

# Staff Handbook

Please fill out and submit one table per person.

Name	<b>Prof. Sanusi Gugule, Ph.D. (Dr.), M.Si</b>		
Post	Teaching area and designation <b>Organic Chemistry; Biodiesel Chemistry, Renewable Energy</b>		
Academic career	Initial academic appointment <b>Lecturer</b>	Institution <b>IKIP Manado</b>	Year <b>1987</b>
	Habilitation [German post-doctoral qualification] (subject) <b>N/A</b>	Institution <b>N/A</b>	Year <b>N/A</b>
	Doctorate (subject) Ph.D in Organic Chemistry	Institution Universitas Airlangga	Year 2004
	Undergraduate degree (subject) Bachelor of Education in Chemistry	Institution IKIP Manado	Year 1986
Employment	Position <b>Professor</b>	Employer <b>Universitas Negeri Manado</b>	Period <b>1987 - present</b>
Research and development projects over the last 5 years	Name of project or research focus <b>Isolasi dan Identifikasi Secara Kromatografi Gas-Spektrometer Massa Komponen Minyak Atsiri Rempah Berpotensi sebagai Antioksidan.</b>		
	Period and any other information <b>2025, DIPA UNIMA (PFUPT), Principal Investigator (PI)</b>		
	Amount of financing <b>IDR 15,000,000</b>		
	Name of project or research focus <b>Inovasi Peningkatan Nilai Gizi Melalui Fortifikasi Beras Ekstrusi Dengan Pemanfaatan Hidrolisat Protein Ikan Payangka Guna Pencegahan Stunting</b>		
Period and any other information <b>2025, Riset Dan Inovasi Untuk Indonesia Maju (Riim) Kompetisi</b>			
Partners, if applicable <b>BRIIN</b>			
Amount of financing <b>IDR 267.000.000,-</b>			
Name of project or research focus <b>Pengaruh Jenis Katalis Homogen pada Reaksi Transesterifikasi Minyak Kelapa Murni Terhadap Kuantitas dan Kualitas Biodisel.</b>			
Period and any other information <b>2024, DIPA UNIMA (PPUPT), Principal Investigator (PI)</b>			
Amount of financing <b>IDR 100,000,000</b>			
Name of project or research focus			

<p><b>Proses Pembuatan Biodiesel Berbahan Baku Minyak Kelapa dan Alkohol Nira Aren (Arenga Pinnata) Menggunakan Kapur Tohor Sebagai Katalis.</b></p> <p>Period and any other information  <b>2024, DIPA UNIMA (PBL), Principal Investigator (PI)</b>  Amount of financing  <b>IDR 40,000,000</b></p>
<p>Name of project or research focus  <b>Karakteristik Fisikokimia Biodiesel Minyak Kelapa yang Dibuat Dengan Beberapa Metode Pengolahan.</b></p> <p>Period and any other information  <b>2024, DIPA UNIMA (RCLI), Principal Investigator (PI)</b>  Amount of financing  <b>IDR 75,000,000</b></p>
<p>Name of project or research focus  <b>Eksplorasi Dan Optimasi Pengolahan Ulat Sagu Sebagai Minyak Pangan dan Aplikasinya Sebagai Minyak Goreng dan Table Oil.</b></p> <p>Period and any other information  <b>2024, Penelitian Kompetitif Nasional (PTKN), Co-Principal Investigator (Co-PI)</b>  Amount of financing  <b>IDR 170,900,000</b></p>
<p>Name of project or research focus  <b>Proses Pembuatan Biodiesel dari Minyak Kelapa Menggunakan Kapur Tohor Sebagai Katalis.</b></p> <p>Period and any other information  <b>2023, DIPA Unima (Luaran), Principal Investigator (PI)</b>  Amount of financing  <b>IDR 35,000,000</b></p>
<p>Name of project or research focus  <b>Pemanfaatan Kapur Lobong Sebagai Katalis Alternatif Dalam Sintesis Biodiesel.</b></p> <p>Period and any other information  <b>2023, DIPA Unima (PPUPT), Principal Investigator (PI)</b>  Amount of financing  <b>IDR 150,000,000</b></p>
<p>Name of project or research focus  <b>Eksplorasi dan Optimasi Pengolahan Ulat Sagu Sebagai Minyak Pangan dan Aplikasinya Sebagai Minyak Goreng dan Table Oil.</b></p> <p>Period and any other information  <b>2023, Penelitian Kompetitif Nasional (PTKN), Co-Principal Investigator (Co-PI)</b>  Amount of financing  <b>IDR 180,652,000</b></p>
<p>Name of project or research focus  <b>Eksplorasi dan Optimasi Pengolahan Ulat Sagu Sebagai Minyak Pangan dan Aplikasinya Sebagai Minyak Goreng dan Table Oil.</b></p> <p>Period and any other information  <b>2022, Penelitian Kompetitif Nasional (PTKN), Co-Principal Investigator (Co-PI)</b>  Amount of financing  <b>IDR 170,000,000</b></p>
<p>Name of project or research focus  <b>Pemisahan dan Identifikasi Komponen - Komponen Minyak Adsiri Sere Secara Kromatografi Kolom.</b></p> <p>Period and any other information  <b>2021, INSTITUSI INTERNAL (PT), Principal Investigator (PI)</b>  Amount of financing  <b>IDR 50,000,000</b></p>
<p>Name of project or research focus</p>

	<p><b>Teknologi Pengolahan Terasi Bakasang, Produk Unggulan Sulawesi Utara Berbahan Dasar Jeroan Ikan Cakalang.</b>  <i>Period and any other information</i>  <b>2020, Penelitian Kompetitif Nasional (PT), Co-Principal Investigator (Co-PI)</b>  <i>Amount of financing</i>  <b>IDR 153,023,000</b></p>	
	<p><i>Name of project or research focus</i>  <b>Pemanfaatan Lemak Babi Sebagai Bahan Baku Sintesis Biodisel.</b>  <i>Period and any other information</i>  <b>2020, INSTITUSI INTERNAL (PT), Principal Investigator (PI)</b>  <i>Amount of financing</i>  <b>IDR 50,000,000</b></p>	
Industry collaborations over the last 5 years		
Patents and proprietary rights	<p><i>Title</i>  <b>Formula Mayones Berbahan Dasar VCO dan Sari Buah Kiwi (<i>Actinidia Deliciosa</i>), Mangga (<i>Mangifera Indica L.</i>), dan Naga (<i>Hylocereus Costaricensis</i>) (Utility Model No. S00202409070, Application accepted and filing date assigned).</b></p>	<p><i>Year</i>  <b>2025</b></p>
	<p><i>Title</i>  <b>Proses Pembuatan Biodisel Berbahan Baku Minyak Kelapa dan Alkohol Nira Aren (<i>Arenga Pinnata</i>) Menggunakan Kapur Tohor Sebagai Katalis (Utility Model No. S00202310145, Drafting Stage).</b></p>	<p><i>Year</i>  <b>2024</b></p>
	<p><i>Title</i>  <b>PROSES PEMBUATAN BIODISEL DARI MINYAK KELAPA MENGGUNAKAN KAPUR TOHOR SEBAGAI KATALIS (Patent No. IDS000004934, granted in 2022).</b></p>	<p><i>Year</i>  <b>2022</b></p>
Important publications over the last 5 years	<p><i>Selected recent publications from a total of approx. (give total number):</i> <b>76 publications</b></p>	
	<p><i>Author(s)</i>  <b>Fatimah F, Gugule S, Katja D, G, Wuntu A, D, Karouw S, Tambas J, S, Kumaunang M, Maanari C, P, and Aloanis A, A.</b></p>	
	<p><i>Title</i>  <b>Exploring the Potential of Sago Caterpillars as Cooking Oils: Extraction, Purifying and Characterization</b>  <i>Any other information</i>  <b>Indexed in Scopus; Q3 category; DOI: 10.3923/pjbs.2023.557.566</b>  <i>Publisher, place of publication, date of publication or name of periodical, volume, issue, page numbers</i>  <b>Pakistan Journal of Biological Sciences, Pakistan, October 2023, 26(11):557-566.</b></p>	
	<p><i>Author(s)</i>  <b>Fatimah F, Gugule S, Wurangian D,C, and Tallei T, E.</b></p>	
	<p><i>Title</i>  <b>The effects of different packaging types on the shelf life of Bakasang paste (Terasi) derived from skipjack fish (<i>Katsuwonus pelamis</i>)</b>  <i>Any other information</i>  <b>Indexed in Scopus; Q4 category; DOI: 10.1063/5.0119103</b>  <i>Publisher, place of publication, date of publication or name of periodical, volume, issue, page numbers</i>  <b>AIP Conference Proceedings, Manado, 26 April 2023, 2694, 050004 (2023).</b></p>	
	<p><i>Author(s)</i>  <b>Fatimah F, Gugule S, Rorong J, A, and Tallei T, E.</b></p>	
	<p><i>Title</i></p>	

	<p><b>Optimum processing conditions for bakasang using the response surface methodology with central composite design (Ccd)</b>  Any other information  <b>Indexed in Scopus; Q3 category; DOI: 10.3923/pjbs.2021.1269.1277</b>  Publisher, place of publication, date of publication or name of periodical, volume, issue, page numbers  <b>Pakistan Journal of Biological Sciences, Pakistan, January 2021, 24(12): 1269 – 1277.</b></p>		
	<p>Author(s)  <b>Gugule S, Fatimah F, Manaari C, P, and Tallei T, E.</b>  Title  <b>Data on the use of virgin coconut oil and bioethanol produced from sugar palm sap as raw materials for biodiesel synthesis</b>  Any other information  <b>Indexed in Scopus; Q2 category; DOI: 10.1016/j.dib.2020.105199</b>  Publisher, place of publication, date of publication or name of periodical, volume, issue, page numbers  <b>Data in Brief, April 2020, Volume 29.</b></p>		
<p>Activities in specialist bodies over the last 5 years</p>	<p>Organisation  Himpunan Kimia Indonesia North Sulawesi</p>	<p>Role  Penasihat</p>	<p>Period  2021-2023</p>