

BEM APPROVED CPD: 2
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TECHNICAL TALK ON CONTAINMENT AND REDUCTION OF EMERGING CONTAMINANTS IMPACT ON THE ENVIRONMENT: THE NEXT GEOSYNTHETICS REVOLUTION.

SPEAKER

PROF DR A (MALEK) BOUAZZA

DATE : 13 DECEMBER 2023, WEDNESDAY

TIME : 5PM - 7PM

VENUE : AUDI HALL 2 (6117)

MONASH UNIVERSITY MALAYSIA. BANDAR SUNWAY

REGISTRATION FEES
MEMBERS : RM 15.00
NON-MEMBERS: RM 70.00

SYNOPSIS

Emerging contaminants are chemicals detected in water supplies or leachates at trace levels for which the environmental effects are unknown and for which treatment technologies are often untested. They are receiving worldwide attention due to their persistence, bioaccumulation potential and adverse effects on biota and humans. Often, they are not included in regulated monitoring in any local jurisdiction, sometimes despite being detected in waste containment facilities. Thus, their presence in waste streams remains relatively unknown publicly. Furthermore, current containment liner systems were not designed with the primary intent to consider emerging contaminants. Therefore, such contaminants can present unexpected and unacceptable risks of release to the environment.

Moreover, the liner systems' effectiveness can be adversely impacted, and their real service life potentially diminished through interaction with emerging contaminants, raising significant concerns for regulators worldwide. The fate and migration of emerging pollutants in geosynthetic liner systems are still unresolved and are a knowledge gap that needs to be addressed. This lecture will give an insight into the new breed of geosynthetics developed to tackle the rising concern about the effect of emerging contaminants on the environment.

SPEAKER'S BIODATA

Dr A (Malek) Bouazza is a Professor of Geotechnical Engineering at Monash University, Melbourne, Australia. He engages extensively with industry and regularly conducts peer reviews, third-party reviews and expert consultation for containment-system engineering projects such as landfills, mining waste containment facilities, heap leach pads, shale/coal gas recovery ponds, pit thermal energy storage facilities, industry process liquid ponds or similar, and cases subject to litigations. He has led and co-wrote the key liner components of the landfill standard (Best Practice Environmental Management: Siting, design, operation and rehabilitation of landfills, EPA Publication 788) for the State of Victoria, Australia, which is now used as a model for much of the country. He is the immediate past chair of the ISSMGE Technical Committee TC 215 on Environmental Geotechnics and the founding chair of the IGS TC on barriers. His research has been recognised by several awards, including the IGS Award (twice) for outstanding contribution to advances in the scientific and engineering developments of geosynthetics, the Telford Premium Prize (twice) from the Institution of Civil Engineers, U.K., the R.M. Quigley Award (twice) from the Canadian Geotechnical Society, the E.H. Davis Memorial Lecture Award from the Australian Geomechanics Society, and the IGS Plaque for significant contributions to the International Geosynthetics Society and outstanding technical contributions to the geosynthetics discipline. He has presented prestigious named lectures, including the Zeng Guoxi Lecture (2014), the AGS Davis Lecture (2016) and the 3rd ISSMGE honour lecture on Environmental Geotechnics (3rd Kerry Rowe Lecture, 2022,2023). He was named in 2021 as an Honorary Life Member of the Australasian Chapter of IGS (ACigs) in recognition of the significant contribution he has made in supporting the geosynthetics profession, and in 2022 he was presented with the IGS chapter service award in recognition of his exceptional service and achievement at the chapter level as well as internationally.

