

A report on



held on 24-July 2020

by

Jaganath University, Jaipur, Rajasthan, India

by

Jagannath University, Jaipur, Rajasthan, India









International Conference (Online) on

JAGANNATH UNIVERSITY, JAIPUR [UGC APPROVED & NAAC ACCREDITED]

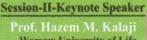
GREEN TECHNOLOGY & SUSTAINABLE DEVELOPMENT



Date:- 24 July, 2020 (Friday) Time:- 11:00 AM to 2:00 PM



Session-I-Kevnote Speaker
Prof. Ashwani Pareek
School of Life Science
JNU, New Delhi, India
Adjunct Professor-Univ. of
Western Australia, Australia



Warsaw University of Life Sciences SGGW Warsaw, Poland





Session-I-Speaker

Dr. Vineet Soni Associate Professor Department of Botany, MLSU, Udaipur, India

Session-II-Speaker

Prof. Ashwani Kumar Humboldt Fellow-Germany Former Professor of Botany University of Rajasthan, Jaipur, India



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Dr. P.N. Kalla

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Research Papers are invited from Academicians, Industry Experts & Research Scholars

For abstract submission & additional information gtsdconference@jagannathuniversity.org

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Jagan Nath University, Jaipur



International Conference on Green Technology and Sustainable Development

24th July, 2020

Schedule

| 11,00 AM - 11.15 AM | Inaugural Session |
|---------------------|--|
| | Welcome address by Prof. P. N. Kalla (Convener) Presidential address by Dr. Vaishali Sharma, Honourable VC |
| 11.15 AM -12.00 AM | Session I |
| | Prof.Ashwani Pareek School of Life Science, JNU, New Delhi, India Adjunct Professor-Uni. of Western Australia, Australia |
| | Topic: Are we ready to feed 9 million? |
| 12.00 PM - 12.25 PM | Session I |
| | Prof. Ashwani Kumar |
| | Humboldt Fellow-Germany |
| | Former Professor of Botany |
| | Uni. of Rajasthan, Jaipur, India |
| | Topic: Climate change due to global warming can be checked by next generation biofuels |
| 12.25P M -1.10 PM | Session II |
| | Prof. Hazem M. Kalaji Warsaw University of Life Sciences SGGW, Warsaw, Poland Topic: Chlorophyll fluorescence as a guide for stress physiology |
| 1.10 PM - 1.35 PM | Session II |
| | Dr. Vineet Soni Associate Professor, Department of Botany, MLSU, Udaipur, India Topic: Manipulating photosynthesis for sustainable development |
| 1.35 PM - 1.50 PM | Paper presentation by three selected researchers* |
| 1.50 PM -2.00 PM | Valedictory session |
| | Vote of thanks by Dr. Ranjeeta Soni (Organizing Secretary) |





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International Conference on Green Technology and Sustainable Development

Organized by

Jagannath University, Jaipur, Rajasthan on 24 July 2020

A one-day International Conference on Green Technology and Sustainable Development (ICGTSD-2020) was organized online on July 24, 2020 Jagannath University, Jaipur, Rajasthan. The conference addressed most of the important aspects and emerging trends of research in Green Technology and Sustainable Development, with specific aim to expose young minds in sustainable uses of natural resources. Development of transgenic crops against various abiotic stresses and production of biofuels were another key issues at the conference. Total 1814 participants from all over the world registered for the conference.

Prof. Vaishali Sharma, Vice Chancellor of the Jagannath University, Jaipur, Rajasthan, inaugurated the conference and emphasized the need of to develop tools and techniques in the field of green technology. She also underlined the importance o interdisciplinary approach of new age research for the exploration of the complex biological process of for sustainable development. Dr. Ashwani Pareek (Professor at JNU, New Delhi and Adjunct Professor at University of Western Australia, Australia) and Dr. Hazem M. Kalaji (Professor at Warsaw University of Life Sciences, Poland) were the keynote speakers of the conference. Dr. P.N. Kalla, Convener of the conference welcomed all participants and dignitaries and introduced the speakers. Dr. Ranjeeta Soni (the organizing secretary) stated that the goal of this conference was to address the major challenges in green technology and sustainable development.

Prof. Ashwani Pareek described the importance of plant genetic engineering and molecular biology in sustainable uses of bioresources through In the keynote address of session-1 on 'Are we able to feed 9 billions'. At the end of the key note, he motivated the young biologists to use modern tools and techniques of biological sciences for sustainable uses of natural resources. Plenary lecture in session-1 was delivered by Dr. Ashwani Kumar (Former Professor of Botany, University of Rajasthan, Jaipur, Rajasthan) on 'Climate change due to global warming can be checked by next generation biofuels. Dr. Kumar emphasized to work on biofuel production.

Session-II of the conference was started by the keynote address of Prof. Hazem M. Kalaji (Poland) on 'Chlorophyll fluorescence as a guide for stress physiology'. He highlighted the importance and applications of chlorophyll fluorescence technique in probing the plant's responses during abiotic and biotic stresses. He stated that OJIP technique is one of the important tools to screen to determine photosynthetic performance in vitro and in vivo. Plenary lecture in session-1 was delivered by Dr. Vineet Soni (Associate Professor of Botany, MLSU, Udaipur, Rajasthan) on 'Manipulating photosynthesis for sustainable development. Dr. Soni focused recent trends in photosynthesis research and messaged to plant biologists to use 'Lab-to Land' approach for sustainable development.

The most exciting and significant feature of this conference was the energetic participation of research scholars and faculty members through presenting their research work by the submission of abstracts. Total 137 abstracts were received and screened by the subject experts on the basis of their scientific quality and relation with the theme of the conference. Three young biologists were also honored with 'Best Researcher Award' for their excellent presentation in the conference. They were: Dr. Ranjana Khade (Mumbai), Dr. Neelam Punar (Jaipur) and Upma Bhatt (Udaipur).



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This conference emphasized on resolve of individual scientists, rather than scribbling passive recommendations, for strengthening collaborations for popularizing bioscience research as a career. At the valedictory session, Dr. Vaishali Sharma (Honorable Vice Chancellor of Jagannath University, Jaipur) and Prof. Ranjeeta Soni conveyed heartfelt thanks to all the speakers and participants of the conference.

Brief Profile of the Speakers

Professor Ashwani Pareek

School of Life Sciences, Jawaharlal Nehru University, New Delhi Adjunct Professor at the University of Western Australia, Perth, Australia

Ashwani Pareek is a prominent plant biologist and educator noted chiefly for his contribution in plant molecular biology and biotechnology. He is currently working as Professor of plant molecular biology and biotechnology at the School of Life Sciences, Jawaharlal Nehru University, New Delhi, and adjunct professor at the University of Western Australia, Perth, Australia. He is a recipient of several honors including the Visitors award for Technology Development from the President of India for developing Stress Tolerant Rice of the Next Generation (STRONG) that has the potential to enhance the income of rice farmers. The award ceremony was held at the Rashtrapati Bhawan on 2nd May 2018. Recently on 26th February 2020, he has been awarded "Tata Innovation Award 2020" by Department of Biotechnology, Govt of India. He has interest in understanding the physiological and molecular adaptations in xero-halophytic plants and development of transgenic rice plants with enhanced tolerance towards multiple abiotic stresses. Some of the key awards received by Prof. Ashwani Pareek are as follows:-

- Tata Innovation Award (2020) by Department of Biotechnology, Govt. of India.
- Visitor's award (2018) for BEST TECHNOLOGY from The President of India for "STRESS TOLERANT RICE OF THE NEXT GENERATION (STRONG)".
- National Academy of Science (NASI)- Reliance Platinum Jubilee Award (2016) for Industry Oriented Research in Biological Sciences.
- J.J. Chinoy Gold Medal Award (2016) by Indian Society of Plant Physiology (ISPP) for Contribution in the Area of Plant Science.
- Fellowship award (2017) from BIOVED Research Institute of Agriculture and Technology, Allahabad.
- Elected Fellow of the National Academy of Agricultural Sciences, New Delhi(2016).
- Elected Fellow of the National Academy of Sciences, India (2013).
- DBT-CREST Award (2012) by Department of Biotechnology, Govt. of Indiato work at University of California, Davis, CA, USA.
- INSA-Royal Society, London Award (2005) for Exchange Visitors Fellowship, to work at University of Cambridge, UK.
- •BOYSCAST Award by Ministry of Science and Technology (India) to work at University of Illinois, USA (2001).
- The Rockefeller Foundation Award (1997) for the Post-doctoral fellowship at University of North Carolina, USA.



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Professor Hazem M. Kalaji

Warsaw University of Life Sciences SGGW, Warsaw, Poland Institute of Technology and Life Sciences ITP, Falenty, Poland

Professor Hazem M. Kalaji is the one of the key figures in the field of plant physiology and bioenergetics. He has deep research specialization in chlorophyll fluorescence analysis and photosynthesis research. He is also the member of UK Controlled Environment Users' Group, UK and Editor-in-Chief of Journal of Water and Land Development. He is also the Associate Editor of renowned journal Photosynthetica, Springer. Prof Kalaji is serving as a member of editorial advisory boards of Plant Physiology and Biochemistry, Elsevier, Environmental and Experimental Botany, Elsevier. Prof. Kalaji has published more than 100 high quality research papers in journals of repute.

Professor Ashwani Kumar

Former Professor of Botany, University of Rajasthan, Jaipur, India

Dr. Ashwani Kumar is a plant biotechnologist and physiologist. He received B.Sc. at Agra University, M.Sc. (Botany) at University of Rajasthan. He was awarded gold medal for standing first in order of merit. His Ph.D. (1971) was under supervision of Professor H.C. Arya and post-doctoral with Professor Dr. K-H. Neumann, and later on with Professor Dr. Sven Schubert at Justus Liebig Universitat, Giessen, Germany, with Alexander von Humboldt Fellow.

He was appointed as Asst. Professor in 1969, Associate Professor in 1985 and Full Professor from 1986 to 2007. Then he was an Adjunct Professor until 2016. During this period he held many important administrative and research positions such as head of Department of Botany and Co-ordinator SAP (1995-1998), Director, Life Sciences, 2001-2004, Director of Central Library and Information Science (2000-2005), Member Senate, Research Board, Convener Board of Studies Botany and Biotechnology, Advisory committee on Biotechnology, and Medicinal plant board Govt. of Rajasthan, member selection committees of Rajasthan and Himachal Public Service Commissions.

Dr. Kumar was awarded **Alexander von Humboldt Fellowship** for 1977-1979, with several resumption of fellowships until 2017, **British Council Visitorship**, U.K.(1986); **Visiting Professorship** at Toyama Medical and Pharmaceutical University in Japan (1999-2000); Toyama Prefectural University Japan (2011) **INSA-DFG visiting Professorship** at Germany, 1997.

Dr. Vineet Soni

Associate Professor, department of Botany, MLSU, Udaipur, India

Dr. Vineet Soni is a plant physiologist and the founder of the "Save Guggul Movement", a community-based conservation effort to conserve threatened plant species, particularly guggul. Soni was profiled as one of 20 global "Earth Movers" by IUCN.

Soni specializes in plant physiology, conservation biology, and photosynthesis research. He received bachelor's (1996-99) and master's degree (2000-2001) in Botany from the University of Rajasthan, Jaipur. He then joined the Birla Institute of Scientific Research and University of Rajasthan for doctoral research (PhD) work on various aspects of biotechnology and physiology of *Commiphora wightii*. In 2004, Soni received visiting fellowship to work on plant bioenergetics at University of Geneva, Switzerland. Through the **Bio-Rad fellowship**,



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he visited European Molecular Biology Laboratory at Heidelberg, Germany in 2005. Thereafter in 2006, Soni received prestigious from Nature Publishing Group to present his research work at Gordon Conference at Boston, USA. After receiving PhD degree, Soni worked as Post-Doctoral research fellow with Professor Reto J. Strasser at University of Geneva, Switzerland. In 2010, UNESCO, France published his special interview entitled 'Why Vineet Soni is bend on saving the guggul plants?' in 'A World of Science' journal. In 2011, he served as a visiting scientist at the Commissariat à l'énergie atomique et aux énergies alternatives, France. He is a member of three International Union for Conservation of Nature commissions: the Species Survival Commission, the World Commission for Protected Areas, and the Commission on Education and Communication and elected fellow of many prestigious societies i.e. the Mendelian Society of India, Indian Botanical Society and Linnean Society of London.

Suggestions and recommendations

After the successful completion of the conference, following suggestions and recommendations were advised by the speakers and organizers to develop green technologies for sustainable uses of bio resources:-

- Awareness about the transgenic plants should be developed among the common as
 these plants may act as strong alternate to increase plant productivity and tolerance
 against biotic and abiotic stresses.
- Government should explore the possible ways to increase the production of biofuels for sustainable development.
- Recent tools and techniques such as chlorophyll fluorescence should be used to determine photosynthetic performance in vivo.
- Adopting 'lab-to Land' approach is highly essential for sustainable uses and conservation of plant biodiversity.

Some glimpses of the conference and sample of the participant certificate:







Jagan Nath University, Jaipur

















International Conference (Online) on GREENTECHNOLOGY & SUSTAINABLEDEVELOPMENT July 24, 2020

Certificate

This is to certify that Prof./Dr./Mr./Ms

of Jagannath university

has attended/presented his/her abstract on the topic

Raijetta Sevi

Organising Secretary

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Convener

Variation

Vice-Chancellor



Dr.Ranjeeta Soni

Organizing Secretary, ICGTSD 2020



