vanilla planifolia* to identify potential **bioactive compounds** for pharmaceutical and agricultural applications.
- **2019 | BiOSC Research Project**
Conducted comparative anatomical studies on *Dendrobium* and *Eria* orchid roots; findings published to support **orchid taxonomy**.

Conference, Forums, & International Exposure

- The 9th International University Consortium Graduate Forum in Agriculture, July 2024
- The 2nd International Conference of Biology for Students, November 2023
- The 6th International Conference and Exhibition on Indonesian Medical Education and Research Institute (ICE on IMERI), November 2021
- Asian Gathering – Youth for Blue Green Economy, October 2021
- California Youth Leadership Summit, February 2021
- Winter Scholar Program on Animal and Food Science, College of Agriculture, January 2021
- Millennial Entrepreneur ZERU Program, August 2019
- UNESCO–UNITWIN Training Program, August 2019

PROFESSIONAL COMPETENCIES

- **Core Competencies:** Analytical research and phytochemical profiling, product innovation and research & development (R&D), quality management systems (QA/QC), environmental sustainability solutions, integrated food safety standards, regulatory compliance (BPOM, SNI, Halal), end-to-end project management, strategic planning and budgeting, scientific writing and publication, stakeholder collaboration, leadership and team mentoring.
- **Technical Competencies:** Laboratory instrumentation including GC-MS, SEM, and microscopic imaging, plant histochemistry and anatomical analysis, statistical data analysis using IBM SPSS, microbiological testing, SOP development and implementation, Microsoft Office Suite with advanced proficiency in Excel and PowerPoint, digital content creation for education and outreach, strategic resource allocation and operational optimization.
- **Language:** Bahasa Indonesia (*Native proficiency*), English (*Professional Working Proficiency*).