

Proposals for NORMAN Joint Programme of Activities 2025

Title	NORMAN MassBank / MassBank EU / RMassBank
Type of activity	Database development
Leader	Emma Schymanski & Anjana Elapavalore (LCSB Luxembourg) in co-operation with Tobias Schulze (UBA Berlin), Steffen Neumann (IPB Halle) and Juliane Hollender (Eawag)
Topic / activities	<p>Background / Justification for the proposed activity:</p> <ul style="list-style-type: none"> - Continuous development and upgrade of NORMAN MassBankEU and related activities <p>Description of the proposed activity and expected outcomes for 2025:</p> <ul style="list-style-type: none"> - Upload of mass spectra to MassBank. All NORMAN members are welcome to contribute! - Further maintenance / development of RMassBank - Further maintenance / development of MassBank server platform (e.g. database and applications programming interface, curation of records, import and export of records, standardisation of curation rules – MassBank3 is under development at IPB-Halle and entering test phase) - Improved cross-integration of MassBank and NORMAN-DSFP (see DSFP JPA) - Fostering the collaboration with MassBank.JP members, reinitiated in the past years - Fostering the integration of MassBank with other mass spectral and metadata platforms (e.g. MoNA, PubChem, GNPS, US EPA CompTox, NORMAN SusDat, RforMassSpectrometry, etc.) - Fostering the discussion with vendors for better integration of vendors' software with MassBank - Continuing the discussion on prioritised compounds missing in MassBank (matches to SLE, priority mixtures etc.). - Making MassBank more FAIR (e.g. better integration of ontologies, linked to NFDI4chem) - Integration of MassBank in NFDI4chem as central repository (2020-2025) - MassBank EU publication – scoping and planning under discussion with key Consortium members. Aiming for publication in 2025 (perhaps submission 2024 ...). <p>Added value / Link with other NORMAN activities and / or other projects</p> <ul style="list-style-type: none"> - Enhancement of non-target identification tools and workflows - Integration with NORMAN-SusDat, PubChem and CompTox Dashboard, including fragment list - NORMAN Digital Sample Freezing Platform – fragmentation and better cross-integration - Cross-Action Working Group NTS - Integration into PubChem - Interaction with NFDI4chem – regularly harvested for https://search.nfdi4chem.de/ - Bridging to WG1 Prioritisation - Supporting new activity on mass spectral quality
Participants	LCSB, UFZ, UBA, UoA, IPB Halle, Eawag, all other interested parties and contributors MassBank Consortium: https://github.com/MassBank/
Proposed in-kind contribution	<p>LCSB: Main NORMAN contact point for MassBank; compilation and contribution of MS records; issue input to MassBank platform development; integration into PubChem, contact to MassBank consortium, MoNA, PubChem, CompTox, RMassBank maintenance etc.</p> <p>UFZ: Hosting and maintenance of MassBank Europe server.</p> <p>IPB: Consulting of whole project, MassBank platform development, making MassBank more FAIR, integration of MassBank in NFDI4Chem</p> <p>UoA: Integration of new RTI approaches into MassBank records</p> <p>UoA/EI: Cross-integration of MassBank and NORMAN-DSFP</p> <p>UBA: Inputs into developments</p> <p>MassBank consortium: Further development of MassBank server platform</p> <p>NFDI4chem: Further development of MassBank server platform, integration as core repository in NFDI4chem, contact to vendors</p>
Contribution needed from NORMAN Association¹	<ul style="list-style-type: none"> - Contribution of new mass spectra - Issues/ideas/feedback for MassBank development

¹ Please, provide here a transparent justification of the requested resources and of the in-kind contribution, thereby distinguishing between the costs associated with “person-months” for the organisation, the “travelling costs” for invited speakers and the costs for the logistics (e.g. meals, room rental etc.)