Professor Douglas Holdway (Tier 1 Research Chair in Aquatic Toxicology, Professor of Ecotoxicology, Faculty of Science, University of Ontario Institute of Technology) launched the ‘Climate Change and Chemicals’ book while presenting a seminar at the RMIT University, Melbourne, Australia on 30 July 2010. The book was published by New India Publishing Agency in 2010 (email: newindiapublishingagency@gmail.com; web: www.bookfactoryindia.com).

Key aspects covered in the book

1. The Book - Climate Change and Chemicals - Environmental and Biological Aspects addressed the two key global environmental issues: climate change and chemical impacts on human health, environment and agricultural production with reference to chemistry, ecotoxicology, toxicology, and biology.

2. There are two parts: Part-1 of the book ‘Climate Change Impacts’ (5 chapters) provides an account of greenhouse gases (GHGs) and its relationships to climate change and likely impacts of climate change on water resources, agriculture and livestock, fisheries and aquatic ecosystems and human health. Part-2 of the book ‘Chemical Impacts’ (8 chapters) highlights the existing and potential environmental impacts of arsenic, heavy metals, pesticides, dioxins, endocrine disrupting chemicals, pharmaceuticals (human and veterinary drugs) and freshwater and marine biotoxins.

3. The book provides a world and regional reviews (Asia-Pacific including Bangladesh and Australasia and other parts of the world) on the impacts of both climate change and harmful chemicals on human health, environment and agricultural production and measures to reduce the impacts of climate change and chemicals.

4. The authors emphasize that there could be a link between climate change and chemicals, for example:
   - The expected rise of surface water temperature due to global warming could accelerate growth of harmful algal blooms which produce toxins (freshwater biotoxins and marine biotoxins).
   - Increases in the concentrations of CO$_2$ in the atmosphere are likely to cause further acidification of the oceans (called ‘Ocean acidification’).
   - Temperature increases are likely to cause a decrease in dissolved oxygen supply and decreased levels of dissolved oxygen could result in endocrine disruption in fish.
   - Where intense rainfall is expected to increase due to climate change, as a result run-off of pollutants such as pesticides (insecticides, herbicides), heavy metals (Cd, Cu, Hg, Zn), endocrine disrupting chemicals (estrone, estradiol nonylphenol, bisphenol A) and pharmaceuticals (antibiotics, NSAID, beta blockers, antineoplastics), into water bodies will increase.
   - The warmer climates and climate extremes could be more favourable to the proliferation of insect pests and plant diseases resulting in increased use of pesticides chemicals.
   - Changes in temperature and precipitation are projected to increase the frequency of bush fires and during bush fires, dioxins and other organic pollutants would be released into the atmosphere.

5. The book documented the complex and technical information in a simplified manner for catering to mass awareness in improving and managing both human and environmental health from the effects of climate change and harmful chemicals.

6. The book would be beneficial to academic and research institutes, and university students (undergraduates and postgraduates), agriculturists, biomedical scientists, chemists, chemical/environmental/hydro engineers, ecotoxicologists, environmental scientists, freshwater/marine fisheries biologists, health professionals, hydrogeologists, water and public health professionals, and government planners, regulators and environmental campaigners.

The article was compiled by Golam Kibria, Ph.D in August 2010 for http://www.sydneybashi-bangla.com (18) for community benefits.
Climate Change is geared toward a variety of students and general readers who seek the real science behind global warming. Exquisitely illustrated, the text introduces the basic science underlying both the natural progress of climate change and the effect of human activity on the deteriorating health of our planet. Noted expert and author Edmond A. Mathez synthesizes the work of leading scholars in climatology and related fields, and he concludes with an extensive chapter on energy production, anchoring this volume in economic and technological realities and suggesting ways to reduce greenhouse New chapter on Global Climate providing a self-contained treatment of climate forcing, feedbacks, and climate sensitivity. New chapter on Atmospheric Organic Aerosols and new treatment of the statistical method of Positive Matrix Factorization. Updated treatments of physical meteorology, atmospheric nucleation, aerosol-cloud relationships, chemistry of biogenic hydrocarbons. Abstract Climate change has become a widespread topic in recent years. This a problem that resulted from the emission of greenhouse gases that affect our environment. Therefore, it raises questions on whether the problem is caused by human activities or it’s just a part of nature’s cycle. This paper discusses and compares the factors that contribute to climate change by humans and nature, some effects of climate change, and some solutions that have been developed to prevent or slow climate change from progressing. Climate Change. According to NASA, the Earth average temperature has increased a The Book -Climate Change and Chemicals -Environmental and Biological Aspects' addressed the two key global environmental issues: climate change and chemical impacts on human health, environment and agricultural production with reference to chemistry, ecotoxicology, toxicology, and biology. There are two parts: Part-1 of the book 'Climate Change Impacts' (5 chapters) provides an account of greenhouse gases (GHGs) and its relationships to climate change and likely impacts of climate change on water resources, agriculture and livestock, fisheries and aquatic ecosystems and human h