## Skillsets for 'Expert Developers' in individual Task Teams of the CCQM-TG-DD

### Task Team 1: Unique Identifiers for Chem/Bio Data

- Experience with chemical and biological data structures.
- Knowledge of existing standards for the identification of chemical and biological substances (e.g., InChI, NPU terminology).
- Understanding of ontology development and management, and their application to chemical and biological data.
- Understanding of database interoperability.
- Familiarity with the KCDB and JCTLM DB databases.
- Knowledge of the SI Digital Framework.

These skills will enable the members to provide recommendations on the use of unique interoperable identifiers for chemical and biological substances, ensuring consistency and interoperability across databases.

### Task Team 2: Digitalization of CRM Certificates

- Knowledge of digital certificate management and development.
- Familiriaty with Data security.
- Understanding of long-term maintenance requirements for digital certificates.
- Familiarity with ISO standards related to digital certificates.
- Understanding of stakeholder needs across various sectors and applications.
- Ability to develop guidelines for digital CRM certificates.

These skills will enable the members to contribute to the creation of guidelines for developing and maintaining digital CRM certificates, and understand the resource requirements, data security, and long-term maintenance of digital certificates

**Task team 3: FAIR Principles in Chem/Bio Databases and incorporation of AI:**

- Understanding of FAIR principles and their application to Chem/Bio data.
- Experience with Large Language Model (LLM) systems (In-Context Learning, Chain of Though, RAGs, APIs, Prompt Engineering, AI Agents, etc).
- Familiarity with Machine Learning/AI applications.
- Database development and management.
- Understanding of data structuring and formatting for AI interpretation.
- Ability to develop AI agents for automating database population and updating.
- Familiarity with Chem/Bio reference databases (e.g., JCTLM DB, KCDB).
- Understanding of measurement comparisons, reporting, and certification outputs.

These skills will enable the members to test approaches for making Chem/Bio reference data accessible to LLM systems, evaluate methods for AI to analyze measurement comparisons, and develop AI agents to automate database population