



Eesti Toksikoloogia Seltsi infokiri

Nr 7, 18.12.2025

Lugupeetud Eesti Toksikoloogia Seltsi liige!

Käesolev on järjekorras seitsmes Eesti Toksikoloogia Seltsi infokiri, mille eesmärk on anda liikmetele ülevaade seltsi tegevusest ning kajastada uudiseid. Käesolevast infokirjast võite muuhulgas lugeda intervjuusid seltsi välismaalastest liikmetest **Yemi Ayankunle** ning **Alla Khosrovyan**’iga Suur tänu neile oma mõtteid jagamast! Saate lugeda Tanel Sõrmuse kogemusi seoses Euroopa Registreeritud Toksikoloogi staatuse omandamisega, kajastame septembris toimunud EUROTOXi ja oktoobris toimunud IUTOXi konverentse, millel meie liikmed osalesid. Samuti anname väikese ülevaate Eesti Teaduste Akadeemiaga assotsieerunud seltside tegevusest. Täna kõiki lehe temadesse panustajaid!

Eelinfona anname teada, et ETSi ja soome toksikoloogide ühenduse (<https://www.toksikologit.fi/en/welcome/>) ühine konverents toimub 4-5. mail 2025 Helsingis, kuhu on väga oodatud kõik meie seltsi liikmed!

Infokirjad ning muu Eesti Toksikoloogia Seltsi puudutav informatsioon on väljas ka seltsi kodulehel:

<https://kbfi.ee/ets/>

Ilusaid pühi soovides

Angela Ivask

Eesti Toksikoloogia Seltsi esimees

Respected members of Estonian Society of Toxicology!

This is the seventh newsletter of the Estonian Society of Toxicology, aimed at giving members an overview of the Society’s activities and sharing news. In this newsletter, you can also read interviews with the Society’s non-Estonian members, **Yemi Ayankunle** and **Alla Khosrovyan**. You can read about Tanel Sõrmus’ experiences in obtaining the status of European Registered Toxicologist. We also cover the EUROTOX conference held in September and the IUTOX conference held in October, both of which were attended by our members. In addition, we provide a brief overview of the activities of the societies associated with the Estonian Academy of Sciences. We also cover the EUROTOX conference held in September and the IUTOX conference held in October, both of which were attended by our members. Thank you to everyone who contributed to the topics of this issue!

As preliminary information, we are pleased to announce that the joint conference of the Estonian Society of Toxicology (ETS) and the Finnish Society of Toxicology (<https://www.toksikologit.fi/en/welcome/>) will take place on May 4–5, 2025, in Helsinki. All members of our Society are warmly invited!

The newsletters and other information related to the Estonian Society of Toxicology are also available on the Society’s website:

<https://kbfi.ee/ets/>

Wishing you beautiful holidays,

Angela Ivask

Chair of the Estonian Society of Toxicology

Euroopa Registreeritud Toksikoloogi staatus

Euroopa toksikoloogide register (<https://www.eurotox.com/what-is-ert/>) asutati 1994.a. ning kuulub Euroopa Toksikoloogia Seltside Ühendie EUROTOX juurde. Registreeritud kuuluvad toksikoloogid, kes on tõestanud oma pädevust toksikoloogia valdkonnas ja vastavad esitatud nõuetele (<https://www.eurotox.com/ert-requirements/>). Euroopa registreeritud kuuluvad toksikoloogid kannavad nime Euroopa registreeritud toksikoloog (ERT).

EUROTOXi vahendusel on ERTdele saadaval kvaliteetsed koolituskursused, EUROTOX töötab selle nimel, et ERT staatus oleks ametlikult tunnustatud liikmesriikides laiemalt, sh riiklike asutuste ja ametite poolt. Tööstusettevõtetes tunnustatakse ERT-de erialast pädevust üle Euroopa ning seetõttu pakub registreering eelistusi erialase töö leidmisel. ERT registreerimise kohta on info veebilehel <https://www.eurotox.com/become-an-ert/>. Kahjuks Eestis ERT registreerimist ei toimu.

Meie seltsi liige **Tanel Sõrmus** on võtnud ette teekonna ERT staatuse omandamiseks ning järgnevalt on meil hea meel jagada tema kogemusi sellel teekonnal.

Mõte tõsisemalt ERT suunas liikumisest tekkis mul umbes aasta aega tagasi. Soovisin tööl uusi põnevaid väljakutseid ning haarasin võimalusest end professionaalselt täiendada. Keemiahariduse põhjal toksikoloogiat õppides tunnen üsna kindlalt, sest mõned teemad on tuttavad ning varasemad teadmised haakuvad hästi ka uutega. Huvitav on varasemalt õpitu uude konteksti panna. Esmalt tundus üpris segane, mida ja kuidas täpselt registreeringu omandamiseks tegema peaks. Hindasin, et enamik EUROTOXi seatud nõudeid peaksid mul täidetud olema, kuid kiirelt sai selgeks, et vaja on läbida mitmeid täiendavaid kursusi ning registreerimine tuleb teha mõne välisriigi toksikoloogia seltsi kaudu. Võtsin ühendust Soome ja Rootsi toksikoloogia seltsidega. Rootsi kaudu oleks ERT-iks registreerumine võimalik, kuid enne pean tõendama oma teadmisi kõigis toksikoloogia põhiteemades. Mitmed teemad olid mulle juba varasemalt tuttavad, kuid paljude teemadega oli kokkupuude minimaalne. Magistriõpe välismaal oleks olnud üks võimalus teemade läbimiseks, kuid eelistasin modulaarset lähenemist. Selleks sobitus hästi 12 Hollandi ülikooli koostöös korraldatav PET (Post Educational Toxicology) programm. Samas jäi Rootsi kaudu registreerumise protsess ebakindlaks – oleksin pidinud mitu aastat kursuseid läbima ja alles seejärel selgunuks, kas see kõik lõppeb ERT sertifikaadiga. Seetõttu otsustasin, et kui õpingud toimuvad Hollandis, on otstarbekas registreeruda ka Hollandi Toksikoloogia Seltsi kaudu. Kindluse andis võimalus taotleda ametlikku õppiva toksikoloogi staatust (toxicologist-in-training), mis tähendab, et õppekava kinnitatakse ette ja ERT-ini jõudmine on kindel, kui kõik seltsi nõuded saavad täidetud. Selline garantii oli oluline ka minu tööandjale. Leidsin Hollandi ülikoolist juhendaja ning 2025. detsembris kinnitas Hollandi Toksikoloogia Selts mind ametlikult õppivaks toksikoloogiks. Sain vabastuse mitmetest teemadest ning osa minu keemia doktorantuurist arvestati nõutava kogemusena. Siiani olen läbinud neli nädalapikkust kursust. Õpingud on olnud sisukad ja silmaringi laiendavad. Teekond on veel pooleli, kuid eesmärk on selge – loodetavasti on ERT sertifikaat 2027. aastaks käes.



Status of European Registered Toxicologist

The European Register of Toxicologists (<https://www.eurotox.com/what-is-ert/>) was established in 1994 and operates under EUROTOX, the Federation of European Toxicologists and European Societies of Toxicology. The register includes toxicologists who have demonstrated their competence in the field of toxicology and meet the defined requirements (<https://www.eurotox.com/ert-requirements/>). Toxicologists included in the European register hold the title *European Registered Toxicologist (ERT)*.

Through EUROTOX, high-quality training courses are available for ERTs, and EUROTOX works to ensure broader official recognition of the ERT status in member states, including by national institutions and agencies. Professional competence of ERTs is acknowledged throughout Europe in industrial sectors, and therefore the registration provides advantages when seeking professional employment.

Information about ERT registration is available on the website <https://www.eurotox.com/become-an-ert/>. Unfortunately, ERT registration is not available in Estonia.

Our Society member, **Tanel Sõrmus**, has embarked on the journey of obtaining ERT status, and we are pleased to share his experiences on this path.

The idea of moving more seriously toward ERT arose for me about a year ago. I wanted new and exciting challenges at work and took the opportunity to develop myself professionally. With a chemistry background, studying toxicology feels quite comfortable—some topics are familiar, and earlier knowledge connects well with the new. It is interesting to place previously learned material into a new context. At first, it was quite unclear what exactly needed to be done to obtain the registration. I estimated that I met most of the requirements set by EUROTOX, but it quickly became clear that additional training courses were necessary and that registration would have to be completed through a toxicology society in another country. I contacted the Finnish and Swedish toxicology societies. Registration as an ERT through Sweden would have been possible, but first I would have needed to demonstrate my knowledge in all core toxicology subjects. Many topics were already familiar to me, but I had only minimal exposure to several others. Studying for a master's degree abroad would have been one option, but I preferred a modular approach. The PET (Post-Educational Toxicology) program, offered jointly by 12 Dutch universities, suited this well. However, the registration process through Sweden still felt uncertain—I would have had to complete courses for several years, and only then would it become clear whether all of it would actually result in an ERT certificate. Therefore, I decided that since the studies would take place in the Netherlands, it would be most reasonable to register through the Dutch Society of Toxicology. What gave me confidence was the possibility to apply for official status as a toxicologist-in-training, meaning that the curriculum is approved in advance and reaching the ERT designation is guaranteed once all society requirements are fulfilled. This guarantee was also important for my employer. I found a supervisor at a Dutch university, and in December 2025, the Dutch Society of Toxicology officially confirmed me as a toxicologist-in-training. I received exemptions from several subjects, and part of my PhD studies in chemistry was counted as required experience. So far, I have completed four week-long courses. The studies have been substantial and broadening. The journey is still ongoing, but the goal is clear—hopefully, the ERT certificate will be obtained by 2027.



EUROTOXi strateegiakoosolek: teostatavad algatused ja selged prioriteedid

14. septembril toimus Megaron konverentsikeskuses EUROTOXi strateegiakoosolek, kus delegaadid jaotati temaatilistesse töögruppidesse. Ajurünnakute käigus keskenduti (noor)teadlaste kaasamisele, nähtavuse suurendamisele ning organisatsioonilisele arendusele. Töögruppide ettepanekud esitleti plenaaris ning parimad lahendused valiti hääletuse teel.

Koosolekul tõusid esile mitmed konkreetsed algatused, sh:

- EUROTOX-i saadikuprogramm liikmesriikides, et tugevdada sidet riiklike ühingutega ja suurendada kaasatust;
- uudiskirja sihtrühmapõhine filtreerimine, et vähendada ebaolulise korraldusinfo levikut ja suunata oluline teave õigete adressaatideni
- EUROTOX-i nähtavuse kasvatamine sotsiaalmeedias, sh Instagrami konto loomine ja aktiivsem kommunikatsioon.

Strateegiakoosoleku eesmärk oli käivitada konkreetsed, teostatavad tegevused—eesmärgid, taktikad ja tööviisid—mis toetaksid koostööd ning tõstaksid EUROTOX-i väärtust nii organisatsiooni sees kui ka liikmete silmis.

EURTOTOXi nõukogu koosolek: finantsid, valimised ja tulevaste kongresside ülevaated

EUROTOX-i 2025. aasta nõukogu koosolek (BCM25) toimus teisipäeval, 16. septembril. Istung algas peasekretäri ja laekuri aruannetega, mis käsitlesid organisatsiooni finantsseisu, 2026. aasta eelarvekava ning audiitori kinnitamist. Koosolekul kuulati kandidaatide üheminutilisi ettekandeid presidendi, peasekretäri ja kahe täitevkomitee koostöös ning hääletati EUROTOX2029 korraldusõiguse üle pärast Briti (Birmingham) ja Šveitsi (Basel) ühingute esitlusi. Lisaks käsitleti liikmeskonnateemasid (individuaalliikmete kinnitamine), ratifitseerimisi (valimiskomitee, auliikmed, alakomiteede liikmed) ning juhtimisküsimusi, sh strateegiakoosoleku tulemused ja põhikirja kinnitamine. Samuti anti ülevaated kongresside seisust: Kopenhaagen 2024 (lõpparuanne), Ateena 2025 (esialgne aruanne), Viin 2026 (korraldus), Göteborg 2027 (stardifaasis) ja Lyon 2028 (lepingu allkirjastamine). Enne lõpetamist kuulutati välja uued kandideerimisvoorud 2026. aasta auhindadele, komiteede rollidele ning 2030. aasta kongressi korraldamise kavatsuskirjadele ning teatati valimistulemused.

Ülevaate pani kokku Laura Kaarma

59th EUROTOX Congress took place on September 14th-17th 2025 in Athens

Estonian Society of Toxicology was represented by **Laura Kaarma**.

EUROTOX 2025 in Athens: Strategy and Council Meetings Brought the Organization's Development into Focus

In September, the EUROTOX 2025 congress took place in Athens, accompanied by important organizational meetings in addition to the scientific program. At the strategy meeting — held after a ten-year break — participants discussed EUROTOX's future directions, while the Council meeting included several governance and administrative decisions that will influence the organization's development in the coming years.

EUROTOX Strategy Meeting: Feasible Initiatives and Clear Priorities

On 14 September, the EUROTOX strategy meeting was held at the Megaron Conference Center, where delegates were divided into thematic working groups. During brainstorming sessions, the focus was on (young) researcher engagement, increasing visibility, and organizational development. The working groups' proposals were presented in a plenary session, and the best solutions were selected through voting.

Several concrete initiatives emerged from the meeting, including:

- an EUROTOX ambassador program in member countries to strengthen ties with national societies and increase engagement;*
- audience-specific filtering of the newsletter to reduce the circulation of irrelevant organizational information and ensure important content reaches the right recipients;*
- improving EUROTOX's visibility on social media, including creating an Instagram account and increasing communication activity.*

The goal of the strategy meeting was to launch specific, feasible actions—objectives, tactics, and ways of working—that would support collaboration and enhance EUROTOX's value both within the organization and in the eyes of its members.

EUROTOX Council Meeting: Finances, Elections, and Updates on Future Congresses

The EUROTOX 2025 Council meeting (BCM25) was held on Tuesday, 16 September. The session opened with reports from the Secretary-General and Treasurer, covering the organization's financial status, the 2026 budget plan, and the appointment of the auditor. Candidates delivered one-minute presentations for the positions of President, Secretary-General, and two Executive Committee posts, followed by a vote on the hosting rights for EUROTOX 2029 after presentations from the British (Birmingham) and Swiss (Basel) societies.

Other topics included membership matters (approval of individual members), ratifications (Election Committee, honorary members, subcommittee members), and governance issues such as the outcomes of the strategy meeting and confirmation of the statutes. Updates were also provided on upcoming congresses: Copenhagen 2024 (final report), Athens 2025 (preliminary report), Vienna 2026 (organization), Gothenburg 2027 (initial phase), and Lyon 2028 (contract signing).

Before closing, new calls were announced for the 2026 awards, committee roles, and letters of intent for the 2030 congress, and the election results were presented.

Overview combined by Laura Kaarma

17. IUTOX kongress toimus 15-18. oktoobril Pekingis

Eesti Toksikoloogia Seltsi liikmed esinesid maailma suurimal toksikoloogia kongressil Pekingis 2025. aasta 15.–18. oktoobril toimus 17. rahvusvaheline toksikoloogia kongress (IUTOX 17th International Congress of Toxicology), kus osales üle 1 400 delegaadi enam kui 60 riigist. Tegemist on Rahvusvahelise Toksikoloogia Liidu (IUTOX) poolt iga 3 aasta järel korraldatava olulisima toksikoloogia-alase rahvusvahelise teadusüritusega.

Sel aastal osalesid kongressil ka kolm Eesti teadlast Keemilise ja Bioloogilise Füüsika Instituudi keskkonnatoksikoloogia laborist – Dr. **Anne Kahru**, Dr. **Monika Mortimer** ja Dr. **Kaja Kasemets**, kes kõik on ka Eesti Toksikoloogia Seltsi liikmed. Anne Kahru ja Monika Mortimer olid kongressi korralduskomitee poolt kutsutud esinejad. Suuliste ettekannetega esineti sessioonides, mida juhtis Prof. Sijie Lin prestiižsest Tongji ülikoolist Shanghais ja kelle laboriga oli Eesti teadlastel ka võimalus tutvuda:

- Anne Kahru ettekanne “Biotests and biosensors for the Evaluation of Ecosafety and Novel (Nano)Materials” käsitles KBFI KTL laboris loodud ja/või kasutatavaid erinevaid bioteste uute (nano)materjalide keskkonnaohutuse hindamisel.
- Monika Mortimer tutvustas ettekandes “Safe-by-Design Metal-phenolic network Nanocomposites for Environmental Remediation” Eesti Teadusagentuuri projekti PRG2188 raames tehtud uurimistööd, keskendudes ohutute metalli-fenoolsete nanokomposiitide rakendamisele saasteainete eemaldamiseks.
- Kaja Kasemets esitles ettekanndes “Synthesis and characterization of novel antibacterial and antifungal silver-chitosan nanocomposites: a mechanistic study” uudsete hõbe-kitosaani nanokomposiitide sünteesi, omadusi ja antimikroobset toimet meditsiiniliselt oluliste bakterite ja seente vastu. Teema on aktuaalne bakterite ja seente kasvava antimikroobse resistentsuse tõttu. Tulemused põhinesid ETAG projektidel PRG749 ja PRG2595.

Kongress pakkus osalejatele võimaluse tutvuda toksikoloogia tänapäevaste uurimissuundadega alates molekulaarsetest mehhanismidest kuni regulatiivsete rakendusteni ning aruteludeni selle üle, kuidas toksikoloogia saab aidata lahendada üleilmseid probleeme – näiteks keskkonnasaastust – või toetada uute tehnoloogiate, sh rohepöörde, arengut. Ühes kongressi avaettekandes rõhutas Prof Thomas Hartung (Johns Hopkins University), et toksikoloogia liigub kiiresti uute loomkatsevabade meetodite, sealhulgas organoidide, integreeritud oomikate ja tohutu kiirusega just tehisintellekti suunas.

Järgmine IUTOX kongress toimub 2028. aastal Vancouveris, Kanadas (11.–14. juuni).

Uudise pani kokku Kaja Kasemets

17th IUTOX Congress took place in Beijing on 15–18 October

Members of the Estonian Society of Toxicology participated in the world's largest toxicology congress in Beijing. From 15–18 October 2025, the 17th International Congress of Toxicology (IUTOX 17th International Congress of Toxicology) was held in Beijing, bringing together more than 1,400 delegates from over 60 countries. This is the most important international toxicology scientific event, organized every three years by the International Union of Toxicology (IUTOX).

This year, three Estonian researchers from the Environmental Toxicology Laboratory of the National Institute of Chemical Physics and Biophysics (KBFI) took part in the congress: **Dr. Anne Kahru, Dr. Monika Mortimer, and Dr. Kaja Kasemets**, all of whom are members of the Estonian Society of Toxicology. Anne Kahru and Monika Mortimer were invited speakers by the congress organizing committee. They gave oral presentations in sessions chaired by Prof. Sijie Lin from the prestigious Tongji University in Shanghai, whose laboratory the Estonian researchers also had the opportunity to visit:

- **Anne Kahru's** presentation, "Biotests and biosensors for the Evaluation of Ecosafety and Novel (Nano)Materials," focused on various bioassays developed and/or used at the KBFI Environmental Toxicology Laboratory for assessing the environmental safety of new (nano)materials.
- **Monika Mortimer** presented "Safe-by-Design Metal-phenolic network Nanocomposites for Environmental Remediation," highlighting research conducted within the Estonian Research Council project PRG2188, with emphasis on applying safe metal-phenolic nanocomposites for removing environmental pollutants.
- **Kaja Kasemets** delivered the presentation "Synthesis and characterization of novel antibacterial and antifungal silver-chitosan nanocomposites: a mechanistic study," introducing the synthesis, properties, and antimicrobial activity of novel silver-chitosan nanocomposites against medically important bacteria and fungi. The topic is highly relevant due to increasing antimicrobial resistance. The results were based on Estonian Research Council projects PRG749 and PRG2595.

The congress offered participants the opportunity to explore contemporary research directions in toxicology—from molecular mechanisms to regulatory applications—and discussions on how toxicology can help solve global challenges such as environmental pollution or support the development of new technologies, including the green transition. In one of the keynote lectures, **Prof. Thomas Hartung (Johns Hopkins University)** emphasized that toxicology is rapidly moving toward new non-animal methods, including organoids, integrated omics, and especially high-speed advances in artificial intelligence.

The next IUTOX congress will take place in Vancouver, Canada, on **11–14 June 2028**.

Compiled by Kaja Kasemets

Teaduste Akadeemiaga assotsieerunud seltside ümarlaud

Eesti Toksikoloogia Selts on alates 2017.a. assotsieerunud Eesti Teaduste Akadeemiaga (TA). Akadeemiaga on assotsieerunud 25 Eestis tegutsevat teadusseltsi.

Taga assotsieerunud seltsidel on võimalik akadeemialt taotleda tegevustoetust ning üks kord aastas kasutada tasuta TA saali seltsi ürituse korraldamiseks.

Aastast 2022 on korraldatud seltside ümarlauda, mille eesmärgiks oli seltside esindajaid kokku tuua ning luua eeldusi seltsidevaheliseks koostööks. Ümarlaual arutatakse seltside tegevust puudutavate teemade üle. Akadeemiliste seltside esindajate kokkusaamist korraldab Hannes Rohtsalu Eesti loodusuurijate seltsist. Kokkusaamistel on arutletud seltside missiooni üle teaduses, seltside unikaalsete ressursside üle, nii seltside omavahelise koostöö kui ka akadeemiaga koostöö üle. Sel aastal 26. novembril said seltside esindajad kokku lõunal Tartus restoranis Vilde ja Vine. Eesti Toksikoloogia Seltsi esindasid seltsi esimees **Angela Ivask** ja juhatuse liige **Kaja Orupõld**. Lisaks lõunatamisele räägiti viimasel kohtumisel seltside tegevuse motivatsioonist, arutati seltside nähtavaks tegemise võimalusi ja mõtiskleti seltside tuleviku üle. Ühiselt otsustati, et seltsi ürituste kohta jagatakse infot teistele akadeemiaga assotsieerunud seltsidele (seltsid@akadeemia.ee). Arutleti ühisürituste korraldamise üle ja kõlama jäi idee, et akadeemiaga assotsieerunud seltse ja nende tegemisi võiks tutvustada taskuhäälingu formaadis.

Riik on järgmistel aastatel vähendamas TA rahastamist, seetõttu on ka seltside tegevuse toetamiseks raha vähem kui eelnevatel aastatel. Sellele vaatamata on TA lubanud seltside korraldatavaid üritusi rahaliselt toetada.

Roundtable of Societies Associated with the Estonian Academy of Sciences

The Estonian Society of Toxicology has been associated with the Estonian Academy of Sciences (EAS) since 2017. In total, 25 scientific societies operating in Estonia are associated with the Academy. Societies associated with the Academy can apply for operational support from the EAS and may use the Academy's hall once a year free of charge for organizing a society event.

Since 2022, a roundtable for the societies has been organized with the aim of bringing society representatives together and creating conditions for cooperation between societies. The roundtable is used to discuss topics related to the activities of the societies. Meetings of academic societies are coordinated by Hannes Rohtsalu from the Estonian Naturalists' Society. During the meetings, participants have discussed the mission of societies in science, the unique resources societies possess, opportunities for cooperation both between societies and with the Academy. This year, on 26 November, representatives of the societies met for lunch in Tartu at the restaurant Vilde ja Vine. The Estonian Society of Toxicology was represented by the Society's Chair, **Angela Ivask**, and board member **Kaja Orupõld**.

In addition to the lunch, the latest meeting addressed motivation for society activities, considered ways to increase the visibility of societies, and reflected on their future. It was jointly decided that information about society events will be shared with other societies associated with the Academy via the email list (seltsid@akadeemia.ee). Joint events were also discussed, and the idea emerged that associated societies and their activities could be introduced in the form of a podcast.

The state plans to reduce the Academy's funding in the coming years, meaning that there will be less money available for supporting the activities of the societies compared to previous years. Nevertheless, the Academy has promised to continue financially supporting events organized by the societies.

Uudise pani kokku/compiled by Kaja Kasemets

Meet the colleague!

Alla Khosrovyan

What is your current job/what are you currently doing?

Investigating the potential effects of metal-phenolic networks on aquatic species.

What specialty have you studied?

Ecotoxicology

Where have you worked before (the current job/activity)?

Before coming to Estonia, I worked at the University of Cadiz, Spain in terms of my PhD enrollment. After that I have worked at Institute of Chemical Physics and Biophysics, Anne Kahru's lab.

How did you get into toxicology and why are you interested in toxicology?

My PhD was about marine and coastal management. It is a wide area including physical, chemical and biological dimensions of coastal zones. I chose to specialize in ecotoxicology.

With what expectations did you join the Estonian Toxicology Society?

I would expect to enlarge my professional network with the help of the Society to be able to easily find colleagues interested in the same research questions as I would be for future grant proposals. Also, to be always the first to know about advances in the ecotoxicology.

Where and how do you see the role of toxicology-related specialties (including in Estonia)?

A toxicology-related role is always demanded. Any past anthropogenic footprint needs to be evaluated to avoid same errors in the future and any new activity requires to be tested to ensure that the environmental harm is minimal. Especially in Estonia currently, it could be employed to evaluate the impact of wind mills, PFAS (per- and polyfluoroalkyl substances), metal-phenolic networks (MPNs) or metal-organic frameworks (MOFs), plastics on the wildlife and humans.

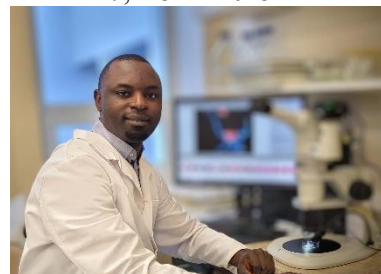


Meet the colleague!

Yemi Ayankunle

What is your current job/what are you currently doing?

I am an environmental engineer and junior researcher working on microplastic contamination in wastewater systems in Estonia, focusing on sampling, quantification, sludge characterization, and the development of removal technologies. My work integrates both academic research and practical collaboration with wastewater treatment utilities.



What specialty have you studied?

I have studied at Tallinn University of Technology (TalTech) Environmental Engineering at the master's level, with earlier training in Chemical Engineering in Nigeria. Currently I'm pursuing my industrial PhD degree at TalTech, Estonia. My specialization focuses on wastewater treatment processes, environmental contamination, and microplastic pollution assessment.

Where have you worked before the current job/activity?

Before my current research role, and as a wastewater technologist at Emajõe Veevärk AS. I worked as a wastewater operator at Türi Vesi OÜ. These roles involved operating and optimizing treatment systems, sludge management, and supporting facility performance improvements across municipal wastewater treatment plants.

How did you get into toxicology and why are you interested in toxicology?

My path into toxicology grew from collaboration with Dr. Margit Heinlaan whose research focuses on the environmental toxicity of plastic particles and functional additives. Currently we have been able to work together on different wastewater and sludge samples across Estonia. Studying how these particles interact with the environment, treatment processes, and potentially biological systems created a strong motivation to understand their toxicological implications. This connection between engineering, environmental impact, and ecosystem health is the key reason for my continued interest.

With what expectations did you join the Estonian Toxicology Society?

I joined the Estonian Toxicology Society with the expectation of expanding my knowledge of contaminant toxicity, strengthening collaborations with experts in related fields, and contributing environmental engineering perspectives to national discussions on emerging pollutants. I also value the opportunity to stay informed about toxicology research relevant to risk assessment and regulation in Estonia.

Where and how do you see the role of toxicology-related specialties (including in Estonia)?

Toxicology-related specialties play an increasingly important role in assessing the risks posed by new and persistent contaminants, including microplastics, chemical additives, pharmaceuticals, and industrial by-products. In Estonia, toxicology provides essential scientific support for environmental monitoring, regulatory development, and public health protection. As wastewater treatment technologies evolve and new contaminants emerge, toxicology will remain central to ensuring that policy decisions and engineering solutions are grounded in evidence-based risk evaluation.