Storm Vortex in the Centre of Parana- State on June 6, 2017: A Case Study



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A vortex originating from a cumulonimbus cloud, tapering toward the ground, and touching it is called a tornado. Feared and admired by man, the tornado is an atmospheric phenomenon that can cause a catastrophe to pass through. If it reaches an unsuspecting and unprotected population on inhabited urban and rural properties, it can lead to human losses and serious material damage. It causes serious losses with the death of wild and farmed animals. On June 6, 2017, an alleged tornado hit the municipalities of Rio Branco do Iva and Rosario do Iva, located in the state of Paran, southern Brazil. The images of the alleged tornado have been disseminated on social networks and in several newspapers in the country. Local officials reported the damage caused by the alleged tornado, causing a large number of homeless, with the destruction of houses, as well as the killing of animals and the destruction of rural properties. The occurrence of tornado had not been confirmed by the countryâ€™s meteorological institutes. A search was initiated to verify the probable cause of the losses and damages caused in these counties, by the supposed tornado. The analyzes indicate that not one, but probably more than a tornado hit the counties of the central region of Parana state. Tobacco smoking is one of the leading causes of mortality and morbidity globally. Tobacco smoking is responsible for 6 billion deaths per year globally, and nearly 10% of deaths due to tobacco smoking are in passive smokers. On average, a smoker's life span is reduced by 10 years compared to non-smokers. There are different ways of smoking substances including bidis (the hand-rolled cigarette), cigar, cigarettes, roll-your-own, hookah, kretek, pipe smoking and vaporizers .The hookah is the second most common way of smoking tobacco. The hookah, which is also called the "waterpipe" or "shisha" is an apparatus invented in 16th century in an attempt to purify tobacco smoke by passing it through water. Hookah use has become prevalent particularly, in developing countries. The misconception that inhaling smoke through the hookah is less toxic and its relative cheap price may be responsible for this increase. However, a recent study has indicated that hookah smoking is equivalent to smoking of a cigarette.Although the effects of cigarette smoking on health has been well studied, the effects of hookah smoking on disease development, and biochemical measurements is less studied. Findings on the adverse effects of hookah smoking on lipid profile are inconsistent. Only an experimental study and a single study with a relatively small sample size have been conducted about hookah smoking and hematological measurements. The only study on the effect of hookah smoking and serum glucose level in a small sample population was recently published .We aimed to determine the association between cigarette and hookah smoking and metabolic parameters, obesity, cardiovascular disease, diabetes mellitus, metabolic syndrome and dyslipidemia in the MASHAD study population .Data was taken from MASHAD (Mashhad stroke and heart atherosclerotic disorder) study (2010–2012). Individuals were recruited from the population living in Mashhad using a stratified cluster random sampling technique . A total of 9840 participants aged between 35 and 65 entered the study. Baseline characteristics were recorded in a questionnaire including demographic data, history of smoking (cigarette, hookah), cardiovascular risk factors and anxiety and depression tests. Fasting blood samples were taken after 14 h of fasting from ante-cubital vein. Cell blood count (CBC) including hemoglobin (Hb), red blood cell (RBC), mean corpuscular volume (MCV), mean corpuscular hemoglobin (MCH), mean corpuscular hemoglobin concentration (MCHC), hematocrit (HCT), red blood cell distribution width (RDW) and platelet count (PLT) were measured with Sysmex K21. Hitherto, he has authored more than twenty books and book chapters in different fields of Chemistry. Syne, he has been awarded more than seven hundreds reputed international awards, prizes, scholarships and honors. Heretofore, he has multiple editorial duties in many reputed international journals, books and publishers. Hitherward, he is a member of more than two hundreds reputed international academic–scientific–research institutes around the world. In addition, he is member of the Nobel committee for Chemistry. It should be noted that he is currently the President of American International Standards Institute (AISI), Irvine, California, USA and also Director of the BioSpectroscopy Core Research Laboratory at California South University (CSU), Irvine, California, USA.

Research and Innovations

Biophysical Chemistry, Bimolecular Spectroscopy, Quantum Chemistry, Nano chemistry, Modern Electronic Structure Computations, Theoretical Chemistry, Mathematical Chemistry, Computational Chemistry, Vibrational Spectroscopy, Molecular Modelling. Biophysical Chemistry

Biography

Alireza Heidari is a Full Distinguished Professor and Academic Tenure of Chemistry and also Enrico Fermi Distinguished Chair in Molecular Spectroscopy at California South University (CSU), Irvine, California, USA. He has got his Ph.D. and D.Sc. degrees from California South University (CSU), Irvine, California, USA. Furthermore, he has double postdocs in Project Management, Oncology, Human Cancer Tissues and Synchrotron Radiation from Monash University, Melbourne, Victoria, Australia and also in Nanochemistry and Modern Molecular Electronic"Structure Computations Theory from California South University (CSU), Irvine, California, USA. His research interests include Biophysical Chemistry, Biomolecular Spectroscopy, Quantum Chemistry, Nanochemistry, Modern Electronic Structure Computations, Theoretical Chemistry, Mathematical Chemistry, Computational Chemistry, Vibrational Spectroscopy, Molecular Modelling, Ab initio & Density Functional Methods, Molecular Structure, Biochemistry, Molecular Simulation, Pharmaceutical Chemistry, Medicinal Chemistry, Oncology, Synchrotron Radiation, Synchrocyclotron Radiation, LASER, Anti"Cancer Nano Drugs, Nano Drugs Delivery, ATR"FTIR Spectroscopy, Raman Spectroscopy, Intelligent Molecules, Molecular Dynamics, Biosensors, Biomarkers, Molecular Diagnostics, Numerical Chemistry, Nucleic Acids, DNA/RNA Monitoring, DNA/RNA Hypermethylation & Hypomethylation, Human Cancer Tissues, Human Cancer Cells, Tumors, Cancer Tissues, Cancer Cells, etc. He has participated at more than five hundred reputed international conferences, seminars, congresses, symposiums and forums around the world as yet. Also, he possesses many published articles in Science Citation Index (SCI)/ International Scientific Indexing (ISI), Medline/PubMed and Scopus Journals. It should be noted that he has visited many universities or scientific and academic research institutes in different countries such as United States, United Kingdom.

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