

Toxic Metals Symposium

Munich

Friday, July 4th 2025 Saturday, July 5th 2025



In cooperation with



Deutsche DFG Forschungsgemeinschaft



Toxic metals

Serious health problems are caused by toxic metals such as lead, mercury and arsenic. There is compelling evidence that even at low levels of exposure increase the burden of disease from cancer as well as cognitive and cardiovascular disorders. Thus, there is a need to reduce human exposure to toxic metals, particularly in low- and middle-income countries. This symposium will address the issues of environmental and human biomonitoring, risk assessment and risk mitigation.

Covered topics include amongst others:

• Mining and processing of minerals related to the transition from fossil fuels to renewable energy.

• Analytical advances such as microsampling

•Human exposure and health effects

The symposium will include a science-policy panel. The aim of this panel is to discuss with scientists, policy makers and citizens the existing and needed policy efforts to mitigate the effects of exposure on human health and to reduce the health impacts.

We hope to see you in Munich on 4th and 5th of July 2025!

Morando Soffritti, Daniele Mandrioli & Melissa McDiarmid Collegium Ramazzini

Dennis Nowak & Stephan Böse-O'Reilly & Stefan Rakete LMU University Hospital



Second Announcement - Program

Friday 4th of July 2025				
9.00-11.00	Heading the stage			
	Welcome notes	Dennis Nowak	Director Institute and Clinic of Occupational,	Germany
		Thomas Gudermann	Dean Medical Faculty LMU Munich	Germany
		Francesca Biagini	Vice President LMU Munich	Germany
		Maria Ward School Bass Ensemble	Musical intermezzo	International
		Daniele Mandrioli	Secretary General Collegium Ramazzini	Italy
		Melissa McDiarmid	President Collegium Ramazzini	USA
	Housekeeping	Stefan Rakete	Ludwig Maximilian University (LMU)	Germany
	Keynote: Green transition – future minerals and potential health impacts	Karin Broberg	Lund University	Sweden
	Musical intermezzo	Michelle O'Reilly	Maria Ward School Bass Ensemble	International
	Who is who in the room - expectations and backgrounds	Stefan Rakete	Ludwig Maximilian University (LMU)	Germany
	Moderation	Melissa McDiarmid	Collegium Ramazzini	USA
11 00 11 00	Danak			
11.00-11.30	Break			
11.30-13.00	Setting the scene - Exposure to toxic metals			
	Occupational exposure to toxic metals	Daniele Mandrioli	Ramazzini Institute	Italy
	The carcinogenicity of metals	Kurt Straif	Boston College & ISGlobal Spain	USA/Spain
	Used lead acid batteries recycling in Africa and India	Anuradha Varanasi & Andreas Manhart	Oeko-Institute	Germany / India
	E-waste and occupational health in Ghana	Andrea Kaifie- Pechmann	Friedrich-Alexander- Universität Erlangen	Germany
	Artisanal and small-scale gold mining and children's health	Stephan Böse- O'Reilly	Ludwig Maximilian University (LMU)	Germany
	Discussion	Morando Soffritti (moderation)	Collegium Ramazzini	Italy



13.00-14.00	Lunch			
	Musical break	Michelle O'Reilly	Maria Ward School Bass Ensemble	Internationa
14.00-14.45	Keynote: Toxic metals and global health	Phil Landrigan	Boston College	USA
14.30-16.00	Human exposure to toxic metals in the Global South I			
	Southern Africa - One health and toxic metals	John Yabe	University of Namibia	Namibia
	Occupational and environmental exposure to lead in Indonesia	Dewi Yunia Fitriani	Universitas Indonesia	Indonesia
	Occupational metal exposure and health outcomes in the Congolese copper belt region	Paul Musa Obadia	University of Lubumbashi	Democratic Republic of Congo
	An investigation on the adverse impacts of mineral mining on the environment / Zimbabwe	Brandon Phathisani Sibanda	Enviro recsus Zimbabwe	Zimbabwe
	Strategies for protecting people from OSH hazards during brown-field expansion of industrial plants in mineral & metals sectors	Krishna Nirmalya Sen	L&T Construction, Minerals & Metals IC	India
	Discussion	Muchtaruddin Mansyur (moderation)	Universitas Indonesia	Indonesien
16.00-16.30	Break			
16.30-18.00	Human exposure to toxic metals in the Global South II			
	Monitoring lead exposure in Indian children	Yi Lu	Vital Strategies	USA
	Childhood anemia and malnutrition correlated to lead exposure in Zambia	Tiza Mufune	District Health Office Kabwe / CiH LMU	Zambia
	Cognitive functions of pupils around e-waste site in Accra, Ghana	Abigail Serwaa Akoto Bawua	University of Ghana	Ghana
	Artisanal and small-scale gold mining and occupational health in the Philippines	Jinky Leilanie Lu	University of the Philippines Manila	Philipines
	Lead in spices: evidence from the 100 most populous cities across India	Jenna Forsyth	Stanford Woods	USA
	Discussion	Katja Radon (moderation)	Ludwig Maximilian University (LMU)	Germany
8.00-22.00	Get together			St. Vincenz



Saturday 5th of July 2025				
8.30-11.00	Toxic metal in the Northern Hemisphere			
	Toxicology of aluminium	Andrea Hartwig	Karlsruhe Institute of Technology (KIT),	Germany
	Effect of organic food intervention treatment on biomarkers of exposure to lead and cadmium in school children of Cyprus.	Konstantinos C. Makris	Cyprus University of Technology	Cyprus
	Lead exposure of children in a former mining area in Germany	Lea John	Ludwig Maximilian University (LMU)	Germany
	Mercury exposure via tuna consumption	Adna Alilovic	Institute Jožef Stefan Slovenia	Slovenia
	Depleted uranium exposure in military populations	Melissa McDiarmid	University of Maryland	USA
	Military occupational exposure to embedded metal fragments	Joanna Gaitens	University of Maryland	USA
	Are big lithium batteries a potential health risk due to electro-magnetic fields?	Morando Soffritti	European Foundation Ruberti-Schileo and Ramazzini Institute	Italy
	Exposure to metals during recycling of lithium-ion batteries for electric vehicles	Florencia Harari	University of Gothenburg	Sweden
	Discussion	Dennis Nowak (moderation)	Ludwig Maximilian University (LMU)	Germany
11.00-11.30	Break			
11.30-13.00	Young researcher's work on toxic metals			
	E-poster presentation a 3-5 minutes	Dingani Moyo (moderation)	National University of Science and Technology	Zimbabwe
	Mercury released into the environment from the uncontrolled dumping of medical thermometers in hospitals in Cameroon	Samuel Tetsopgang	Association Institute of Total Environment (INTEV)	Cameroon
	Diet dependence of mercury exposure in Northern and Southern European populations	Marti Nogués Freixas	IDAEA - CSIC	Spain
	Artisanal gold mining, mercury and health in Paraguay	Laura Emilce Flores Rodriguez	Hospital de Clínicas Paraguay	Paraquay
	Working towards zero lead emissions from the battery recycling industry for a just energy transition in India.	Anuradha Vanasi	Columbia University	India
	Comparative measurements of toxic metals in dust in 66 households and 55 museum institutes with wipe samples and dust traps	Katharina Deering	Ludwig Maximilian University (LMU)	Germany
	Dynamics of value and power: Organization of the informal e-waste sector in Ghana and its health impacts	Johanna Elbel	Sciences Po	France
	Heavy metals monitoring following the massive use of fire crackers in Dehli	Tushar Joshi	Maulana Azad Medical College India	India
	Biomonitoring of occupational exposure to mercury among dentists in the Fes-Meknes region. Morocco	Imane Bensouda Korachi	Moulay Ismail University Morocco	Morocco
	Metal exposures and biomarkers of liver damage: A systematic review of observational studies	Ibrahim Issah	University of Ghana	Ghana
	Benchmark dose analysis of lead toxicity in wistar rats: identifying critical toxic effects	Dragana Vukelic	University of Belgrade	Serbia



13.00-14.00	Lunch			
14.00-16.00	New analytical tools and other topics			
	"Do No Harm": Understanding and addressing lead exposure in development programs	Rachel Bonnifield	Center for Global Development	USA
	New analytical approaches to inform exposure assessment and treatment	Don Smith	University of California	USA
	Microsampling as potential tool for toxic metal assessment	Stefan Rakete	Ludwig Maximilian University (LMU)	Germany
	Criminal Arsenic Poisoning, a Case Study	Syarifah Hidayah Fatriah	Muhammadiyah University of Riau	Indonesia
	Rapid market screening - lead in consumer products	Aelita Sargsyan	Pure Earth/ University of Valencia	Armenia
	Discussion	Monica Nordberg (moderation)	Karolinska Institutet	Sweden
15.45-16.15	Break			
16.15-16.45	Keynote: Global burden of health from lead and mercury exposure	Ernesto Sanchez- Triana, Björn Larsen	World Bank	USA/Sweden
16.45-18.00	Existing policy interventions - panel			
	Short inputs a 5 minutes, panel discussion, general discussion			
	Sustainable minerals - wanted!	Luca Maiotti / Caecilie Le Gallic	OECD Centre for Responsible Business	France
	Tackling the global burden of lead poisoning	Rachel Bonnifield	Center for Global Development	USA
	Lesson learnt - remediation of lead hotspot areas in Kabwe/ Zambia	Pamela Mwanza	Ministry of Mines	Zambia
	Moral mining - responsibility of industry - rights of communities	Sophie Turner	Leigh Day	UK
	Lead in gasoline - what we need to learn from a success story	Ernesto Sanchez- Triana	World Bank	USA
	Lithium and Co - future chalenges for policies	Karin Broberg	Lund University	Sweden
	Moderation	Melissa McDiarmid	President Collegium Ramazzini	USA



Organizational details

The symposium will take place in St. Vinzenz (Nussbaumstr. 5, 80336 Munich), a charming former convent in Munich/Germany. It is located in the inner-city premises of the LMU University Hospital, surrounded by hotels of all categories, close to the Central Station and very well connected to public transport (U-Bahn Goetheplatz or Sendlinger Tor).

The symposium is planned as a hybrid meeting. The attendance is free of charge. Participants must organize their own travel and accommodation. For participants from low and middle-income countries, there is limited support for travel and accommodation costs provided by the German Research Foundation (DFG) and the Collegium Ramazzini (CR). Several travel grants were provided, and the application period is now closed. We still would like to encourage young researchers with topics on toxic metals to register for the Eposter session.

The Bavarian Medical Association is requested to provide continuing education credits for the event.

Please use the following links for registration and access to the symposium homepage.

Registration



https://www.umfragen-amklinikum.de/index.php/435933?n ewtest=Y&lang=en

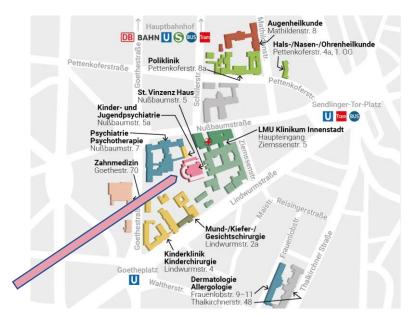
Homepage



https://www.lmuklinikum.de/arb/fortbildung/toxicmetals-symposiummunich/e6f6a43e045b3894



Site map (Event takes place in St. Vinzenz House (in PINK), Nussbaumstr. 5, 80336 Munich)



If you have further questions, please contact us at <u>ARB.Toxicmetals@med.uni-muenchen.de</u>.