

CURRICULLUM VITAE

A. IDENTITY

- 1 Name (with title) : Dr. Shabarni Gaffar, M.Si.
- 2 Place and Date of Birth : Bukittinggi, 25th April 1971
- 3 Academic Position : Associate Professor
- 4 Name of Research Group : Biology Molecular of Health and Food and Protein Functional Chemistry
- 5 Office Address : Jl. Raya Bandung-Sumedang Km.21, 45363
- 6 Email Address : shabarni.gaffar@unpad.ac.id
- 7 Employee ID number : 197104252005012001
- 8 Professional Organization : HKI, RSC
- 9 Scopus ID/ *h*-index : 57159795800/ 10

B. Education

No	Degree	Institution	Year of Graduation
1	Bachelor degree	Chemistry, Andalas Univ	1995
2	Master degree	Chemistry, ITB	1998
3	Doctoral degree	Chemistry, Unpad	2011

C. Research and Grants in the Past 5 Years

Year	Research title	Grant and Funder's Name
2021-2022	Co-expression of Chaperone to Increase Production of Recombinant Antibody Fragments against Chikungunya virus in host <i>Escherichia coli</i> for Chikungunya Virus Rapid Diagnosis Kit Development Immunosensory Based	Padjadjaran Univ
2021	Automation of RNA isolation procedure and making of multiplex qPCR master mix for Covid-19 detection	Ministry of Finance, Indonesia
2020	In silico design and expression of recombinant mutant Diphtheria toxoid as a candidate of Diphtheria vaccine	Ministry of higher education, Ind
2020	Determination of expression levels of apoptotic triggering genes in HeLa cancer cells treated with Disobinol compound from <i>Chisocheton macrophyllus</i> plant by qPCR method	Ministry of higher education, Ind
2020	Bioinformatics studies and application of the ENaC protein as a biomarker of hypertension in biosensor	Ministry of higher education, Ind

2020-20 21	Terpenoid Compounds as Candidates for New Breast Anticancer Agents from Indonesian Aglaia Plants	Ministry of higher education, Ind
2019-20 20	Molecular mechanism of anticancer activity of disobinin and disobinol compounds from the Chisocheton macrophyllus plant against breast and cervical cancer cells	Padjadjaran Univ
2019-20 20	Electrochemical Biosensor Using Nanomaterial Bioconjugate for Detection of Sodium Channel Epithelial Protein (ENaC) as a Biomarker of Hypertension	Ministry of higher education, Ind
2017-20 18	Development of DNA Biosensor Technology for Detection of Pigs (Sus scrofa) in Food	Padjadjaran Univ
2017-20 18	Cytotoxic activity of the active compound Moringa leaf (moringa oleifera l.) and its effect on suppression of cyclooxygenase-2 enzyme expression and induction of apoptosis in T47D breast cancer cells	Padjadjaran Univ
2017-20 18	Electrochemical Biosensor Using Nanomaterial Bioconjugate For Cancer Biomarker Protein Detection	Ministry of higher education, Ind
2016-20 18	Anticancer Potential of Alkaloid and Flavonoid Compounds from Erythrina (Leguminosae) Plants	Ministry of higher education, Ind
2015-20 16	Production of Natriuretic Peptide Type B (BNP) and Recombinant Anti BNP scFv and its application for the diagnosis of heart failure using electrochemical biosensors	Ministry of higher education, Ind

D. Scientific Publication in the Past 5 Years

Year	Title	Journal Name/Quartil	Volume/Number/Year/pp
2022	The Selectivity and Stability of Epithelial Sodium Channel (ENaC) Aptamer as an Electrochemical Aptasensor	Anal. Bioanal. Electrochem.	14/ 7/ 2022/ 715-729
2022	Laboratory optimization of the production of guanidium-based inactivated transport media to support SARS-CoV-2 PCR testing in Indonesia	Journal of Applied Pharmaceutical Science	12/ 8/ 2022/ 70-81
2022	The optimization of an electrochemical aptasensor to detect RBD protein S SARS-CoV-2 as a biomarker of COVID-19 using screen-printed carbon electrode/AuNP	Journal of Electrochemical Science and Engineering	12/ 1/ 2022/ 219-235
2022	Evaluation and Clinical Validation of Guanidine-Based Inactivation Transport Medium for Preservation of SARS-CoV2	Advances in Pharmacological and Pharmaceutical Sciences	1677621/ 2022

2022	A Review on the Development of Aptamer Immobilization Techniques in Aptamer-Based Electrochemical Biosensors for Viruses Detection	Analytical and Bioanalytical Electrochemistry	14/ 1/ 2022/ 127–143
2022	Expression of human serum albumin in <i>Pichia pastoris</i> protease deficient host and conjugation with gadoliniumdiethylene triamine pentaacetate for application as a contrast agent	Journal of Applied Pharmaceutical Science	11/ 12/ 2022/ 183-195
2022	Aktivitas Antioksidan dan Sitotoksik Terhadap Sel Kanker HeLa dari Ekstrak Daun <i>Vernonia amygdalina</i> (Asteraceae)	Chimica et Natura Acta,	10/ 1/ 2022/ 6-14
2021	Label-based and label-free electrochemical DNA biosensors for the detection of viruses: A review	Current topics in electrochemistry	3/ 2021.
2021	An Electrochemical Aptasensor for the Detection of HER2 as a Breast Cancer Biomarker Based on Gold Nanoparticles-Aptamer Bioconjugates	Indones. J. Chem.,	21/ 6/ 2021/ 1526-1532
2021	Mutation and Phylogenetic Analysis of Spike Glycoprotein of Indonesian Isolates of <i>Severe-Acute-Respiratory Syndrome-Coronavirus-2</i> (SARS-CoV-2)	Majalah Kedokteran Bandung,	53/ 1/ 2021/ 38–47
2021	Synthesis and characterization of nanoceria for electrochemical sensing applications	RSC Advance	11/ 16216/ 2021
2021	An Epithelial Sodium Channel (ENaC)-Specific Aptamer Determined through Structure-Based Virtual Screening for the Development of Hypertension Early Detection System	Pharmaceutical Sciences,	27/ 1/ 2021/ 67-75
2021	An aptasensor using ceria electrodeposited-screen-printed carbon electrode for detection of epithelial sodium channel protein as a hypertension biomarker.	Royal Society Open Science,	8/ 2/ 2021
2021	Applications of electrochemical biosensor of aptamers-based (APTASENSOR) for the detection of leukemia biomarker	Sensing and Bio-Sensing Research	32/ 2021
2020	Toxicity Evaluation of Ethanol Extract of <i>Lansium domesticum</i> cv kokossan Seeds in Female Wistar Rats	TJNPR,	4/8/ 2020/ 348-354
2020	Temperature effect on expression of recombinant human prethrombin-2 in <i>Escherichia coli</i> BL21(DE3) Arctic Express	Jurnal Pendidikan Kimia,	11/ 2019/ 122-128
2020	Ethyl Acetate Fraction of <i>Moringa oleifera</i> Leaves Induces Cell Cycle Arrest on T47D Breast Cancer Cell via G0/G1 through Cyclin D1 Expression	Jurnal Kimia Valensi,	6/ 1/ 113-119

2020	A voltammetric immunosensor based on gold nanoparticle - Anti-ENaC bioconjugate for the detection of epithelial sodium channel (ENaC) protein as a biomarker of hypertension	Sensing and Bio-Sensing Research,	29/ 2020
2020	Electrochemical DNA biosensor for detection of pork (<i>Sus scrofa</i>) using screen printed carbon-reduced graphene oxide electrode	Science Asia	46/ 2020/ 72-79
2020	A voltammetric epithelial sodium channels immunosensor using screen-printed carbon electrode modified with reduced graphene oxide	Current Chemistry Letters,	9/ 2020/ 151-160
2020	Cerium oxide-monoclonal antibody bioconjugate for electrochemical immunosensing of HER2 as a breast cancer biomarker	Sensing and Bio-Sensing Research	27/ 2020/ 100316
2019	Cytotoxic Activity of Alpinum isoflavone from <i>Erythrina poeppigiana</i> (Leguminosae) Against Colon Cancer (WiDr), Cervical Cancer (Hela), and Hepatoma Cancer (HepG2) Cells	Hayati journal of bioscience	26/ 2/ 2020/ 96-100
2019	A Gold Nanoparticle–DNA Bioconjugate–Based Electrochemical Biosensor for Detection of <i>Sus scrofa</i> mtDNA in Raw and Processed Meat	Food Analytical Methods	
2019	Acute toxicity of ethanolic extract of <i>Lansium domesticum</i> cv kokossan leaves in female Wistar rats	JPPRes	8/ 2/ 2020/ 105-116
2019	<i>n</i> -Hexane Fraction of <i>Moringa oleifera</i> (hMO) Leaves Induces Apoptosis and Cell Cycle Arrest on T47D Breast Cancer Cell Line.	JPPRes	7(3), 173-183, 2019
2019	Combination of Genetic Manipulation Improved <i>Saccharomycopsis fibuligera</i> α -Amylase Secretion by <i>Pichia pastoris</i>	Indones. J. Chem.	19(2), 305-318, 2019
2019	Effect of IPTG Concentration on Recombinant Human Prethrombin-2 Expression in <i>Escherichia coli</i> BL21(DE3) ArcticExpress	IOP Conf. Series: Earth and Environmental Science	217 (2019) 012039
2018	Gold nanoparticles modified screen-printed immunosensor for cancer biomarker HER2 determination based on anti HER2 bioconjugates	AIP Conference Proceedings	2049, 020051 (2018)
2018	Gold modified screen printed carbon electrode (SPCE) with streptavidin-biotin system for detection of heart failure by using immunosensor	AIP Conference Proceedings	2049, 030017 (2018)
2018	An Electrochemical Immunosensor for the Detection of B-Type Natriuretic Peptide (BNP) Based on Sandwich ELISA Using Screen Printed Carbon Electrodes	Molekul	Vol 13, No 1 (2018)
2018	Optimization of The Expression of Recombinant Universal Influenza vaccine Candidate in	IOSR Journal Of Pharmacy,	8(2), 2018, 53-60

	Escherichia Coli Using Response Surface Methodology		
2018	Cytotoxic activity of erypogein d from erythrina poeppigiana (leguminosae) against cervical cancer (HeLa), breast cancer (MCF-7) and ovarian cancer (SKOV-3) cells	IOP Conf. Series: Journal of Physics: Conf. Series	1013 (2018)
2018	Cytotoxic Activity of Ethanol Extract, Ethyl Acetate and n-hexane Fraction of Kelor Leaves (<i>Moringa oleifera</i>) Against Breast Cancer Cell T74D.	Alchemy: Jurnal Penelitian Kimia,	14(1), 2018), 1-12
2018	A Voltammetric Immunosensor for Detection of HER2 Using Gold Modified-Screen Printed Carbon Electrode.	<i>Res. J. Chem. Environ,</i>	Vol. 22 (Special Issue II) August (2018)
2018	Recombinant Anti BNP-SCFV Production in <i>Escherichia coli</i> and its Application for the Detection of Heart Failure by Electrochemical Immunosensor using Screen-Printed Carbon Electrode-Gold Nanoparticles (SPCE-GNP)	<i>Res. J. Chem. Environ ,</i>	Vol. 22 (Special Issue II) August (2018)

E. Patents/Intellectual Property Copyright in the Past 5 Years

No	Title	Year	Patent Number
1.	Metoda deteksi urutan pendek DNA Salmonella thypi menggunakan biosensor elektrokimia.	2020	IDP000067858

F. Community Service in the Past 5 Years

No	Year	Title
1	2022	Pengenalan, Pencegahan, dan Deteksi Dini mengenai Penyakit Infeksi pada Manusia di Desa Sayang, Jatinangor, Sumedang, Jawa Barat.
2	2021	Penyuluhan penyakit Chikungunya, penyebab, pencegahan dan deteksi dini” di desa Cileles, Kecamatan Jatinangor, Sumedang.
3	2020	Optimalisasi Potensi Tumbuhan Herbal di Desa Cangkuang, Kecamatan Rancaekek, Kabupaten Bandung
4	2019	Potensi Tumbuhan <i>Chisocheton machrophyllus</i> Sebagai Obat Herbal di Kampung Galudra Cimalaka, Sumedang

G. Journal Reviewer/Editor in the Last 5 Years

No	Name of Journal	Reviewer/Editor	Year
1.	ACS Omega	Reviewer: Latent Functions and Applications of Cytochrome P450 Monooxygenases from <i>Thamnidium elegans</i> : a Novel Biocatalyst for 14 α -Hydroxylation of Testosterone	2022

2.	Frontiers in medicines	Reviewer: Isolation and Identification of a Rare Spike Gene Double-Deletion SARS-CoV-2 Variant from the Patient with High Cycle Threshold Value	2022
3.	Biotechnology and Applied Biochemistry	Reviewer: Simple and Low Cost Antibiotic Susceptibility Testing for Mycobacterium tuberculosis using Screen-Printed Electrodes"	2022
4.	Scientific report	An Electrochemical Biosensor for the Rapid Genetic Identification of Musang King Durian	2022