

National Conference on Innovation & Technology for Sustainable Rural Development

01st to 02nd July 2022

राष्ट्रीय सम्मलेन नवाचार और प्रौद्योगिकी द्वारा सतत ग्रामीण विकास

01 से 02 जुलाई 2022



Organized by

BABASAHEB BHIMRAO AMBEDKAR UNIVERSITY
LUCKNOW
प्रज्ञा शील करुणा
ESTABLISHED 1996

Centre for Innovation, Incubation, Entrepreneurship (CIIE)
Babasaheb Bhimrao Ambedkar University Raebareli Road
Lucknow-226025
&
Science Technology and Innovation Hub in North India (STI-Hub)
(Catalyzed and supported by DST-SEED)
Department of Environmental Science
Babasaheb Bhimrao Ambedkar University
Raebareli Road, Lucknow-22605

&
Unnat Bharat Abhiyan
Babasaheb Bhimrao Ambedkar University Raebareli Road
Lucknow-226025

आयोजन कर्ता

नवाचार, उद्भवन, उद्यमिता के लिए केंद्र (सी.आई.आई.ई.)
बाबासाहेब भीमराव अम्बेडकर विश्वविद्यालय
रायबरेली रोड, लखनऊ-226025
एवं
उत्तर भारत में विज्ञान प्रोद्योगिकी एवम् नवाचार केंद्र
(डी.एस.टी.सी,ईईडी द्वारा उत्प्रेरित एवम प्रायोजित)
पर्यावरण विज्ञान विभाग
बाबासाहेब भीमराव अम्बेडकर विश्वविद्यालय
रायबरेली रोड, लखनऊ-226025
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In collaboration with
सहयोग से

Society for Environmental Sustainability
सोसाइटी फॉर एनवायर्नमेंटल सस्टेनबिलिटी

About the Conference

University Centre for Innovation, Incubation, Entrepreneurship (CIIE), Unnat Bharat Abhiyan and Science Technology and Innovation Hub in North India (Uttar Pradesh, Uttarakhand and Himachal Pradesh STI-Hub) (funded by DST-SEED) are proposing a national conference on “Innovation and Technology for Sustainable Rural Development ” from 01 to 02 July 2022 . The aim of this two-day conference is to disseminate knowledge on technology led innovations/solutions that could be helpful in sustainable development of rural population. The conference will highlight scientific solutions to problems related to agriculture. The conference will also include a young scientist conclave where scholars, students and young faculty will present their innovative ideas in relation to sustainable rural development. Various experts will join the platform and share ideas amongst participants. NGOs and farmers from three states (Uttar Pradesh, Uttarakhand and Himachal Pradesh) will also participate in the conference.

संगोष्ठी के बारे में

विश्वविद्यालय के नवाचार, उद्भवन, उद्यमिता केंद्र (सी.आई.आई.ई.), उन्नत भारत अभियान और उत्तर भारत (उत्तर प्रदेश, उत्तराखंड और हिमाचल प्रदेश एसटीआई-हब) में विज्ञान प्रौद्योगिकी और नवाचार केंद्र (डी.एस.टी.-सीड द्वारा वित्त पोषित) "सतत ग्रामीण विकास के लिए नवाचार और प्रौद्योगिकी" पर एक राष्ट्रीय सम्मेलन का आयोजन कर रहे हैं। इस दो दिवसीय सम्मेलन का उद्देश्य प्रौद्योगिकी आधारित नवाचार के तरीकों/समाधानों पर ज्ञान का प्रसार करना है जोकि ग्रामीण आबादी के सतत विकास में सहायक हो सकते हैं। सम्मेलन में कृषि से संबंधित समस्याओं के वैज्ञानिक समाधानों पर प्रकाश डाला जाएगा। सम्मेलन में एक युवा वैज्ञानिक सम्मेलन भी शामिल होगा जहां छात्र, शोधार्थी, और युवा फैकल्टी सतत ग्रामीण विकास के संबंध में अपने अभिनव विचारों को प्रस्तुत करेंगे। विभिन्न विशेषज्ञ मंच में शामिल होंगे और प्रतिभागियों के बीच विचार साझा करेंगे। सम्मेलन में तीन राज्यों (उत्तर प्रदेश, उत्तराखंड और हिमाचल प्रदेश) के एन.जी.ओ. और किसान भी भाग लेंगे।

Highlights of the Conference

- Talk by eminent scientists, researchers and technology expert in the domain of sustainable rural development
- Lectures by scientists/ academicians on theme related to innovation and technology for sustainable rural development
- Interactive session in which farmers, students, and academicians/scientists will discuss key issues related to sustainable rural development
- Exhibition of various products that have been developed under the STI-Hub project
- Exhibition on farmer's friendly booklets.

संगोष्ठी के मुख्य बिन्दु

- सतत ग्रामीण विकास पर सुप्रसिद्ध वैज्ञानिकों, शोधकर्ताओं व् तकनीकी विषेशज्ञों की बात-चीत।
- वैज्ञानिकों / शिक्षाविदों द्वारा सतत ग्रामीण विकास में तकनीकी एवं नवाचार पर व्याख्यान।
- सतत ग्रामीण विकास से संबंधित महत्वपूर्ण मुद्दों पर किसानों, छात्रों, और शिक्षाविदों / वैज्ञानिकों की आपसी चर्चा।
- एसटीआई-हब परियोजना के तहत विकसित किए गए विभिन्न उत्पादों की प्रदर्शनी
- किसानों के लिए उपयोगी पुस्तिकाओं पर प्रदर्शनी।

Young Innovator Conclave

A young innovator conclave where scholars, students and young faculty will present their innovative ideas in relation to sustainable rural development is to be held on the second day of conference. The gridlines for participation in young innovator conclave are given below:-

- In conclave student, scholars and young faculty (up to age of 35 years) may participate.
- Participants have to register themselves by submitting a proposal cum power point presentation related to their innovation/idea/technology on the thematic area of sustainable rural development.
- The format of pptx file is provided at end of this brochure).
- The presentation should reach on or before 25 June 2022 at the email address itsrd2022@gmail.com
- Only those selected by the Screening Committee will be notified for detailed presentation at the Young Scientist Conference.

युवा खोजकर्ता सम्मेलन

संगोष्ठी के दूसरे दिन युवा खोजकर्ता सम्मेलन में छात्र, शोधार्थी और युवा शिक्षक सतत ग्रामीण विकास के संबंध में अपने अभिनव विचारों को प्रस्तुत करेंगे । युवा खोजकर्ता सम्मेलन में भाग लेने के लिए निर्देश नीचे दी गए हैं: -

- युवा वैज्ञानिक सम्मेलन में छात्र, विद्वान और युवा शिक्षक (35 वर्ष की आयु तक) भाग ले सकते हैं।
- प्रतिभागियों को सतत ग्रामीण विकास से सम्बंधित विषयों पर अपने नवाचार/विचार/प्रौद्योगिकी से संबंधित प्रस्ताव की एक पावर प्वाइंट प्रस्तुति भेज कर ही खुद को पंजीकृत करना होगा।
- पावर प्वाइंट प्रस्तुति का प्रारूप ब्रोचर के अंत में दिया गया है)।
- प्रस्तुति 25 जून 2022 को या उससे पहले itsrd2022@gmail.com इस ईमेल पर पहुंचना चाहिए।
- स्क्रीनिंग कमेटी द्वारा चुने गए लोगों को ही युवा वैज्ञानिक सम्मेलन में विस्तृत प्रस्तुति के लिए सूचित किया जाएगा।

Registration*

Rs. 1000/- for students and scholars
Rs. 1500/- for faculty/Scientist
*Registration will include Lunch and tea for two days along with conference kit and certificate

पंजीकरण*

1000 ₹/- छात्र व शोधार्थी
1500 ₹/- शिक्षक/ वैज्ञानिक
*पंजीयन शुल्क में दोपहर का भोजन व चाय (दो दिनों के लये) सेमिनार किट व सर्टिफिकेट निहित है।

Registration fee can be submitted by cash/DD/Cehque or transferred online at society's account as given below

Account No: 2900101014071
Account Name: SOCIETY FOR ENVIRONMENTAL SUSTAINABILITY
Bank Name: Canara Bank
Branch Address: BBA University, Lucknow, Uttar Pradesh- 226025
IFSC Code: CNRB0002900

Note: Participants are required to send a copy of the receipt of registration fee along with the registration form at the email itsrd2022@gmail.com by the 30th June 2022.

Committee

Patron-in-Chief
Prof. Sanjay Singh,
Vice-Chancellor
B.B.A. University

Patron
Prof. R. P. Singh,
Dean, Academic Affairs
B.B.A. University

Co-patron
Prof. S.K. Dwivedi
DES, B.B.A. University

Convenor
Prof. Naveen Kumar Arora,
PIC, CIIE & Dean, SEES
B.B.A. University

Organising Committee
Prof. Shilpi Verma
DLIS, BBA University
Prof. Shikha
DES, BBA University
Dr. N.K.S. More
DES, BBA University
Prof. Venkatesh Dutta
DES, BBA University
Dr. Venkatesh Kumar R.
DoZ, BBA University
Dr. P.S. Rajinikanth
DPhSc., BBA University
Dr. Neetu Singh
DHDFS,BBA University
Dr. Narendra Kumar
DES, BBA University
Dr. Raj Shree
DIT, BBA University
Dr. Sunil Kr. Singh
DM, BBA University
Dr. Suneesh Kumar Pachathundikandi
DEM, BBA University
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DMCJ, BBA University
Dr. Sufiya Ahmed
DoL, BBA University
Dr. Surendra Meher
DE, BBA University
Dr. Rahul Varshney
DoS, BBA University
Dr. Ravi Shankar Verma
DoH, BBA University
Dr. Baljeet Kr. Srivastava
DoH, BBA University
Dr. Subhash Mishra
DoE, BBA University
Dr. Jiwan Singh
DES, BBA University
Dr. Arpit Shailesh
DRM, BBA University
Dr. Amit Kumar Singh
DIT, BBA University

समितियां

मुख्य संरक्षक
आचार्य संजय सिंह
कुलपति
बी.बी.ए. विश्वविद्यालय

संरक्षक
आचार्य राणा प्रताप सिंह
संकायाध्यक्ष शैक्षणिक मामले
बी.बी.ए विश्वविद्यालय

सह-संरक्षक
आचार्य एस.के. द्विवेदी
पर्यावरण विभाग., बी.बी.ए. विश्वविद्यालय

संयोजक
आचार्य नवीन कुमार अरोड़ा
पी.आई.सी., सी.आई.आई.ई. व संकायाध्यक्ष भूमि
एवं पर्यावरण संकाय बी.बी.ए. विश्वविद्यालय

आयोजन समिति
आचार्य शिल्पी वर्मा
पुस्तकालय विभाग, बी.बी.ए. विश्वविद्यालय
आचार्य शिखा
पर्यावरण विभाग, बी.बी.ए. विश्वविद्यालय
डॉ. एन.के.एस.मोरे
पर्यावरण विभाग, बी.बी.ए. विश्वविद्यालय
आचार्य वेंकटेश दत्ता
पर्यावरण विभाग, बी.बी.ए. विश्वविद्यालय
डॉ. वेंकटेश कुमार आर.
जन्तु विज्ञान विभाग, बी.बी. ए. विश्वविद्यालय
डॉ. पी एस रजनीकांत
फार्मेसी विभाग, बी.बी.ए. विश्वविद्यालय
डॉ. नीतू सिंह
डी.एच. डी.ऍफ़. एस.,बी.बी.ए. विश्वविद्यालय
डॉ. नरेंद्र कुमार
पर्यावरण विभाग, बी.बी.ए. विश्वविद्यालय
डॉ. राज श्री
सूचना एवं तकनीकी विभाग, बी.बी.ए. विश्वविद्यालय
डॉ. सुनील कुमार सिंह
गणित विभाग,बी.बी.ए. विश्वविद्यालय
डॉ. सुनीश कुमार पचाथुंडिकंदी
डी.ई. ऍम.बी.बी.ए. विश्वविद्यालय
डॉ. महेंद्र कुमार पाढ़ी
पत्रकारिता विभाग, बी.बी.ए. विश्वविद्यालय
डॉ. सूफिया अहमद
विधि विभाग, बी.बी.ए. विश्वविद्यालय
डॉ. सुरेन्द्र मेहर
डी. ई., बी.बी.ए. विश्वविद्यालय
डॉ. राहुल वार्ष्णेय
सांख्यखी विभाग, बी.बी.ए. विश्वविद्यालय
डॉ. रविशंकर वर्मा
बागवानी विभाग, बी.बी.ए. विश्वविद्यालय
डॉ. बलजीत के.आर. श्रीवास्तव
हिंदी विभाग, बी.बी.ए. विश्वविद्यालय
डॉ. सुभाष मिश्रा
शिक्षा विभाग, बी.बी.ए. विश्वविद्यालय
डॉ. जीवन सिंह
पर्यावरण विभाग, बी.बी.ए. विश्वविद्यालय
डॉ. अर्पित शैलेश
प्रबंधन विभाग, बी.बी.ए. विश्वविद्यालय
डॉ. अमित कुमार सिंह
डी.आई.टी.,बी.बी.ए. विश्वविद्यालय

Inaugural Programme

1 July, 2022

Venue- SEES Conference Hall

Minute to Minute Program

10:30 AM – 10:34 AM	**Lighting lamp, Garlanding of Babasaheb Bhimrao Ambedkar & University Kulgeet**
10:34 AM – 10:38 AM	**Welcome of the guests**
10:38 AM – 10:43 AM	**Introduction of theme by Prof. Naveen Kr. Arora** **Dean, School of Earth & Environmental Science**
10:43 AM – 10:58 AM	**Address by Guest of Honour; Prof. P.K. Seth** **Chairman. ILSI, Former Director, CSIR- IITR & Former CEO, Biotech Park**
10:58 AM – 11:13 AM	**Address by Guest of Honour; Dr. Debapriya Dutta** **Head of Scientific Divisions, DST- SEED and State S&T Programme(SSTP)**
11:13 AM - 11:21 AM	**Address by Prof. Rana Pratap Singh** **Dean Academic Affair, BBA University**
	Inaugural of Booklets on Trichoderma, Lemon grass and Stevia
	Inaugural of Documentary "Mere Desh ki Dharti" Kanpur Dehat Interventions
11:21 AM – 11:41 AM	**Address by Chief Guest; Prof. S.K. Barik** **Director, CSIR-National Botanical Research Institute**
11:41 AM – 11:56 AM	**Presidential Address by Prof. Sanjay Singh** **Vice Chancellor, BBA University**
11:56 AM – 11:59 AM	**Vote of thanks**
11:59 AM – 12:00 PM	**National Anthem**
12:00 PM - 12:30 PM	**High Tea**
12:30 PM - 01:30 PM	**Inauguration of Common Facility Centre (CFC), STI-HUB (Catalyzed and Supported by DST-SEED) and Centre for Innovation, Incubation and Entrepreneurship (CIIE)**

PROGRAMME OUTLINE

1 July, 2022 Venue: SEES Conference Hall	
10:30AM - 12:00 PM	**Inaugural Program**
12:00 PM - 12:30 PM	**High Tea**
12:30 PM - 01:30 PM	**Inauguration of Common Facility Centre (CFC), STI-HUB (Catalyzed and Supported by DST-SEED) and Centre for Innovation, Incubation and Entrepreneurship (CIIE)**
01:30 PM - 02:30 PM	**Lunch**
02:30 PM - 05:00 PM	**Technical Session**

Technical Session I Role of innovation and Technology in Rural Context Venue: SEES Conference Hall; Time: 02:30 PM - 05:00 PM		
IL-1	**Prof. P.K. Seth**	Biotechnology Innovations: Growth Engine for Rural India
IL-2	**Prof. M.K. Awasthi**	Innovation and Technology for Sustainable Rural Development
IL-3	**Dr. Alok Kalra**	Innovations and Technologies for Efficient Organic Farming System
IL-4	**Dr. Sanjay Kumar**	Agribusiness Opportunities through Medicinal and Aromatic Plants for Rural India
IL-5	**Dr. Ajay Kumar Singh**	Innovation: The Way of Life

2 July, 2022 Young Innovators Conclave Venue: SEES Conference Hall ; Timing: 10:30 AM - 01:30 PM		
01:30 PM - 02:30 PM Lunch		

Technical Session II Innovative and Ecologically-Sound Solution for Sustainable Rural Development Venue: SEES Conference Hall; Time: 02:30 PM – 04:00 PM		
IL-1	**Prof. H.B. Singh**	Intellectual property rights: Future of Innovation in India
IL-2	**Prof. Y.P. Singh**	Innovative approaches for resource poor farmers to manage salt affected soils and poor quality ground water
IL-3	**Prof. Ram Chandra**	Public Health Hazards of Industrial Waste and their Management for Improvement of Rural Economy by Innovative Technology
04:00 PM - 5:00 PM Valedictory Session		

REPORT

Two days national conference on "Innovation and Technology for Sustainable Rural Development" was organized by Prof Naveen Arora, Chairman, Centre for Innovation, Incubation and Entrepreneurship, BBA University, and committee members CIIE in collaboration with Society for Environmental Sustainability. On first day in Inaugural Session, Prominent dignitaries were present Prof Sanjay Singh, Vice Chancellor, BBA University, Prof. S K Barik, Director, CSIR-NBRI, Prof. P K Seth former Director, CSIR-IITR, Dr. Debapriya Dutta, Head SEED Division, DST, Ministry of Science and Technology, New Delhi, Prof. Rana Pratap Singh, Director IQAC, BBAU, Prof. Awasthi, IIM Lucknow, Dr. Alok Kalra, former Director, CSIR-CIMAP, Dr Sanjay Kumar, Senior Scientist, CSIR-CIMAP, Prof H B Singh, BHU, Varanasi and GLA University, Mathura, Dr. Y P Singh, former Head, ICAR-CSSRI, Lucknow, Prof. Ram Chandra, DEM, BBAU, Prof. Shilpi Verma, Head, DLiSc. 37 young innovators gave presentations in the event.

On 2nd July, 2022 was the 02nd day of conference on "Innovation and Technology for Sustainable Rural Development", where Prof. H B Singh, FNAAS, GLA University, Mathura was the chief guest of the today session where he had informed and given presentation on intellectual property rights. He said lack of awareness is the major issue regarding IPR. He suggested IPR should be mandatory course in education system to make students aware. He emphasized the problems that why India is lacking in patents, copyrights, trademarks etc. He also defined innovation i.e. something new which is not known anybody on earth. He explained why people should patent their Intellectual Property Rights and sensitized students and young researchers about the benefits of the IPR. Session was interactive and lively where questions were asked by participants.

The Convener of the Programme Prof. Naveen Kumar Arora motivated the young researchers and participants about protecting their research through patents. He added that youngsters should be encouraged and their ideas must be tapped. That's why BBA University has initiated young scientist conclave which will be organized every year not only for university scholars but also for scholar from other institutes and even students from schools of Lucknow. Manav Vikas Sansthan from Himachal Pradesh, HESCO from Uttarakhand and Shramik Bharti from Uttar Pradesh were also part of the programme. Prof. Shilpi Verma also briefed the importance of research to all the students and young researchers' present there. Dr. Sufiya Ahmad was the session Coordinator and compered the programme.

Young Innovators conclave was organized for young researchers and faculty members. Total 37 young innovators presented their innovative ideas in front of panel of judges. Very interesting ideas were displayed by scholars in subject of

Environmental Sciences, Library and Information Sciences and other allied disciplines. Five best young innovators will be rewarded and given opportunity to further present their proposal to university for further funding.

In the second session of the program, Prof. Y P Singh, Former Director, CSSRI, gave talk about the approaches for resource poor farmers to manage salt affected soil and poor quality ground water. He told about harmful effects of salt stress soil and their negative impacts on plant growth. He also Shared his ideas that how farmers increase their income and improve livelihood.

Prof. Ram Chandra, DEM, BBAU, explained about the public health hazard of industrial waste and their management for improvement of rural economy by innovative technologies. He also highlighted the problem arises during filing patents and copyrights etc., especially in India.























Lack of IPR awareness major issue: Prof Singh

PNS ■ LUCKNOW

On the second day of the conference on 'Innovation and Technology for Sustainable Rural Development' at Babasaheb Bhimrao Ambedkar University on Saturday, Prof HB Singh, Faculty of Agricultural Sciences, GLA University (Mathura), was the chief guest, who gave a presentation on intellectual property rights.

He said lack of awareness is the major issue regarding IPR. He said IPR should be a mandatory course in the education system to make students aware. He emphasised on why India is lacking in patents, copyrights, trademarks etc.

He explained why people should patent their IPR and sensitised the students and young researchers about the benefits of the IPR. The session was interactive and lively where questions were asked by participants.

Convener of the programme Prof Naveen Kumar Arora motivated the young researchers and participants about protecting their research through patents. He added that youngsters should be encouraged and their ideas must be tapped. This is the reason why BBAU has initiated a young scientist conclave which will be organised every year not only for university scholars but also for scholars from other institutes

'Lack of awareness is the major issue regarding Intellectual Property Right. IPR should be a mandatory course in the education system to make students aware'

and even students from schools of Lucknow.

Manav Vikas Sansthan from Himachal Pradesh, HESCO from Uttarakhand and Shramik Bharti from Uttar Pradesh were also part of the programme. Prof Shilpi Verma spoke about the importance of research to all the students and young researchers present there.

The Young Innovators Conclave was organised for young researchers and faculty members. A total of 37 young innovators presented their ideas in front of a panel of judges. Interesting ideas were displayed by scholars on environmental sciences, library & information sciences and other allied disciplines. Five best young innovators will be rewarded and given the opportunity to present their proposal to university for further funding.

In the second session of the programme, former director of CSSRI Prof YP Singh delivered a talk about the approaches for resource poor farmers to manage salt-affected soil and poor quality groundwater. He spoke about the harmful effects of salt stress soil and their negative impacts on plant growth. He also shared his ideas on how farmers increase their income and improve livelihood.

DEM, BBAU, Prof Ram Chandra explained the public health hazard of industrial waste and their management for improvement of rural economy by innovative technologies. He also highlighted the problems arising during the filing of patents and copyrights etc, especially in India.