

7th International Conference on

CLIMATE CHANGE AND MEDICAL ENTOMOLOGY

October 15-16, 2018 Dubai, UAE



Workshop (Day 1)

7th International Conference on

CLIMATE CHANGE AND MEDICAL ENTOMOLOGY

October 15-16, 2018 Dubai, UAE



Raeesa Moolla

University of the Witwatersrand, South Africa

Biography

Raeesa Moolla attained her PhD at the age of 30, at the University of the Witwatersrand, where she is now a tenured lecturer. Her research interests lie in hotspot monitoring and modelling of urban-scale air pollution and its impacts on human health; specifically related to VOC emissions and pollution from the transport sectors. She is also involved in surface and tropospheric ozone research; and is currently participating in the IGAC-led TOAR project. Dr Moolla currently has over 25 publications and conference proceedings to her name, with an additional five publications being reviewed by recognized peer-reviewed journals.

Raeesa.Moolla@wits.ac.za

Notes:

7th International Conference on

CLIMATE CHANGE AND MEDICAL ENTOMOLOGY

October 15-16, 2018 Dubai, UAE



Scientific Tracks & Abstracts (Day 1)

7th International Conference on

CLIMATE CHANGE AND MEDICAL ENTOMOLOGY

October 15-16, 2018 Dubai, UAE

An occupational health risk assessment for exposure to BTEX: A case study of informal traders in a metro centre (taxi rank) in South Africa**Raeesa Moolla and M Dubazana**

University of the Witwatersrand, South Africa

Many South African commuters use minibus taxis daily and are connected to the informal transport network through metro centres informally known as 'taxi ranks'. A taxi rank forms part of an economic nexus for many informal traders, where they work alone in designated areas along the periphery of the taxi rank. Consequently, informal traders are at potential risk of adverse health effects associated with the inhalation of exhaust fumes from the taxis. Of particular concern is a group of hazardous volatile organic compounds, known as BTEX (viz. benzene, toluene, ethylbenzene and xylenes). The BTEX compounds are known to have a high level of toxicity, both in acute and chronic exposure situations. Thus, an occupational health risk assessment for informal traders exposed to BTEX compounds was investigated. The health risk assessment included a questionnaire and three active sampling campaigns. The sampling campaigns were conducted using the synspec spectras gas chromatography 955 instrument. Results indicated that the average ambient concentrations were 8.46 ppb, 0.63 ppb, 1.27 ppb and 1.0 ppb for benzene, toluene, ethylbenzene and xylenes respectively; which were above acceptable South African Air Quality Standards (i.e. 8-hour-running-average). The daily variation of BTEX compounds also indicated increased benzene and xylene concentrations when ambient temperatures increased, a concern with future climate fluctuations. The average cancer risk calculated for the informal traders was 9.46×10^{-3} . Although this was an acceptable cancer risk, in a number of individual cases, there were incidences of unacceptable risk to the cumulative exposure of BTEXtotal.

Biography

Raeesa Moolla attained her PhD at the age of 30, at the University of the Witwatersrand, where she is now a tenured lecturer. Her research interests lie in hotspot monitoring and modelling of urban-scale air pollution and its impacts on human health; specifically related to VOC emissions and pollution from the transport sectors. She is also involved in surface and tropospheric ozone research; and is currently participating in the IGAC-led TOAR project. Dr Moolla currently has over 25 publications and conference proceedings to her name, with an additional five publications being reviewed by recognized peer-reviewed journals.

Raeesa.Moolla@wits.ac.za

Notes:

7th International Conference on

CLIMATE CHANGE AND MEDICAL ENTOMOLOGY

October 15-16, 2018 Dubai, UAE

The climatic response of ground beetles (Carabidae, Coleoptera) in the Northern Baikal (Barguzin State Nature Reserve)**Tatiana Ananina**

Federal State Establishment, Russia

Climate variability is a regulator of natural systems. The analysis of the climate in the Barguzinsky Reserve for the period 1955-2015 was carried out. A stable positive trend of the average annual air temperature and the length of the frost-free period with a stable level of atmospheric precipitation noted. Temperatures of air at the end of winter, in spring, summer and autumn months have grown. The arrival of winter became later, and the onset of spring was early. Snow cover is ahead of the average long-term date. To understand the adaptive capacity of ecosystems to climate change, there is a need for a quantitative analysis of the flora and fauna indicator species reactivity. The quantitative calculations of ground beetles in the Barguzin Range high-altitude transect in 1988-2015 were carried out. The statistical method Poisson regression on the logarithmic scale "meteorological factors-the number of ground beetles" is applied. The interaction of calculated group indices is considered: the sum of the active air temperatures; the level of summer and winter precipitation, the duration of the frost-free period; longitude of snow cover, the Rubtsov hydrothermal coefficient, the final occurrence of maximum temperatures above 10° C (spring), the stable transition of minimum temperatures above 5° C (summer) and the decisive transition of minimum temperatures below 0° C (autumn), the establishment of a snow cover. The Poisson regression analysis made it possible to quantify the communications "meteorological factors-the ground beetles number" to compile an ecological scale characterizing the tolerance of ground beetles to environmental factors.

Biography

Tatiana Ananina graduated from Tomsk State University in 1980, Chair of Zoology of Vertebrates. 1980-1982 - Researcher at the Tomsk University Zoological Museum. 1982-1987 - Senior Engineer of the Monitoring Station in Barguzinsky Reserve. Since 1988 she has been senior researcher, entomologist in State Nature Barguzinsky reserve. In 1999 she defended the thesis "Ground beetles of barguzin ridge" at the Candidate of Biological Sciences. He has published more than 200 papers in the journals, participated in 45 scientific conferences. She took part in expedition work in the southern and northern part of Lake Baikal.

t.l.ananina@mail.ru

Notes:

7th International Conference on

CLIMATE CHANGE AND MEDICAL ENTOMOLOGY

October 15-16, 2018 Dubai, UAE

Adaptive and interactive climate future by integrating scientific information with local perceptions**Engila Mishra Maharjan**

Climate Change Specialist at ASHA Project, Nepal

Climate change is already having adverse impacts on ecosystems and communities through higher temperatures, prolonged droughts and more frequent extremes. However, a gap remains between public understanding, scientific knowledge about climate change and effective adaptation options identification and implementation. Adaptation to the climate change cannot effectively occur unless the planning process adopts an ecosystem-based approach. The livelihoods of smallholder farmers/community depend on natural systems that extend beyond administrative boundaries. Therefore, to enhance the climate resilience of natural environment and to sustain ecosystem services needs to consider the environment at a larger ecosystem level in Adaptation for Smallholders in Hilly Areas (ASHA) Project. This poster highlights the novel approaches for covering natural boundary of climate change adaptation plan by adopting the enhanced approaches for climate change adaptation planning and implementation which integrates scientific information with local perceptions and also it contributes to fulfill the gaps. These approaches are Geographic Information System (GIS) based sub-watershed and Participatory Scenario Development (PSD). Since, GIS based sub watershed assessment is necessary in order to support for ecosystem level resilience building by addressing upstream and downstream linkages whereas PSD is necessary for envisioning future for balancing both development and ecosystem needs. Therefore, this assessment process provides communities with the opportunity to interactively explore different climate futures, builds capability and capacity for dealing with complex challenges and socializes adaptation priorities with diverse publics. Furthermore, it enhances learning effects for resilient climate futures.

Biography

Engila Mishra Maharjan has completed her Master of Science in Natural Resource Management from Pokhara University, Nepal and has completed her second master of Science in Sustainable Energy System and Management from Flensburg University. She has worked in the field of environment, energy and climate change more than 12 years in South East Asia region and has published more than 10 papers in reputed journals.

engilam@gmail.com

Notes:

7th International Conference on

CLIMATE CHANGE AND MEDICAL ENTOMOLOGY

October 15-16, 2018 Dubai, UAE



Workshop (Day 2)



7th International Conference on

CLIMATE CHANGE AND MEDICAL ENTOMOLOGY

October 15-16, 2018 Dubai, UAE



Engila Mishra Maharjan

Climate Change Specialist at ASHA Project, Nepal

Biography

Engila Mishra Maharjan has completed her Master of Science in Natural Resource Management from Pokhara University, Nepal and has completed her second master of Science in Sustainable Energy System and Management from Flensburg University. She has worked in the field of environment, energy and climate change more than 12 years in South East Asia region and has published more than 10 papers in reputed journals.

engilam@gmail.com

Notes:

7th International Conference on

CLIMATE CHANGE AND MEDICAL ENTOMOLOGY

October 15-16, 2018 Dubai, UAE



7th International Conference on

CLIMATE CHANGE AND MEDICAL ENTOMOLOGY

October 15-16, 2018 Dubai, UAE

Long-term variations of atmospheric parameters over United Arab Emirates**Seyda Tilev Tanriover**

Abu Dhabi Polytechnic, UAE

Assessing the statistics and trends of atmospheric variables is the very basic step for the climate change risk management. The numerical weather prediction models have displayed an increasing credibility for achieving sound simulations of the interactions between the atmosphere and the earth surface. Those models have been used together with the assimilation procedure which combines the model forecasts with all available observations including conventional and satellite information to generate gridded reanalysis datasets. Atmospheric reanalysis datasets are commonly used and are reliable sources for analyzing the long-term variations of atmospheric variables because of their uniform global coverage and long-term availabilities. This study is also developed by using one of those widely referred atmospheric reanalysis datasets, i.e. European Center for Medium-Range Weather Forecast ERA-interim. Era-Interim data has 0.75° horizontal grid spacing, 28 vertical levels, consisting of 1 surface level and 27 pressure levels from 1000 hPa to 100 hPa and available with 6 hours interval (00 UTC, 06 UTC, 12 UTC, 18 UTC). Parameters such as 2-meter temperature, maximum temperature, minimum temperature, sea surface temperature, total column water vapor and total precipitation are analyzed for the 38-year period of 1979-2017.

Biography

Seyda Tilev is currently working as an Assistant Professor at Abu Dhabi Polytechnic, Meteorology Department. She has completed her MSc in Satellite Communication and Remote Sensing (2009) and PhD degree in Atmospheric Sciences (2016) from Istanbul Technical University, Turkey. She received the scholarship from University of Manchester, School of Earth and Environmental Sciences. She has published many papers in reputed journals. Her research interests include renewable energies, climate change, air pollution, severe convective storms, atmospheric modeling and NWP and data assimilation. She is also a Member of American Meteorological Society.

seyda.tanriover@adpoly.ac.ae

7th International Conference on

CLIMATE CHANGE AND MEDICAL ENTOMOLOGY

October 15-16, 2018 Dubai, UAE

Evanescing beauty and viability of coastal beaches of Colombo districtSivakumaran Sivaramanan¹ and SarathKotagama²¹Central Environmental Authority, Sri Lanka²University of Colombo, Sri Lanka

Sri Lanka has been ranked at the 5th place in the list of world's most sea waste producing Countries. Sea waste comprises the slow decaying or accumulated manmade products at the seashore and deep-sea waters. It has been observed that sources of the waste depend on the type of coastal location of the beach. According to weekly beach survey conducted for two months and data analysis done by Clean Coast Index (CCI) method, some beaches in the Colombo district are rarely visited by public and they are at the backyard of rural population and become the dumping sites for them (domestic dumping sites) such as Moratuwa and Ratmalana. Beaches in Wellawatte, Dehiwala, Bambalapitiya and Kollupitiya hold wastes from mixed sources such as domestic dumping, wastes from commercial activities such as hotels, from running trains and from beach visitors and beaches in Mt. Lavana, Galleface and Mattakuliya hold similar kind of wastes that are mostly from beach visitors including tourists. Furthermore, wastes from fishing related activities are abundant in Dehiwala, they are nylon fishing nets, ropes and polystyrene floats. In addition, PET bottle usage by the fisherman also significantly high. In urban areas such as Kollupitiya, Bamblapitiya, Wellawatte and Dehiwala most of the wastes are carried by the drainage canals. Mechanized beach grooming is not possible in most of the locations due to the presence of Southern railway track and stone fences thus source level mitigation plans have to be implemented such as penalties and banning of certain types of plastics.

Biography

Sivakumaran Sivaramanan is currently working as an Environmental Officer since 2014 in Central Environmental Authority, Sri Lanka.

sivaramanansr@hotmail.com

Notes:

7th International Conference on

CLIMATE CHANGE AND MEDICAL ENTOMOLOGY

October 15-16, 2018 Dubai, UAE

Industrial initiatives towards reducing water pollution**Shruti Bhargava**
India

In 2016, the water crisis was determined as the global risk of highest concern for people and economies for the next 10 years (WEF, 2016). Our ability to cope with current and future stresses on freshwater resources is a core challenge of the 21st century (CDP Global Water Report, 2017). Ensuring adequate water quality and quantity are of increasing importance in recent times owing to climate change related uncertainties and pollution related activities. The immediate source of water pollution is waste water discharge from various sources. Ocean acidification, plastic contamination, creation of dead zones is some of the visible effects of anthropogenic intervention. Companies and industrial sectors across the world are recognizing the crucial role water plays in the sustainability of their operations. Water related risks and opportunities are being accounted for and organizations are working together to alleviate the pollution causing effects of their operations. Measures include finding alternate modes of fuel, researching alternative modes of packaging, coming up with newer ways to have circular resource management, forward and backward integration, committing to reduce their water consumption per unit of production, among others. These measures may be small but contribute towards responsible resource consumption and showcase an organizations commitment towards contributing their bit. Actions taken today will determine if we have the possibility of water secure tomorrow.

Biography

Shruti Bhargava has completed her MBA in Business Sustainability, Environmental Pollution, Climate Change, Environmental and Organizational Sustainability and also worked on assignments related to Sustainable Agriculture, third generation biofuels, poverty alleviation and livelihood generation. She has worked with organizations in multiple sectors including manufacturing, textile, FMCG, telecom and oil and gas.

shrutibhargava25@gmail.com

Notes: