## **Tuesday 29 October 2019** 2019年10月29日, 星期二 14:00-22:00 Conference reception 会议报到 18:00-20:00 Welcome Reception 欢迎酒会 Wednesday 30 October 2019 2019年10月30日, 星期三 8:30-9:00 Opening 开幕式 Wastewater-based epidemiology-past development and future perspectives Session 1 主顯1 污水流行病学的发展和未来展望 Ettore Zuccato, Italy Wastewater-based epidemiology: past, present and future 9:00-9:30 (invited) Talk 1 污水流行病学的过去、现在和未来 意大利 (特激) Future perspectives for wastewater-based epidemiology: Testing urban water for Adrian Covaci, community-wide public health assessment Belgium Talk 2 9:30-9:50 污水流行病学的新进展:城市污水监测在社区健康评价中的应用 比利时 Jochen Mueller, Reflections on a decade of wastewater-based epidemiology in Australia Australia 9:50-10:10 Talk 3 澳大利亚污水流行病学研究状况综述 澳大利亚 10:10-10:30 Coffee break 茶歇 Session 2 主题2 Government funded WBE programs 政府资助的污水流行病学项目 Zhendong Hua, China Application of wastewater-based epidemiology in drug trends monitoring index system in (invited) Talk 4 10:30-11:00 China 污水流行病学在中国毒情监测指数体系中的应用 中国 (特邀) A Kankaanpää, Trends in stimulant drug use in Finland 11:00-11:20 Finland Talk 5 芬兰的兴奋剂使用趋势研究 芬兰 S Neilson or A Downstream benefits of a national government funded wastewater program Migus, Australia 11:20-11:40 Talk 6 国家资助污水监测项目的效益研究 澳大利亚 Andrew Chappell, New Zealand national wastewater monitoring programme-challenges, successes and initial New Zealand results Talk 7 11:40-12:00 新西兰 新西兰国家污水监测项目的挑战、成功和初步成效 12:00-13:30 Lunch break 午餐 Refining WBE methodology 污水流行病学方法的改进 Session 3 主题3 Consumed or fly-tipped? Can drug biomarker residues in wastewater originating from Pim de Voogt, Netherlands (invited) consumption be distinguished from dumped chemicals? Talk 8 13:30-14:00

消费还是倾倒? 污水中药物消费产生的生物标志物是否能与药物倾倒区分开?

based epidemiology

污水流行病学中污水处理厂服务区人口匡算研究

14:00-14:20

Talk 9

Characterization of wastewater treatment plant catchment populations for wastewater-

荷兰 (特邀)

Australia

澳大利亚

Ben J Tscharke,

Talk 10	14:20-14:40	Refining the excretion factor of ketamine for wastewater-based epidemiology estimation - Combining pharmacokinetic and wastewater data 氯胺酮排泄率计算的改进-药代动力学与污水数据相结合	Peng Du, China 中国
Talk 11	14:40-15:00	Comprehensive evaluation of illicit drugs stability based on measurements in laboratory reactors and a pilot-scale sewer system 基于实验室模拟和污水管网系统的非法药物稳定性评价	Jiaying Li, Australia 澳大利亚
Talk 12	15:20-15:40	Suspected and nor-target screening combined to linear and non-linear distance measures to detect MDMA and amphetamine synthesis markers in wastewater 污水中摇头丸和苯丙胺的合成标志物检测研究	Frederic Béen, Netherlands 荷兰
15:40-16:00		Coffee break 茶歇	
Session 4 主题4 Monitoring other psychoactive substances in wastewater 污水中其他精神活性物质监测			Ú
Talk 13	16:00-16:30	Monitoring drug use in Europe: where does wastewater-based epidemiology fit? 污水流行病学在欧洲药物滥用监测中的适用性研究	João Martias, EMCDDA (Invited) 欧洲毒品和成瘾监 测中心(特邀)
Talk 14	16:30-16:50	Determining the occurrence of novel psychoactive substances in Australia using wastewater analysis 污水分析在澳大利亚新精神活性物质监测的应用	Richard Bade, Australia 澳大利亚
Talk 15	16:50-17:10	Assessing pattern of use of new psychoactive substances (NPS) in the population-The NPS Euronet project 新精神活性物质的滥用模式评估-欧洲NPS Euronet项目	Sara Castiglioni, Italy 意大利
Talk 16	17:10-17:30	Development, validation and application of bioanalytical assays to detect and quantify biomarkers for psychoactive pharmaceuticals in influent wastewater 生物分析方法在污水中精神药物生物标志物定量检测中的应用	Tim Boogaerts, Belgium 比利时
Talk 17	17:30-17:50	Challenges, limitations and possibilities for the screening of new psychoactive substances in wastewater 污水中新精神活性物质筛选的挑战、局限和前景	Lubertus Bijlsma, Spain 西班牙
18:00-20:00 Dina		Dinner 晚餐	

## Thursday 31 October 2019 2019年10月31日,星期四

Session 5 主题5		WBE monitoring around the globe 全球污水流行病学监测		
Talk 18	8:30-9:00	Current status and future implications of wastewater-based epidemiology in the USA 美国污水流行病学研究的现状和未来发展	Bikram Subedi, USA (Invited) 美国(特邀)	
Talk 19	9:00-9:20	The application of wastewater based epidemiology for local municipalities to investigate drug consumption rather than using the national figures 污水流行病学在地方政府调查毒品消费中的应用	Erik Emke, Netherlands 荷兰	
Talk 20	9:20-9:35	Illicit drug consumption of Istanbul from 14 WWTPs in the city 伊斯坦布尔基于14个污水处理厂的毒品消费研究	Selda Mercan, Turkey 土耳其	
Talk 21	9:35-9:50	Making sense of drug levels in wastewater from industrial sites 工业废水中的药物浓度水平研究	Cobus Gerber, Australia 澳大利亚	
Talk 22	9:50-10:05	Estimation of alcohol and tobacco intake in limited population in the Moscow region from wastewater analysis 基于污水分析的莫斯科地区人群酒精和烟草摄入量估算	V.V. Rozhanets, Russia 俄罗斯	
Talk 23	10:05-10:20	Estimation of community drug abuse in the Reykjavik metropolitan area by wastewater analysis 污水分析在雷克雅未克城市社区药物滥用估算中的应用	A.S.C. Löve, Iceland 冰岛	
10:20-10:	40	Coffee break 茶歇		
Session 6 主题6		Advanced wastewater monitoring approaches 污水监测方法新进展		
Talk 24	10:40-11:00	Real Real-time measurements of illicit drugs in wastewater- a pipe dream or useful reality? 污水中非法药物的实时监测-空想还是现实?	Christoph Ort, Switzerland 瑞士	
Talk 25	11:00-11:20	Developing a national wastewater monitoring program to coincide with a population census: a case study using the Australia census and the potential implications for population health 制定与人口普查同步的全国污水监测计划:澳大利亚人口普查与人群健康状况研究	Jake W O'Brien, Australia 澳大利亚	
Talk 26	11:20-11:40	Low-cost and rapid sensors for profiling sewage for public health assessment 用于公共健康评估的低成本快速污水监测传感器	Zhugen Yang, UK 英国	
Talk 27	11:40-12:00	Using participatory research to develop an online WBE dashboard to address the United States opioid epidemic 使用参与性研究开发在线污水监测方法应对美国阿片类药物滥用	Joshua C Steele, USA 美国	
12:00-13:	00	Lunch break (Poster session) 午餐(展板论文展示)		
Session 7	主题7	WBE in a broader context 污水流行病学的广泛应用前景		
Talk 28	13:00-13:30	Triangulating survey and wastewater-based epidemiology to better measure community drug use 三角调查和污水流行病学在社区药物滥用估算中的联合应用	Jason Ferris, Australia (Invited) 澳大利亚(特邀)	
Talk 29	13:30-13:50	Wastewater-based epidemiology combined with law enforcement and forensic toxicological data: better cross-governmental policies and more accurate picture on drug use 污水流行病学、执法与法医毒理数据的结合:跨政府政策和药物滥用监测	Teemu Gunnar, Finland 芬兰	
Talk 30	13:50-14:10	Appetite-suppressant, anesthetic, hypnotic and illicit drugs in the wastewater treatment plant, and their estimated consumption rates in Korea 食欲抑制药、麻醉药、催眠药和违禁药在韩国污水处理厂中的检出水平及其消费量估算	KY Kim, Korea 韩国	

Talk 31	14:10-14:30	Identification and analysis of water-borne human nutritional biomarkers to assess population nutritional status 基于污水中人体营养标志物的监测来评价人群营养状况	DA Bowes, USA 美国
Talk 32	14:30-14:50	Social, economic and demographic correlates of chemical consumption and diet identified by wastewater-based epidemiology 基于污水流行病学的化学品消费与社会、经济和人口统计的相关性研究	Phil M Choi, Australia 澳大利亚
Talk 33	14:50-15:05	Estimating population consumption to areca nut in major Chinese cities through wastewater-based epidemiology 基于污水流行病学的中国主要城市槟榔消费量研究	H Huang, China 中国
Talk 34	15:05-15:20	Assessing the trend of diabetes mellitus by analysis of metformin as a biomarker in wastewater 以二甲双胍为污水生物标志物评价糖尿病趋势	Y Xiao, China 中国
Open Forum 论坛	15:20-15:50	PANEL DISCUSSION 专题讨论	Moderated by: Adrian Covaci Sara Castiglioni
15:50-16:00		Closing 闭幕式	
After 16:00		Tour: Ancestral Temple and Lingnan Tiandi 参观:祖庙和岭南新天地,晚餐自由安排	

## Poster Session 展板部分

Number	Title	First Author
编号	<b>题目</b> The application of wastewater-based epidemiology to monitor illicit drug and alcohol	第一作者
P01	consumptions in Lithuanian communities 污水流行病学在立陶宛的社区非法药物和酒精消费监测中的应用	A L.N. van Nuijs
P02	Licit and illicit drug consumption among school children and students in Slovenia: a wastewater-based epidemiological approach 地致文尼亚类似 多和类化的人社和北社基地或事,其工实业这年完全专社	T Verovšek
P03	斯洛文尼亚学龄儿童和学生的合法和非法药物消费:基于污水流行病学方法 Towards establishing population markers in wastewater in the United States 美国生活污水中的人口标记物研究	DA Burgard
P04	Modeling wastewater temperature and attenuation of sewage-borne biomarkers globally 全球污水中生物标志物的温度与衰减规律模拟	Olga E Hart
P05	Transferring technology from academia to the marketplace: the Aquavitas case study 从学术到市场的技术转移: Aquavitas案例研究	AJ Gushgari
P06	Tracking chemical and biological hazards nationally and globally using the human health observatory (HHO) 基于人类健康观测项目的全国和全球化学品和生物危害跟踪研究	RU Halden
P07	Expanding wastewater-based epidemiology by using glucocorticoid hormones to assess population stress 污水流行病学的扩展-利用糖皮质激素评估人群压力	EM Driver
P08	Declining trend in consumption of methamphetamine in China by wastewater-based epidemiology 从污水流行病学看我国甲基苯丙胺消费量的下降趋势	XT Shao
P09	Wastewater-based epidemiology as complementary data source in drug utilization research: state-of-the-art and future perspectives 基于污水流行病学数据的药物利用研究: 现状与展望	T Boogaerts
P10	The transportation behavior of illicit drug users from different regions to the capital of China using wastewater-based epidemiology 基于污水流行病学的非法吸毒者迁移行为研究	Shang Zhao
P11	Unknown-unknown Screening of Wastewater by UHPLC-HRMS System 基于UHPLC-HRMS的污水中未知物筛选研究	Kenneth Chow
P12	Spatial distribution and consumption patterns of illicit drugs in Guangdong province, China by wastewater analysis 基于污水分析的广东省违禁药品消费模式和空间分布研究	K Yuan
P13	Integrating wastewater-based epidemiology into adolescent education to improve community health 将污水流行病学与青少年教育结合以改善社区健康	DA Bowes
P14	A paper-microfluidic electrochemical aptamer sensor for rapid detection of antibiotics in water 用于快速检测水中抗生素的纸微流控电化学适配体传感器	Yuwei Pan
P15	In situ active sampling to assess community exposure using wastewater-based epidemiology 通过污水流行病学的现场采样评估社区暴露	JC Steele
P16	Estimating population exposure to phthalate esters in major Chinese cities through wastewater-based epidemiology 基于污水流行病学的中国主要城市居民邻苯二甲酸酯类的暴露估算	Peng Du
P17	Monitoring methadone and other opioids use in major Chinese cities by wastewater-based epidemiology 中国主要城市美沙酮和其他阿片类药物使用的污水流行病学监测	Peng Du
P18	Assessing alternative population size proxies in a wastewater catchment area using mobile device data 利用移动设备数据评估污水厂服务区的人口规模	JA Baz-Lomba
P19	Estimating the level of drinking and smoking in major cities of China in 2014 and 2016 using wastewater-based epidemiology 应用污水流行病学方法估算2014年和2016年中国主要城市的饮酒和吸烟水平	J Gao
P20	Estimating the level of illicit drug use in Hanoi: a preliminary study using wastewater-based epidemiology 基于污水流行病学的越南河内非法药物滥用评估	P Thai
P21	Assessing the impact of in-sewer degradation of biomarker to the final alcohol consumption estimates: a case study 下水道内生物标志物的降解对酒精消费量估算的影响: 案例研究	Q Zheng

P22	Monitoring drug, alcohol and nicotine consumption by using wastewater-based epidemiology: Turkey model 应用污水流行病学监测药物、酒精和尼古丁的消费: 土耳其模型	N Daglioglu
P23	Refining the excretion factor of prescription drugs by analyzing mass load of biomarkers in wastewater and prescription statistics 应用污水中生物标志物负荷量和处方统计数据优化处方药的排泄因子	Jianfa Gao
P24	Monitoring the life habits of Istanbul: caffeine, nicotine and alcohol 伊斯坦布尔居民对咖啡因、尼古丁和酒精的消费习惯监测:	Merve Kuloglu
P25	Estimation the decaying of four potential drug-indicators for high incidences in water 污水中四种潜在药物标志物的衰减估算	Ping Li
P26	Monitoring of ethyl sulfate (ETS) in wastewater samples for estimation of alcohol consumption in Adana, Turkey 通过监测污水中的硫酸乙酯估算土耳其阿达纳的酒精消耗量	EY Guzel
P27	Reduction in methamphetamine consumption trends from 2015 to 2018 detected by wastewater-based epidemiology in Dalian, China 基于污水流行病学调查的中国大连市2015-2018年甲基苯丙胺消费量下降趋势研究	Z Wang
P28	Novel colorimetric sensors for duplexed detection of methamphetamine and cocaine using non-aggregated nanoparticles 基于非聚集纳米颗粒的甲基苯丙胺和可卡因联合检测新型比色传感器研究	Kang Mao