

Applying Artificial Intelligence to Gather Toxicological Data

A hands-on ToxMCP workshop for evidence retrieval, integration and review

3 HOURS	IN PERSON	UP TO 30	6 NOVEMBER 2026
Duration	Format	Participants	09:00–12:00

Organiser: Swiss Centre for Applied Human Toxicology (SCAHT)

Workshop lead: Ivo Djidrovski

Workshop overview

ToxMCP is a Model Context Protocol (MCP) implementation that enables a compatible AI assistant to retrieve and organise evidence from selected toxicology data sources and tools. Through guided setup and a hands-on case study, participants will learn how to gather source-linked evidence while recognising the limits of AI-supported outputs and the continuing need for expert judgement.

Programme

Time	Session	Focus
09:00–09:15	Welcome, scope and boundaries	Objectives, responsible-use boundaries and the case-study question.
09:15–09:35	MCP and the public ToxMCP model	How a compatible AI assistant connects to selected public toxicology sources and tools.
09:35–10:05	Guided ToxMCP setup	Configure the supported desktop client, connect the released public components and run a test query.
10:05–10:15	Break	Short comfort break.
10:15–11:40	Hands-on toxicology case study	Gather and organise evidence, inspect provenance and discuss applicability, uncertainty and limitations.
11:40–12:00	Conclusions, Q&A and next steps	Consolidate learning, collect feedback and identify appropriate follow-up.

AUDIENCE, REQUIREMENTS AND CONDITIONS

Audience and learning outcomes

For toxicologists, risk assessors, regulatory scientists, computational scientists and students. No programming experience is required.

- Understand how MCP and ToxMCP connect an AI assistant to selected toxicology sources and tools.
- Set up and test the released public ToxMCP components in a supported desktop environment.
- Use ToxMCP in a guided case study to gather and organise source-linked toxicological evidence.
- Review provenance, applicability, uncertainty and limitations, and identify where expert judgement remains essential.

Participant requirements

- A laptop on which the participant has administrator rights.
- A compatible desktop AI assistant with an active paid subscription; the supported client and pre-workshop installation guide will be confirmed in advance.
- An individual US EPA Computational Toxicology and Exposure (CTX) API key. The key is free and should be requested from ccte_api@epa.gov at least five business days before the workshop.

Registration and participation conditions

- Attendance is limited to 30 participants and requires advance registration.
- Attendance is restricted to confirmed registrants. Walk-ins, guests, substitutions and remote participation are not permitted.
- Recording, live-streaming, automated transcription, screenshots and photography of restricted demonstrations are not permitted unless explicitly authorised by the workshop lead.
- Participants must not enter confidential, personal, customer, employer-restricted or unpublished regulatory data into workshop systems or exercises. Only presenter-approved materials may be circulated.

Scope and READYAI workshop output

The workshop is limited to released public ToxMCP capabilities and prepared public or synthetic case material. Unreleased services, private environments, source code, internal research systems, proprietary roadmaps and custom organisational workflows are outside scope.

Anonymised learning synthesis

An anonymised synthesis of recurring scientific, usability and readiness observations from the case study may be prepared for the ReadyAI project. It will not include participant names, affiliations, confidential information or attributed quotations.