

SUMMARY OF QUALIFICATIONS

- Final-year Chemistry student with experience in inorganic material synthesis, sintering techniques, and laboratory analysis supported by a Q1 journal publication.
- Skilled in operating analytical instruments including UV-Vis, FTIR, Raman, AAS, PSA, pH meters, muffle furnaces, and titration equipment.
- Strong ability in data analysis & interpretation, laboratory safety procedures, literature review, experimental design, and scientific writing.

EDUCATION

Brawijaya University **2022 – Expected July 2026**
Bachelor of Chemistry – GPA 3.6
Analytical Chemistry, Instrumental Analysis, Materials Chemistry

RELEVANT COURSEWORK

- Conducted undergraduate research on CaTiO₃ ceramic materials involving synthesis, cold sintering process (CSP), and material characterization.
- Performed compound isolation, synthesis, and characterization using FTIR, UV-Vis, AAS, HPLC, and GC-MS.
- Investigated conductometric sensors and electrode modifications for environmental applications.
- Evaluated sunscreen quality and safety through SPF determination, heavy metal analysis, and physicochemical testing.

TECHNICAL SKILLS

Analytical Instruments	UV-Vis Spectrophotometer, FTIR, Raman Spectroscopy, AAS, PSA, titration equipment, oven, muffle furnace
Research & Laboratory Skills	Experimental Design, Literature Review, Data Analysis & Interpretation, Inorganic Material Synthesis, Sintering Process, Sample Preparation, Scientific Writing
Software	Origin, Highscore, ImageJ, ZS Explorer, OMNIC, Microsoft Word/Presentation/Excel, Google Docs/Slides/Sheet, Adobe Illustrator
Languages	Indonesian (Native), English (Intermediate), Mandarin (Beginner)

RELEVANT EXPERIENCE

Undergraduate Researcher - Advanced Ceramics & Functional Materials Division, Nano Center Indonesia **January 2026 – Present**
■ Designed and conducted experiments to optimize Cold Sintering Process (CSP) parameters for CaTiO₃ ceramics.
■ Performed material characterization (XRD & SEM) and data analysis to identify processing-property relationships.

Research Intern - Advanced Materials Division, Nano Center Indonesia **August – November 2025**
■ Designed and conducted experiments for perovskite materials synthesis via solid-state, sol-gel, and hydrothermal methods using a planetary ball mill, oven, autoclave, furnace, optimizing processing parameters to achieve targeted material properties.
■ Performed characterization using Raman spectroscopy, PSA, FTIR also interpreted data using Origin, Excel, Highscore, and ImageJ
■ Maintained laboratory safety and documentation standards.
■ Designed and conducted photocatalytic performance studies of industrial wastewater using UV-Vis spectrophotometer.
■ Resulted a Q1 journal publication (Ceramic International, 2026): <https://doi.org/10.1016/j.ceramint.2026.01.372>

Inorganic Chemistry Laboratory Teaching Assistant - Department of Chemistry, Brawijaya University **February – May 2025**
■ Guided 40 students in experiments to determine mineral acidity using the titrimetric method.
■ Ensured laboratory safety and accuracy of experimental procedures.

Fundamental Chemistry Laboratory Teaching Assistant - Department of Physics, Brawijaya University **August – December 2024**
■ Assisted 40 students in conducting fundamental chemistry experiments, including laboratory equipment, standard solution preparation, and pH determination using various media.
■ Guided students in titration techniques, solution standardization calculations, and laboratory safety procedures.

ADDITIONAL EXPERIENCE

Student Press Activity Unit, Brawijaya University (UAPKM-UB) **January - December 2025**
Secretary General
■ Managed administrative and organizational activities and coordinated internal programs and documentation.

Editorial Department Staff **January 2024 – December 2024**
■ Wrote articles and created illustrations aligned with the content to be published.

Volunteer TemanKita, External Platform **August 2022 – Mei 2023**
■ The person in charge of the TemanKita Podcast, handles script writing, creating ToR, and being the podcast moderator.

Class Representatives in the Welcoming Event, Department of Chemistry, Brawijaya University **October 2022**
■ Collaborated with the team in presenting an English storytelling performance at the Department of Chemistry's new student welcoming event.

ACHIEVEMENT

- **Silver Medalist, Brawijaya International Scientific Writing Competition** **2024**
In the Climate Change sub-theme from 127 participants from various universities both from within and outside Indonesia with the idea of changing carbon emissions from the cement industry into sustainable solar fuel.
- **Gold Medalist, National Youth Science Competition** **2024**
In the Life Science category with participants from various universities in Indonesia with a study of transdermal microneedles patches using red ginger extract in relieving arthritis pain.



KEMENTERIAN PENDIDIKAN TINGGI, SAINS, DAN TEKNOLOGI
UNIVERSITAS BRAWIJAYA MALANG
FAKULTAS MATEMATIKA & IPA

SISTEM INFORMASI AKADEMIK UB

Kartu Rencana Studi

No Induk : 225090207111003 Th. Akademik : 2025/2026 Genap
Nama : Gracia Cahyadi Konsentrasi : Non Konsentrasi
Program Studi : S1 Kimia

No	Kode MK	Nama MK	SKS	Kelas	Program Studi
1	UBU60001	Tugas Akhir/ Skripsi	6.00	A	Kimia
Jumlah:			6		

Informasi Akademik:

Semester	MK Lulus	= 4	SKS Lulus	= 13	IP Lulus	= 4
	MK Beban	= 4	SKS Beban	= 13	IP Beban	= 4
Kumulatif	MK Lulus	= 51	SKS Lulus	= 140	IP Lulus	= 3.6
	MK Beban	= 51	SKS Beban	= 140	IP Beban	= 3.6

Catatan:

Belajar lebih giat untuk persiapan Tugas Akhir di luar kampus

Malang, 9 Februari 2026

Dosen Penasehat Akademik,

Prof. Dr. Dra. Rurini Retnowati, M.Si.
NIP. 196012091988022001



TRANSKRIP AKADEMIK

No. Induk : 225090207111003

Nama : Gracia Cahyadi

Prog. Studi : Kimia

Th. Akademik : 2025-2026

Semester : Genap

Konsentrasi : -

No	Nama MK	SKS	Nilai	NxK
1	Agama Katolik	2	A	8
2	Analisis Kimia Instrumentasi	3	B+	10.5
3	Analisis Struktur Kimia	3	B	9
4	Bahasa Indonesia	2	A	8
5	Bahasa Inggris	2	A	8
6	Biokimia	3	B	9
7	Biokimia Molekuler	3	A	12
8	Biokimia Pangan	3	A	12
9	Biokimia Teknik	3	A	12
10	Biologi	2	C+	5
11	Dasar-dasar Industri Kimia	3	B	9
12	Dasar-dasar Kimia Kuantum	3	A	12
13	Fisika	4	B	12
14	Kemandirian Pengayaan Pengetahuan I	3	A	12
15	Kewarganegaraan	2	A	8
16	Kewirausahaan	2	A	8
17	Kimia Analisis Dasar	3	C	6
18	Kimia Analisis Forensik	3	A	12
19	Kimia Dasar	4	B+	14
20	Kimia Elektroanalisis dan Pemisahan	3	B+	10.5
21	Kimia Koordinasi	4	A	16
22	Kimia Organik	4	B+	14
23	Kimia Organik Fisika	3	D+	4.5
24	Kimia Organik Sintesis	3	C+	7.5
25	Kimia Unsur	3	A	12
26	Kinetika Reaksi Kimia	3	B+	10.5
27	Literasi Komputer	2	A	8

No	Nama MK	SKS	Nilai	NxK
28	Manajemen Laboratorium	3	A	12
29	Matematika Dasar	4	A	16
30	Matematika Kimia	4	B	12
31	Metodologi Penelitian, Statistika, dan Etika	3	B+	10.5
32	Metodologi dan Terapan I	3	A	12
33	Mineralogi	3	A	12
34	Pancasila	2	A	8
35	Pengabdian Kepada Masyarakat (PKM)	4	A	16
36	Praktek kerja Lapang (PKL)	4	A	16
37	Praktikum Biokimia	1	A	4
38	Praktikum Kimia Analisis 1	1	A	4
39	Praktikum Kimia Analisis 2	1	B+	3.5
40	Praktikum Kimia Analisis 3	2	A	8
41	Praktikum Kimia Anorganik	1	B+	3.5
42	Praktikum Kimia Dasar	1	A	4
43	Praktikum Kimia Fisika	2	A	8
44	Praktikum Kimia Organik	1	A	4
45	Praktikum Kimia Organik Lanjut	1	A	4
46	Prinsip Pengukuran Kimia	3	A	12
47	Proyek Kimia	4	A	16
48	Sensor Elektroanalitik	3	B+	10.5
49	Struktur dan Kereaktifan Anorganik	4	C+	10
50	Sumber Daya Alam I	3	A	12
51	Termodinamika dan Kestimbangan	4	A	16
52	Tugas Akhir/ Skripsi	6	E	0

Jumlah SKS yang ditempuh

: 146

Prosentase(%) :

Jumlah SKS yang lulus

: 140

A : 56.85 C : 2.05

Jumlah NK (Nilai*Kredit)

: 503.5

B+ : 17.12 D+ : 2.05

Nilai Indeks Prestasi Kumulatif (IPK)

: 3.45

B : 11.64 D : 0.00

Nilai Indeks Prestasi Kumulatif (IPK) Lulus

: 3.60

C+ : 6.16 E : 4.11



Malang, 16 - 02 - 2026

Ketua Departemen,

Anna Safitri, S.Si., M.Sc., Ph.D.

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