



No. 362/UN41.1/Kim.S1/2026

**IMPLEMENTATION AGREEMENT
BETWEEN
BACHELOR OF CHEMISTRY, FACULTY
OF MATHEMATICS, NATURAL
SCIENCES, AND EARTH SCIENCES
UNIVERSITAS NEGERI MANADO**

WITH

**CHEMISTRY DEPARTMENT, COLLEGE
OF NATURAL SCIENCE SOGANG
UNIVERSITY**

ON

***FOCUS GROUP DISCUSSION OF
BACHELOR OF CHEMISTRY
CURRICULUM***

**PERJANJIAN IMPLEMENTASI
ANTARA
PROGRAM STUDI S1 KIMIA,
FAKULTAS MATEMATIKA, ILMU
PENGETAHUAN ALAM, DAN
KEBUMIHAN UNIVERSITAS NEGERI
MANADO**

DENGAN

**CHEMISTRY DEPARTMENT, COLLEGE
OF NATURAL SCIENCE SOGANG
UNIVERSITY**

TENTANG

***FOCUS GROUP DISCUSSION
KURIKULUM PROGRAM STUDI
KIMIA***

On this day, Wednesday, the twenty nine of July, two thousand and twenty-six (29-07-2026), at Universitas Negeri Manado, the undersigned:

Name : Prof.Dr.Mokosuli Yermia
Semuel.M.Si

Position : Dean

Address : Jalan Kampus Unima, Tonsaru
Village, Tondano Selatan
District, Minahasa Regency,
North Sulawesi, Indonesia

In this matter acting for and on behalf of the Bachelor of Biology ,Faculty of Mathematics, Natural Sciences and Earth Sciences hereinafter referred to as the **FIRST PARTY**.

Pada hari ini, Rabu, tanggal dua puluh sembilan, bulan Juli, tahun dua ribu dua puluh enam (29-07-2026) bertempat di Universitas Negeri Manado yang bertanda tangan di bawah ini:

Nama : Prof.Dr.Mokosuli Yermia
Semuel.M.Si

Jabatan : Dekan

Alamat : Jalan Kampus Unima,
Kelurahan Tonsaru,
Kecamatan Tondano Selatan,
Kabupaten Minahasa,
Sulawesi Utara.

Dalam hal ini bertindak untuk dan atas nama Program Studi S1 Kimia, Fakultas Matematika, Ilmu Pengetahuan Alam dan Kebumihan, Universitas Negeri Manado selanjutnya disebut **PIHAK KESATU**

Name : Prof. Dr. Won Koo Lee
Position : Professor
Address : Chemistry Department, College
of Natural Science (CNS),
Sogang University (SU), South
Korea

In this matter acting for and on behalf of the
Chemistry Department, College of Natural
Science (CNS), Sogang University (SU),
hereinafter referred to as the **SECOND
PARTY**

The **FIRST PARTY** and the **SECOND
PARTY**, hereinafter collectively referred to as
the **PARTIES**, hereby agree to jointly
implement the cooperation concerning the
execution of educational activities, which
shall be carried out by the **PARTIES** as
stipulated in the following articles.

Article 1

Purpose and Objectives

1. This Implementation Agreement serves
as the foundation for conducting the
International Workshop on Chemistry
Education Innovation, jointly prepared by
the **PARTIES** in accordance with the
scope of cooperation.
2. The objectives of this Agreement are:
 - a. To advance education innovation
through FabLab-Based Chemistry
Education, EthnoSTEM approaches,
and microscale experimentation.
 - b. To provide international exposure for
faculty members and students through
workshops involving experts from
global partner universities.

Article 2

Scope of Activities

1. The implementation of the Curriculum
Focus Group Discussion (FGD) for the
Chemistry Program includes:

Nama. : Prof. Dr. Won Koo Lee
Jabatan : Professor
Alamat. : Chemistry Department, College
of Natural Science (CNS),
Sogang University (SU), South
Korea

Dalam hal ini bertindak untuk dan atas
nama Chemistry Department, College of
Natural Science (CNS), Sogang
University (SU), selanjutnya disebut
PIHAK KEDUA.

PIHAK KESATU dan **PIHAK KEDUA**
selanjutnya disebut **PARA PIHAK**.
Dengan ini sepakat untuk bersama-sama
melaksanakan implementasi Kerja Sama
mengenai Implementasi Pelaksanaan
Kegiatan Pendidikan dilaksanakan oleh
PARA PIHAK seperti diatur dalam pasal
sebagai berikut

Pasal 1

Maksud Dan Tujuan

1. Implementasi Kerja Sama ini
dimaksudkan sebagai landasan
pelaksanaan kegiatan International
Workshop on Chemistry Education
Innovation yang disusun oleh **PARA
PIHAK** sesuai ruang lingkup kerja
sama.
2. Tujuan Implementasi Kerja Sama ini
adalah:
 - a. Mengembangkan inovasi
pembelajaran melalui pendekatan
FabLab-Based Chemistry
Education, EthnoSTEM, dan
eksperimen mikroskala.
 - b. Memberikan paparan internasional
kepada dosen dan mahasiswa
melalui workshop yang melibatkan
pakar dari universitas mitra global.

Pasal 2

Ruang Lingkup Kegiatan

1. Pelaksanaan FGD Kurikulum Kimia
mencakup:
 - a. Review kurikulum eksisting
Program Studi Kimia.

- a. Reviewing the existing curriculum of the Chemistry Study Program.
- b. Discussing the strengthening of learning outcomes (CPL) based on global and national needs.
- c. Preparing curriculum recommendations for implementation in the upcoming academic year.

2. FIRST PARTY:

- a. Provide expert speakers from international partner universities. The curriculum FGD speakers are as follows :
 - Prof.Dr. Fitri Khoerunnisa (Universitas Pendidikan Indonesia)
 - Prof.Dr. I Nyoman Suardana (Universitas Pendidikan Ganesha)
 - Cepi Kurniawan, Ph.D. (Universitas Negeri Semarang)
- b. Provide materials, modules, and examples of best practices in FabLab-based and EthnoSTEM-oriented chemistry curriculum development.
- c. Assist in the process of preparing curriculum recommendations.

3. SECOND PARTY:

- a. Provide curriculum documents, CPL data, and course structures for analysis.
- b. Prepare FGD participants (lecturers, students, and stakeholders).
- c. Draft curriculum recommendations based on the results of the FGD.

4. The PARTIES shall conduct monitoring and evaluation of the FGD outcomes and produce outputs in the form of:

- a. A curriculum recommendation document.
- b. A draft revision of the Chemistry curriculum.

- b. Diskusi penguatan capaian pembelajaran (CPL) berbasis kebutuhan global dan nasional.
- c. Penyusunan rekomendasi kurikulum untuk implementasi tahun akademik berikutnya.

2. PIHAK PERTAMA :

- a. Menyediakan narasumber ahli dari universitas mitra internasional. Narasumber FGD Kurikulum adalah sebagai berikut :
 - Prof.Dr. Fitri Khoerunnisa (Universitas Pendidikan Indonesia)
 - Prof.Dr. I Nyoman Suardana (Universitas Pendidikan Ganesha)
 - Cepi Kurniawan, Ph.D. (Universitas Negeri Semarang)
- b. Memberikan materi, modul, dan contoh best practices kurikulum kimia berbasis FabLab dan EthnoSTEM.
- c. Mendampingi proses penyusunan rekomendasi kurikulum.

3. PIHAK KEDUA :

- a. Menyediakan dokumen kurikulum, data CPL, dan struktur mata kuliah untuk dianalisis.
- b. Menyiapkan peserta FGD (dosen, mahasiswa, dan pemangku kepentingan).
- c. Menyusun draft rekomendasi kurikulum berdasarkan hasil FGD.

4. PARA PIHAK melakukan monitoring dan evaluasi hasil FGD serta menyusun luaran berupa:

- a. Dokumen rekomendasi kurikulum.
- b. Draft revisi kurikulum Kimia.

Article 3 Funding

Expenses arising from the implementation of this workshop shall be borne by each Party according to mutual agreement and shall not impose additional financial obligations beyond the agreed scope of activities.

Article 4 Duration

This Implementation Agreement is effective from the date of signing until the completion of all workshop activities and the preparation of recommendations, covering the period July 2026 to July 2027.

Article 5 Closing

1. Any amendments to this Implementation Agreement may be made upon the mutual consent of the PARTIES.
2. This Implementation Agreement may be considered void if either Party fails to comply with the agreed provisions.
3. Matters not yet regulated in this Agreement shall be determined later through deliberation and subsequently documented in an Addendum, which will form an integral part of this Agreement.
4. This Implementation Agreement is prepared in two (2) original copies, duly stamped, each bearing equal legal force.

Pasal 3 Pembiayaan

Biaya yang timbul dari pelaksanaan workshop ini ditanggung oleh masing-masing pihak sesuai kesepakatan PARA PIHAK dan tidak mengikat pada pembiayaan tambahan di luar ruang lingkup kegiatan.

Pasal 4 Jangka Waktu

Perjanjian Implementasi ini berlaku sejak tanggal ditandatangani hingga selesainya seluruh rangkaian workshop dan penyusunan rekomendasi, yaitu pada periode Juli 2026 sampai Juli 2027.

Pasal 5 Penutup

1. Perubahan atas naskah Implementasi Kerja Sama ini dapat dilakukan atas persetujuan PARA PIHAK.
2. Implementasi Kerja Sama ini dapat dianggap batal apabila salah satu pihak tidak memenuhi ketentuan yang telah disepakati.
3. Hal-hal yang belum diatur dalam naskah ini akan ditetapkan kemudian melalui musyawarah dan dituangkan dalam Addendum.
4. Naskah Implementasi Kerja Sama ini dibuat dalam rangkap 2 (dua), bermeterai cukup, dan memiliki kekuatan hukum yang sama.

First Party/PIHAK KESATU



Prof. Dr. Mokosuli Yermia Semuel, S.Si, M.Si
Dean/ Dekan Fakultas Matematika, Ilmu
Pengetahuan Alam dan
Kebumian, Universitas Negeri Manado

Second Party/PIHAK KEDUA



Prof. Dr. Won Koo Lee
Chemistry Department, College of Natural
Sciences, Sogang University