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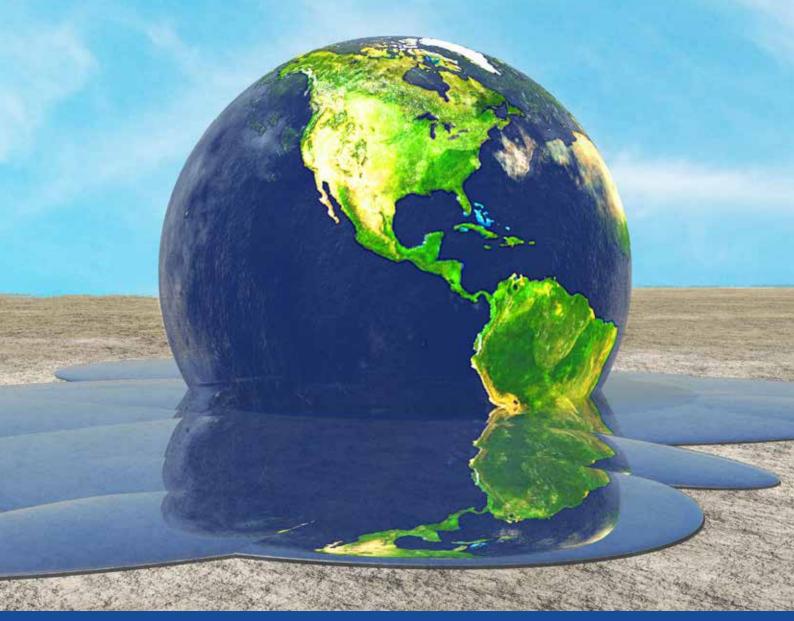
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Proceedings of

4th World Congress on

# CLIMATE CHANGE AND GLOBAL WARMING

August 06-07, 2018 Osaka, Japan



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4th World Congress on

# **Climate Change and Global Warming**

August 06-07, 2018 Osaka, Japan

# **Keynote Forum**

Day 1

4th World Congress on

# CLIMATE CHANGE AND GLOBAL WARMING

August 06-07, 2018 Osaka, Japan



Vladimir Babeshko
Russian Academy of Sciences, Russia

#### Influence of the seismicity on the climate change

The problem of prediction of the recently established new type of earthquakes called starting earthquakes is discussed. These arise in the Earth's crust at the moment of contact of lithospheric plates. The origin of the starting earthquakes is associated with concentration of contact stresses below them. The problem is considered under the assumption that the lithospheric plates and the below layered substrates are linearly elastic. The layered bases are modeled by three-dimensional bodies, while the lithospheric plates are modeled by Kirchhoff plates. The report addresses the stress concentration under the plates for different mutual positions when they approach each other with their ends. Both cases of distant plates and contacted plates are considered. The report demonstrates that the obtained result cannot be obtained by a finite element method and other numerical methods based on the energy integral. The topological method of the block element elaborated in this paper differs from the earlier approaches by the present authors. In the earlier works the local coordinate systems were introduced which complicates in understanding the results. The present report proposes a unified coordinate system which makes the approach applicable to other problems. This approach also reveals a singular concentration of contact stresses which coincides with the previously obtained singularity however the present result is more transparent. This result allows us to discuss the approach enabling prediction of location, time and intensity of earthquake, as well as the conditions that ensure the realization of prognostication. The influences of the seismicity and earthquakes on the climate change are discussed in the report.

#### **Biography**

Vladimir Babeshko has completed his PhD (Doctor of Mechanics) from Russian Academy of Sciences, Russia. He is a Chief of Scientific-Research Center for Forecasting and Preventing Geoecological and Technologenic Disasters, Kuban State University and Southern Research Center, Russian Academy of Sciences. He has 20 patents, published 7 monographs and more than 450 papers in reputed journals to his credit.

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4th World Congress on

# CLIMATE CHANGE AND GLOBAL WARMING

August 06-07, 2018 Osaka, Japan



Arup Kumar Sarma
Indian Institute of Technology Guwahati, India

# Sustainable approach of rainwater management and application for mitigating climate change impact on tea agriculture in northeast India

different combinations of GCMs and RCP scenarios. Study has revealed that increase in total annual precipitation varies from 3% to 27% with increase in number of dry days. This indicates high intensity rainfall of short duration in monsoon and longer dry spell. Visible impact of such changed scenario has been experienced in various sectors of economy including agriculture. Tea, one of the major commercial crops of northeast India, is suffering because of this changed scenario. To mitigate adverse impact of climate change, society can take up various steps for reducing carbon emission, increasing carbon sink and adapting themselves to the changing scenario. The increasing temporal variation in water availability can be reduced by increasing surface storage by different means. Rainwater harvesting, if done in large scale and in an innovative way considering sustainability aspect can contribute significantly towards mitigating climate change impact on the society in general and water. Efficient management of rainwater will also help reducing flood and drought. To achieve multiple benefits of rainwater harvesting, a new and flexible method, named as Sustainable Approach of Rainwater Management and Application (SARMA) has been developed and presented in this paper. This proposed method, in addition to conventional benefit of meeting water-need for day to day application, provides benefits of irrigation, flood moderation, improved drainage condition, groundwater recharge, pisciculture, carbon sequestration, reducing power consumption and hence carbon emission and micro-climate moderation. Field application of this method in Dolowjan Tea Estates of India has generated visible evidence that efficient management and application of rainwater using SARMA method not only can provide other conventional benefits but also can bring favorable micro-climatic changes and thus can be considered as a solution to climate change.

#### **Biography**

Arup Kumar Sarma is presently holding the prestigious B P Chaliha Chair Professor position given by Ministry of Water Resources, Government of India. He has also served as a Visiting Professor in the Asian Institute of Technology, Bangkok, Thailand. He has developed NPTEL video course on Hydraulic Engineering which is getting wide appreciation from different parts of the globe and has entered the top 5 most visited course. He has more than 100 technical papers published in national and international journals, books and in conference proceedings. Apart from working for management of many Indian Rivers, he has also provided his technical expertise for management of Mekong River. He is a Reviewer of several reputed international journals and has also served as Member and Adviser of various prestigious committees.

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4th World Congress on

# CLIMATE CHANGE AND GLOBAL WARMING

August 06-07, 2018 Osaka, Japan



Shoichiro Ozaki
Ehime University, Japan

# Promotion of plankton $\mathrm{CO}_2$ assimilation by NOx is best way to protect global warming and to get best climate

The earth is warmed by  $\mathrm{CO}_2$  and heart produced by burning of fossil fuel. The plant is growing by  $\mathrm{CO}_2$  assimilation absorbing  $\mathrm{CO}_2$  producing carbohydrate and  $\mathrm{O}_2$ . Supply of nutrients is important factor for the promotion of  $\mathrm{CO}_2$  assimilation. When fossil fuel is burned, NOx is produced. This NOx is major source of nutrient N. NOx is promoting  $\mathrm{CO}_2$  assimilation and promoting the growth of plankton and contributing to produce fish and grain. But NOx is hated as pollution gas. Around half of country hated NOx. NOx 7.2 billion tone is eliminated by ammonia. NP in drainage is also hated as pollution element and eliminated. Some other country like China, Indonesia, India and Vietnam do not eliminate NOx and NP in drainage. They use NOx and excreta as it is to produce plankton and fish. Then fish production and  $\mathrm{CO}_2$  fixing of these countries increased remarkably. To eliminate NOx and NP by other precious fertilizer is tremendous loss. The countries who do such unreasonable elimination are suffering great damage on electricity price, economy, productive industry, agriculture, fish industry and DGP (GDP). NOx is promoting plankton  $\mathrm{CO}_2$  assimilation, fixing of  $\mathrm{CO}_2$  and promoting production of fish and grain and contributing for the protection of global warming.

#### **Biography**

Shoichiro Ozaki has served as the Professor at Ehime University, Department of Chemical Industry and as the Visiting Professor at various reputed universities of the world including University of Konstanz, New York State University and Shangdong University. He had also been a Research Chemist at the Institute of Physical and Chemical Research, Tokyo, Japan. Currently he is the Professor Emeritus at the Ehime University, Japan. He has been the Recipient of Hatsumeishou (Invention Prize) for the invention of Carmofur (antitumor agent), Gakujutsusho (Academic Prize) from the Japan Chemical Society for the synthesis of biologically active compounds (Carmofur, IP3) and Fulbright Award.

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**Notes:** 



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# **Keynote Forum**

Day 2

4th World Congress on

### CLIMATE CHANGE AND GLOBAL WARMING

August 06-07, 2018 Osaka, Japan



Xiangrong Wang
Fudan University, China

#### Urban resilience design to tackle with climate change for sustainability

At the same time of fast urbanization in the world, climate change has brought with the tremendous impact on urban area, which is most directly and severe. It is very important to carry out the researches on urban resilience design to tackle with the climate change for sustainability. Based on the analysis of the progress of resilience research in the world, the objectives of urban resilience design were put forward in this paper, i.e. under the impact and pressure of climate change, the city still can maintain its basic function, structure, system and status by adjusting and controlling its social, economic and technical system. And, the connotation of the urban resilience design was also provided from the following aspects including (1) Infrastructural resilience, (2) Institutional resilience, (3) Economic resilience and (4) Social resilience. The methodology of urban resilience design was employed in this paper such as the evaluation framework of resilience design, evaluation modeling, building of evaluation indicator system and evaluation of urban resilience by taking the city of Shanghai, China as an example. Accordingly, the key areas of climate change resilience were identified and comprehensive countermeasures including the eco-zoning, ecoplanning of resilient city for urban sustainability were put forward as well.

#### **Biography**

Xiangrong Wang is currently the Director and Professor of the Center for Urban Eco-Planning and Design in the Department of Environmental Science and Engineering and he is also the Deputy Director of Yangtze River Economic Zone of Fudan University in Shanghai, China. He also serves as the President of the Shanghai Ecological Society and the Deputy Chairman of the Urban Ecological Commission within the Ecological Society of China. In addition, he is a Member of the Shanghai Senate, a Member of Shanghai Municipal Science and Technology Commission, the Chair of Environmental Science and Greening Division of Shanghai's Municipal Construction Commission, an Executive Member of IUCN-CEC. He is currently focusing on his research in the areas of urban ecology and planning, climate change and urban ecosystem research, environmental policy and management, vegetation ecology and natural conservation and environmental assessment and planning. He has published 22 scholarly books and 170 academic papers.

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**Notes:**