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National Seminar

on

BIODIVERSITY AND DEVELOPMENT: CHALLENGES OF 21st CENTURY

24th & 25th November, 2019

Circular-Cum-Invitation

Organized by



IQAC & Faculty of Science
M.L.K. P.G. College, Balrampur, U.P.

In Association with

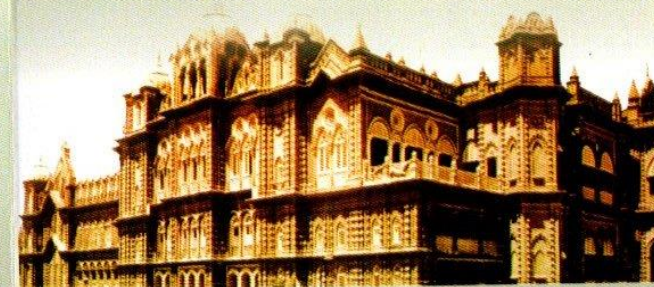


Asian Biological Research Foundation (ABRF)
Prayagraj, U.P., India.

Sponsored by



Council of Science & Technology, Lucknow, U.P.



Venue: M.L.K. P.G. College, Balrampur
(Siddharth University, Kapilvastu, Siddharth Nagar)

Dear Colleagues & Friends,

Biodiversity is the 'foundation of human life' on earth because we derive their supplies of food, medicines, energy, and many industrial products from the vast reservoir of this biodiversity. Biodiversity includes variety and variability among living organisms of ecosystems and ecological complexes in which they occur. Biodiversity helps in producing more productive and stable ecosystem capable of surviving in stress conditions. Biodiversity, apart from having aesthetic and recreational values, is very important for the maintenance of ecological balance and continuation of evolutionary process. The distribution and magnitude of the biodiversity that exists today is a product of over 3.5 billion years of evolution, involving speciation, migration, extinction and more recently, human influences. Emphasizing the importance of biodiversity in human well-being the United Nations has declared to celebrate 2010-2020 as decade of biodiversity. Therefore, IQAC and Faculty of Science cordially invites you in the present seminar "Biodiversity and Development: Challenges in 21st Century together at one platform: with respect to:

1. **Microbial, Floral and Animal diversity and their conservation.**
2. **Role of community in conservation of traditional knowledge and ecosystem.**
3. **Plant and animal health and disease management.**
4. **Bio resource management and development.**
5. **Molecular biology and modern techniques in conservation of biodiversity.**
6. **Biodiversity status and sustainable development of India.**
7. **Impact of climate change on Biodiversity.**

ABSTRACT, ARTICLE & RESEARCH PAPER

The Abstract (not more than 250 words)/ Article / Research Papers to be presented in the seminar are invited latest by 15th Nov, 2019 in MS-World (Times New Roman, Front size 12) file as attachment E-mail: mlk.scinatcon19@gmail.com,

Note: Selected Research Papers / Article / short Communication will be published in the proceeding with ISBN number,

ABOUT THE COLLEGE

M.L.K.P.G. College, Balrampur was established by Maharaja of Balrampur Estate, Sri Pateshwari Prasad Singh in 1955 in sweet memory of his mother Maharani Lal Kunwari. This College was popularly known as 'Oxford of Terai' for its academic environment, infrastructure and quality. The College is situated at a distance of 165 Km in the east from Lucknow & 170 Km from Gorakhpur. The College is situated in the heart of city at distance 03 Km. from Balrampur Railway Station and 01 Km. from Jharkhandi Railway Station.

REGISTRATION FEE

NGO & Industry Delegates	Rs. 1000/-
Scientist / Academicians	Rs. 600/-
Members of MLK & ABRF	Rs. 500 /-
Research Scholars	Rs. 400/-
P.G. Students	Rs. 300/-
Local Tribes of Balrampur	Rs. 300 /-

ABOUT ABRF

The Asian Biological Research Foundation (ABRF) Paryagraj, India is a self-supporting academic & research associated body. It is basically non-profit & Non-Government organization to (1) provide a common platform for scientists associated with biological sciences to interact with one another for mutual benefit and to enhance the innovative knowledge on the subjects (2) encourage, facilitate & perform the activities related with conservation of nature and biodiversity and so on. The ABRF confers following categories of awards through nominations:

1. **ABRF Life Time Achievement Award** (above 57 years of age).
2. **Honorary Fellowship/Fellowship (FABRF).**
3. **ABRF Excellence Award for Agricultural / Botanical / Zoological Research.**
4. **Best Teacher Award for Agricultural/ Botanical/ Zoological Innovations.**
5. **Innovative Botanist /Zoologist/ Animal Scientists Award**

6. **Eminent Ecologist / Cytologist / Ichthyologist / Environmentalist/Physiologist/ Entomologist/ Geneticist / Parasitologist / Taxonomist / Plant Pathologist/Anthropologist Award.**
7. **Innovative Biologist Award for Wild Life / Biodiversity Conservation.**
8. **Senior Botanist/ Zoologist/ Biochemist / Scientist Award (above 45 years of age).**
9. **Paryavaran Shri Samman.**
10. **Young Botanist / Zoologist / Scientist Award** (For Research Scholar).

Note: Membership of ABRF is mandatory for applying these awards. For detailed guidelines, visit the website: <http://www.abrf.org.in>
Email: secretary.abrf@gmail.com
Contact: 8004913089

ACCOMMODATIONS

We have accommodation for resource person and invitees only in College guest house. Therefore, outstations participants are advised to arrange accommodations at their own expenses and liberty.

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National Seminar on Biodiversity and Development Challenges of 21st Century

24th & 25th, November, 2019

Souvenir

Organized by



**IQAC & Faculty of Science
M.L.K. P.G. College, Balrampur, U.P.**

(Affiliated to "Siddharth University, Kapilvastu, Siddharth Nagar")

In Association with



Asian Biological Research Foundation (ABRF)
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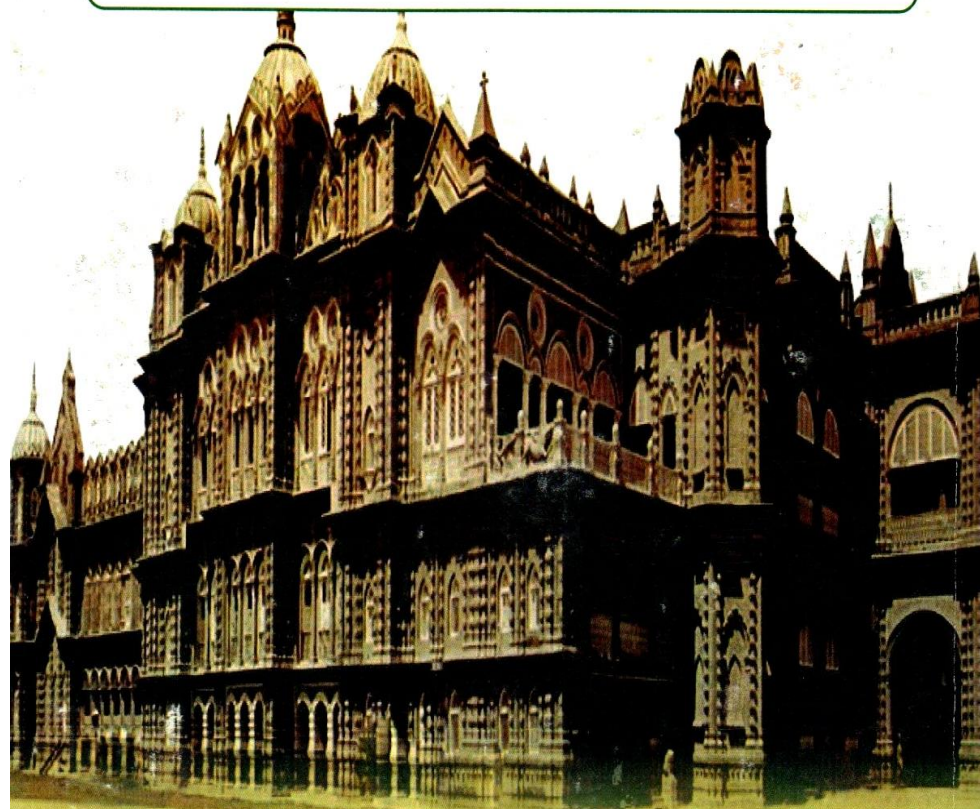
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M.L.K.P.G. College, Balrampur was established by Maharaja of Balrampur Estate, Sri Pateshwari Prasad Singh in 1955 in sweet memory of his mother Maharani Lal Kunwari. This College was popularly known as 'Oxford of Terai' for its academic environment, infrastructure and quality. The college is situated at a distance of 165 km in the east from Lucknow & 170 KM from Gorakhpur. The College is situated in the heart of city at distance 03 KM. from Balrampur Railway Station and 01 KM. from Jharkhandi Railway Station.



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Biodiversity and Development: Challenges of 21st Century



Sponsored by
U.P.C.S.T. Lucknow

Sadguru Prakash | Rajiv Ranjan | Ravindra Kumar Pandey



Organizing Secretary
National Seminar on
Biodiversity & Development:
Challenges of 21st Century

Dr. Sadguru Prakash has started his teaching career in department of Zoology, M.L.K.P.G. College, Balrampur since 2002 after completing his Ph.D degree in 2000 from Dr. R.M.L. Avadh University, Ayodhya under the supervision of Dr. K.K. Ansari. Dr. Prakash is well known researcher and published more than 65 research papers in reputed national and international journals and attended more than 30 national and international conferences/seminar/ symposium and delivered lectures as resource person on various topics. He has been awarded fellowship from Blue Planet Society, Prayagraj; Asian Biological Research Foundation, Prayagraj and Glocal Environment & Social Association, New Delhi. He has been awarded Dr. A. P. J. Abdul Kalam Green Environment Promotion Award by GESA, New Delhi, Innovative Educationist Award by GESA, New Delhi and Innovative Zoologist Award by ABRF, Prayagraj. He has supervised one Ph.D. Scholar, one M.Phil Student and five dissertation projects of M.Sc. Students. Instead of other academic pursuit viz. Examination Incharge of the College, member of proctorial board, Assistant coordinator IGNOU study center, Assistant coordinator IQAC of the college etc and member of Board of studies of Siddharth University Kapilvastu Siddharth Nagar U.P.



Convener
National Seminar on
Biodiversity & Development:
Challenges of 21st Century

Dr. Rajiv Ranjan has started his teaching in 2002 after after completing his Ph.D degree in Plant Pathology from Dr. R.M.L. Avadh University, Ayodhya under the supervision of Dr. J.P. Tiwari and guidance of late Prof. Ashwani Kr. Srivastava, D.D.U university, Gorakhpur. Dr. Ranjan has published more than 15 research papers in reputed national and international journals and attended more than 20 national and international conferences/seminar/symposium. He has been awarded fellowship from Asian Biological Research Foundation, Prayagraj and Lal Bahadur Shastri Glocal award for Biodiversity by GESA, New Delhi. He has guided more than 30 dissertation projects of M.Sc. Students. He is equally active in other cocurricular activities of the college viz-programme officer NSS, Game superintendent, Assistant Hostel warden, member of proctorial board, member of sport council & Board of studies of Siddharth University, Kapilvastu Siddharth Nagar U.P.



Coordinator
National Seminar on
Biodiversity & Development:
Challenges of 21st Century

Dr. Ravindra Kumar Pandey has been working as associate professor in department of Botany since 2001. He has completed his M.Sc. degree from D.D.U. Gorakhpur university, Gorakhpur in first division with specialization in genetics and molecular genetics in 1988 with NET-JRF (CSIR). He did his Ph.D. degree from Dr. R.M.L. Avadh University, Ayodhya under the supervision of Dr. J.P. Tiwari. Dr. Pandey has published more than twenty five research paper in reputed national and international journals and attended several seminar/symposia/conference organized by various college and universities. He has been awarded fellowship from Asian Biological Research Foundation, Prayagraj. He has written three books and delivered many popular lecturers on various topics. Instead of other academic pursuit viz., Coordinator IQAC, member of proctorial board, NSS and Ex-coordinator IGNOU study center etc. President of sport council & member of Board of studies of Siddharth University, Kapilvastu Siddharth Nagar. He has guided more than 30 dissertation projects of M. Sc. Students.



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**RECOMMENDATIONS OF NATIONAL SEMINAR ON
Biodiversity and Development: Challenges of 21st Century
(24th & 25th November 2019)**

**Organized by IQAC & Faculty of Science,
M.L.K.(P.G.) College, Balrampur (U.P.)
Sponsored by-U.P.C.S.T.Lucknow.**

Biodiversity is the 'foundation of human life' on earth because we derive their supplies of food, medicines, energy, and many industrial products from the vast reservoir of this biodiversity. Biodiversity includes variety and variability among living organisms of ecosystems and ecological complexes in which they occur. Biodiversity helps in producing more productive and stable ecosystem capable of surviving in stress conditions. Biodiversity, apart from having aesthetic and recreational values, is very important for the maintenance of ecological balance and continuation of evolutionary process. The distribution and magnitude of the biodiversity that exists today is a product of over 3.5 billion years of evolutionary history, involving speciation, migration, extinction and more recently, human influences.

Biodiversity benefits human societies in a myriad of ways by providing wide range of ecological, economic, social, cultural, educational, scientific and aesthetic services. Thus, biodiversity is the resource on which families, communities, nations and future generation depends. It serves as link between all organisms on earth, binding each into an independent ecosystem, in which all biological species interact with each other. In other words-*It is the web of life.*

Extensive anthropogenic interventions in the natural ecosystems in recent times have been resulting in loss of biodiversity. Emphasizing the importance of biodiversity the United Nations has declared 2011-2020 as decade of biodiversity, with the goal of raising awareness of importance of variety of life on earth to *human well being.*

The issues on **Biodiversity and Development: Challenges of 21st Century** are centre of discussion among participants. These two issues are inter-twined in such a way that any development changes the environment that directly or indirectly affects the biodiversity. Thus, in the present seminar following conclusions have been drawn by Scientist, delegates, students, and people and policy makers for development.

1-Reason of Biodiversity Degradation: There are many reasons that disturb the biodiversity. The main reason of biodiversity loss is "HIPPO".

HIPPO means-

H=Habitat alteration: Human encroachment upon forest and other lands makes the biodiversity to lose their natural habitat.

I=Invasion of species: Biological invasion by non-native species (exotic) constitute one of the major threats to natural environment and biodiversity including forestry, livestock and agro-ecosystem.

P=Population: Over-growing human population is the root cause of biodiversity loss.

P=Pollution: Industrial pollution and Chemicals in the form of pesticides and insecticides destroy the birds and aquatic organisms.

O=Over exploitation: Over exploitation of natural resources causes the loss of biodiversity.

2-Biodiversity need Documentation and Conservation; Vast majority of flora and fauna are yet to be discovered and named (out of 10 million species estimate only 1.55 is still named) Thus Biodiversity assessment including genetic diversity, species diversity, unique ecosystems, plant animal interactions, climate change, bioprospecting and utilization of medicinal plants agro diversity among others natural process should be studied. Conservation measures for biodiversity needs immediate attention with special reference to-

- (a) Conservation of biological diversity of ecosystems, habitats and biomes.
- (b) Conservation of species diversity.
- (c) Conservation of genetic diversity.
- (d) Sustainable use and consumption.
- (e) Control threats from invasive alien species.
- (f) Challenges to biodiversity from climate change.
- (g) Protect traditional knowledge, innovations and practices.

3-The environment is global issue; it should be studied and enforced in that context. Presently it is under stress because-

There are high population growth rates in rural as well as urban areas in the India, due to this human induced factors habitat degradation and destruction became common phenomenon, it should be immediately controlled. As a result of our own actions and inactions, desertification has claimed more and more fertile lands. Adverse effects of climate change are being witnessed every day. Natural disasters have become more frequent and more devastating than earlier soil, air, water and marine environments continue to be polluted through our industrial activities.

The main targets of the environment goal should be-

- * To integrate environmental issues into state and country policies and programs,
- * To reverse the ongoing devastation of natural resources, and
- * To enhance environmental services.

4-Green biotechnology which is more commonly known as Plant Biotechnology is a rapidly expanding field within Modern biotechnology needs more emphasis. Use of environment friendly and cost effective alternatives to industrial chemicals such as bio fuels, bio fertilizers and bio pesticides are not only resulting in enhanced crop output, improvement in health and safety standards, these new products are also leading to less environment pollution and use of green technology.

5-Participation of diverse stakeholders is critical for promoting integration and mainstreaming of biodiversity considerations. In this context, a large number of NGOs have been making significant contribution and playing a pivotal role as an interface between the Government and community groups.

6-A multidisciplinary, holistic and integrated institutional mechanism is in place to address the elements. This include relevant departments in the states such as forest, agriculture, horticulture, irrigation, science and technology, and various specialized national and state level institutions, which predominantly deal with biodiversity issues must be in coordination.

7- Ever increasing populations of man has put pressure on environment through various developmental activities is the main cause of environmental degradation as well as biodiversity loss. It can be controlled by educating them properly.

8- Governments, with the full and effective participation of indigenous and local communities, evaluate the role of biodiversity in national and local economies and cultures as well as the ecological services provided by harvested species. The economic hardship are primary cause of nature exploitation, so conservation strategies should linked to **eradication of poverty**, otherwise we cannot attain the goal.

The following important steps are suggested by various scientists and delegates participated in the present seminar to save existing biodiversity:

- Indiscriminate exploitation of nature and natural resources should be immediately checks through proper education, and legislations without any time gap. Regularly contact or monthly contact environmental awareness. It is very useful and major link between people and the Government.
- Biodiversity conservation awareness programme should be conducted at school level which will also give fruitful effects in due course of time
- The integrated approach is essential to solve the problem by public awareness and primary education of biodiversity importance, pollution and the effect of climate change on biodiversity.
- There is urgent need to check the ever-growing human population, which is the root cause of biodiversity loss. So to control the increasing population laws were made by Central as well as State government and enforced these laws strictly.

Biodiversity is the diversity of life on earth and diversity is our life
U.N. International Decade of Biodiversity-2010-2020


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