STAFF HANDBOOK

Name / Nama	Prof. Dr. Ir. Muhammad Irfan Said, S.Pt, M.P,IPM. ASEAN Eng.
Position / Bidang keilmuan	Waste and Livestock Waste Processing Technology
Academic career / Riwayat Pendidikan	S1 - Department of Animals Science, Faculty of Animal Husbandry - Hasanuddin University (1993-1997) S2 - Magister of Animal Science, Faculty of Animal Science - Universitas Gadjah Mada, Yogyakarta (1998-2000) S3 – Doktor of Animal Science, Faculty of Animal Science - Universitas Gadjah Mada, Yogyakarta (2008-2011)
Employment / Pekerjaan	Lecturer at the Faculty of Animal Husbandry, Hasanuddin University
Research and development projects over the last 5 years / Riwayat penelitian 5 tahun terakhir	1. Development of Antioxidant-Rich Animal-Based Functional Food Products through Fortification with Bioactive Compounds from Broiler Chicken Foot Collagen Extract (Principal Investigator) (Year 2) 2. Productivity and Quality of Bali Beef through Innovation in Ingredient Technology in Feed Supplements (Principal Investigator) (Year 2) 3. Application of Microbial-Based Enzymatic Technology on Beef Skin Waste from the Cracker Industry as a Potential Feed Protein Source for Livestock (Principal Investigator) (Year 1) 4. Application of Microbial Enzymatic Technology on Cattle Hair Waste from the Skin Cracker Industry as a Potential Feed Protein Source for Livestock (Principal Investigator) (Year 2) 5. Basic Study on the Potential of Cattle Bone Waste and Hatchery as a Source of Calcium Hydroxyapatite Nano-Particles for Bone Graft Material Preparations (Principal Investigator) (Year 1) 6. Characterization of Livestock Industry Waste and Its Development Potential as a Component Material in the Medical Field (Multi-Year Principal Investigator) (Year 1) 7. Characterization of Livestock Industry Waste and Its Development Potential as a Component Material in the Medical Field (Multi-Year Principal Investigator) (Year 2)

	8. Characterization of Eco-Enzymes from Vegetable Waste and Their Application in Reducing Ammonia Gas in Chicken Manure Waste (Principal Investigator) 9. Innovation of Plant-Enzyme Products from Natural Waste Materials as Reducers of Pollutant Gas Emissions to Improve Productivity in the Poultry Farming Industry: A Case Study in Sidrap District, South Sulawesi (Principal Investigator)
Industry collaborations over the last 5 years / Kolaborasi dengan industry 5 tahun terakhir	1. Erasmus 2. BRIN in Waste Management
Patents and proprietary rights / Paten dan HKI	1. Production Process of Feather Protein Concentrate (FPC) from Broiler Chicken Feather Waste Using Bacillus subtilis FNCC 0059 as a Fermentation Hydrolyzer
Important publications over the last 5 years / Publikasi penting 5 tahun terakhir	1. Ammonia (NH_3) Emissions in Laying Hen Farms: Distribution and Influencing Factors in Sidrap, Indonesia 2. Characteristics of Ammonia Gas Emission in The Laying Hen Farming Industry in Indonesia. 3. Characteristics of Ammonia Gas Emission in The Laying Hen Farming Industry in Indonesia. 4. Effect of Differences in Bio-activators and Fermentation Time on the Properties of Liquid Organic Fertilizers Based on Local Rabbit's Urine Waste 5. Hydroxyapatite (HA) Synthesis from Leg Bone By-Product of Beef Cattle: Structural and Optical Characteristics for Various Sintering Temperatures 6. Utilization of Broiler Skin Gelatin as Wound Healing Medicine 7. Diversification of Healthy Chicken Nuggets Which Rich in Antioxidants and Dietary Fiber Through the Utilization of Vegetable Broccoli (*Brassica oleracea* L.) and Carrot (*Daucus carota* L.) 8. Growth and production of rice (*Oryza sativa* l.) With several application doses of urea fertiliser and cow manure 9. Physical Characteristics of Meat Part of Longissimus dorsi Muscle Marinated in Collagen ExtractBeef Meatballs 10. Effect of Fermentation Time on The Dynamics of *Lactobacillus plantarum* Bacteria using Collagen Extract from Broiler Claw Skin as a Substrate

	11. Effect of Fortification of Collagen Extract from Chicken Feet Skin Fermented by *L.Plantarum* on the Properties of Beef Meatballs 12. Evaluation of Yields and Chemical Composition of Unhairing Concentrate (UC) from Cowhide Unhairing Waste (CUW) Produced Using Different Process Method 13. Properties and cost analysis of bio-urine liquid fertilizer (BLF) from Balinese cattle on the use of bio-activators and different fermentation times
Activities in specialist bodies over the last 5 years / Aktifitas berkaitan dengan bidang keahlian dalam 5 tahun terakhir (contoh: menjadi narasumber, tenaga ahli dll.)	1. Presenter in International Conference on Green Energy and Environmental Technology 2. Presenter in International Agricultural, Biological & Life Science Conference (AGBIOL) 2022 3. Presenter in Cukurova 7th International Scientific Researches Conference 4. Presenter in Ispec 7th International Conference on Agriculture, Animal Sciences and Rural Development 5. Presenter in The 3nd International Conference of Animal Science and Technology 2020