



International symposium on Environmental and Molecular Toxicology of Chemicals

7th December 2023, Zagreb, Croatia

Institute for Medical Research and Occupational Health, Ksaverska cesta 2, Zagreb, Croatia

Lecture hall

Programme

8:30-9:00	Registration
9:00-9:05	Opening
Session I – Pesticides and cholinesterases (Chair: Zrinka Kovarik)	
9:05-9:20	Zrinka Kovarik (IMI, HR): Environment and chemicals in the focus of 75 years of research at the Institute for Medical Research and Occupational Health
9:20-9:40	Heidi Qunhui Xie (RCEES, CN): New perspective on regulation of acetylcholinesterase by dioxins
9:40-10:00	Zoran Radić (UCSD, USA): Structural basis of organophosphate pesticide toxicity inferred from atomic level studies of acetylcholinesterase structure
10:00-10:20	Goran Šinko (IMI, HR): In silico examination of pesticide cholinesterase interactions via molecular modeling
10:20-10:35	Dora Kolić (IMI, HR): Neurotoxic impact of organophosphate pesticides via inhibition of cholinesterase activity
10:35-11:00	Coffee break
Session II – New approaches in chemical toxicology (Chair: Maja Katalinić)	
11:00-11:20	Višnja Stepanić (IRB, HR): Use of chemoinformatics in toxicology
11:20-11:40	Maja Katalinić (IMI, HR): Xenobiotics' effects on the living organism: a cell-based research
11:40-11:55	Yagsheng Chen (RCEES, CN): Aryl hydrocarbon receptor (AhR) pathway mediated activation of primary cultured astrocytes after 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) exposure
11:55-12:10	Ruihong Zhu (RCEES, CN): Effects of 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) on human renal tubulointerstitial fibrosis
12:10-12:30	Davor Želježić (IMI, HR): Increasing resolution of pesticides' genotoxicity evaluation by implementing fluorescent <i>in situ</i> hybridization
12:30-13:30	Lunch break
Session III – Environmental pollutants and biomonitoring (Chair: Jasna Jurasović)	
13:30-13:50	Jasna Jurasović (IMI, HR): Human biomonitoring as a tool in assessment of prenatal environmental exposure to metal(loid)s
13:50-14:10	Antonija Sulimanec Grgec (IMI, HR): Metals in fish and rice available on the Croatian market: Is there a risk for consumers health?
14:10-14:30	Darija Klinčić (IMI, HR): Research on polybrominated diphenyl ethers in Croatia
14:30-14:50	Goran Gajski (IMI, HR): Impact of air pollutants on genome stability and health-related biomarkers
14:50-15:10	Gordana Pehnec (IMI, HR): Air quality in Croatia - levels, legislation and recent research
15:10-15:30	Coffee Break
Session IV – Exposure to chemicals and adverse effects (Chair: Irena Brčić Karačonji)	
15:30-15:50	Irena Brčić Karačonji (IMI, HR): Hair analysis as a toxicological tool for the detection of psychoactive substances
15:50-16:10	Veda Marija Varnai (IMI, HR): PyrOPECh project - risk assessment for adverse effects of dietary pesticide exposure on neuropsychological and sexual development in pubertal boy
16:10-16:25	Marija Macan (IMI, HR): Insecticide residues in food samples from the Total Diet Study-Zagreb region: preliminary results
16:25-16:45	Nikolina Maček Hrvat (IMI, HR): Oxime therapy diminishes the neurotoxic effect of organophosphorus compound in mice
16:45-17:00	Closing