

# South Asia Biosafety Program

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## About the Conference

Join scientists, academics, researchers and officials from industry, research institutions, universities, government departments and ministries at the 5th Annual South Asia Biosafety Conference in Bangalore this September. Organized by the South Asia Biosafety Program, the ILSI Research Foundation, and Biotech Consortium India Limited, this conference is the premier biosafety meeting in South Asia.

Registration is now open and includes access to all plenary sessions, conference materials, opening and closing ceremonies, Welcome Reception, tea breaks, and half day workshops.

## Social Media

Join the conversation! Follow along to @ILSIRF on Twitter for updates leading up to the conference! Tweet using #SABC2017.

## Program at a Glance

- Regulation and Capacity Building Initiatives in South Asia
- Crop Biotechnology and Biosafety in South Asia
- Soil and Plant Microbiomes
- New Applications of Biotechnology: Focus on Forestry and Biofuels
- Designing Confined Field Trials to Maximize Data Transportability
- Best Practices for Public Sector Genetically Engineered Product Development Programs
- Intersection of the Cartagena Protocol and the Indian Biosafety Regulatory System
- Lighting Round for Students and Young Scientists
- Poster Session

**For more details and registration information, please see pages 5-6**

**or visit <http://sabc.biotech.co.in>**

## Highlights of the Workshop on “Phase II Capacity Building Project on Biosafety: Outcomes and Way Forward”

Dr. Vibha Ahuja, Biotech Consortium India Limited, New Delhi and India Country Coordinator, South Asia Biosafety Program (SABP)

Since 2012, the Ministry of Environment, Forest and Climate Change (MoEF&CC) has been implementing the UNEP/GEF-supported Phase II Capacity Building Project on Biosafety. The objective of this project was to strengthen the biosafety management system in India. The four project areas included Risk Assessment and Risk Management (RARM), Handling, Transport, Packaging and Identification (HTPI) of LMOs, Socio-Economic Considerations (SECs) and Public Awareness (PA). These areas align with the focal areas identified in the Strategic Plan for Cartagena Protocol on Biosafety for the period 2011-2020.

As the project activities near completion, a workshop on “Phase II Capacity Building Project on Biosafety: Outcomes and Way Forward” was held on March 15, 2017 in New Delhi, India. Approximately 130 participants including regulators, senior officials from MoEF&CC and other concerned ministries/departments, project partners, scientists, industry representatives, and students participated in the workshop. The event was coordinated by Biotech Consortium India Limited (BCIL) which serves as the Project Coordination Unit (PCU).

Achievements were presented by Dr. Amita Prasad, National Project Director (NPD) and Additional Secretary, MoEF&CC, and Shri Gyanesh Bharti, National Project Coordinator (NPC) and Joint Secretary, MoEF&CC. Participants were informed about the reports, trainings, guidance documents developed specifically for environmental risk assessment and monitoring of confined field trials of GE crops, outreach material for public awareness, and translations in regional languages that have been developed under the four areas of the project.

Sharing his appreciation, Dr. Alex Owusu Biney, Portfolio Manager, United Nations Environment Program (UNEP) indicated that the project outcomes have the potential to be replicated across not only the Asian region but throughout the developing world. He stressed the need for a strong political will to support the translation of strong Indian scientific capacity to drive development needs and empower end users to find solutions through innovations including climate smart agriculture, and modern biotechnology, whilst ensuring confidence in the safety measures put in place.

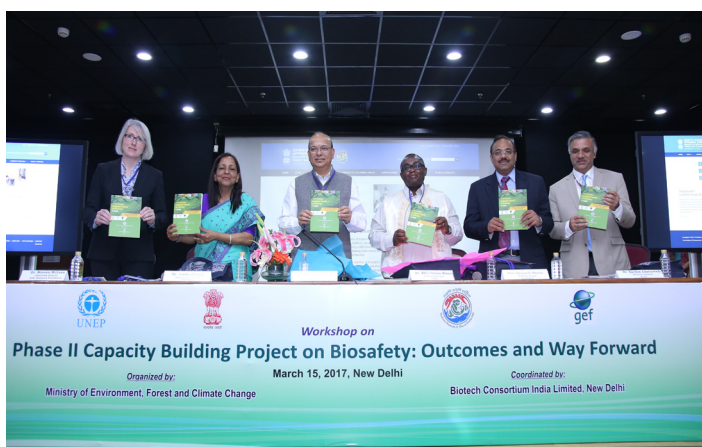
In her address, Dr. Morven McLean, Executive Director, ILSI Research Foundation, one of the project partners, referred to the Sustainable Development Goals (SDGs), highlighting Goal 2 which aims to end hunger and all forms of malnutrition by 2030. She indicated that the use of GMOs is one of the tools for sustainable agriculture to achieve this goal. She stated that regulatory authorities have an extremely important role in ensuring that innovations in modern agricultural biotechnology are translated into products through effective regulation.

She highlighted the progress made thus far, particularly in adopting systematic and scientific guidance for environmental risk assessment of GE plants, in line with Annex-III of the Cartagena Protocol on Biosafety. She stressed that adoption of the guidance is only a starting point and further capacity building is required to strengthen the safety assessment process in India.

Shri Ajay Narayan Jha, Secretary, MoEF&CC congratulated the team at MoEF&CC, BCIL and all project partners for the successful completion of the four-year project and the development of several knowledge products that would be useful not only in India but also regionally. He expressed hope that the capacity building activities would continue to strengthen the institutional mechanisms for biosafety regulations in India. He emphasized that continued capacity building at the state level, targeted on creating awareness about the key issues associated with biosafety, would help provide an enabling environment in the country to take forward research and position India as the regional leader.

In addition to the workshop, a Poster Exhibition showcased the work of the project partners. During the exhibition, scientists from National Bureau of Plant Genetic Resources (NBPGR) demonstrated the detection of the presence of Cry1Ac in Bt cotton seed samples.

Inputs for the next phase of capacity building activities by MoEF&CC were provided by all project partners in the technical session chaired by Dr. Amita Prasad.





## GM crops could contribute to higher food output: ICAR chief

Reproduced from Times of India (originally published on [March 19, 2017](#))

KARNAL: A discussion on the impact of the genetically modified (GM) crops on food security was organised at the National Dairy Research Institute (NDRI), Karnal on Saturday where experts deliberated over various aspects of the issue. The discussion was part of D Sundaresan Memorial Oration on impact of genetically modified crops on food security.

The director general of the Indian Council of Agricultural Research (ICAR) Trilochan Mohapatra, who is the secretary of the department of agricultural research and education (DARE), presented his views on the GM crops. He said, "Around 900 million people in the world are undernourished. Many more suffer from specific nutritional deficiencies, often related to insufficient intake of micro-nutrients. Eradicating hunger is a central part of the United Nations Millennium Development Goals. In order to achieve the goals, genetically modified (GM) crops are also mentioned on some occasions, as scientists see the development and use of GM crops as the key to reduce hunger amidst other controversies."

He said, "There are three possible pathways how GM crops could impact food security. First, GM crops could contribute to food production increases and thus improve the availability of food at global and local levels. Second, GM crops could affect food safety and food quality. Third, GM crops could influence the economic and social situation of farmers, thus improving or worsening their economic access to food."



Elaborating about genomics, Mohapatra said the science of genomics had transformed the way new varieties in crops and breeds in animals are being selected by providing vast knowledge about the actual genes responsible for a preferred growth trait or DNA markers tightly-linked to the trait of interest.

## Key Messages from Plant Food Allergens Seminar in Dhaka

Prof. Dr. R.H. Sarker, Department of Botany, University of Dhaka, Dhaka



On March 20, 2017, a seminar on proteomic approaches for identification and quantification of plant food allergens was held at the Institute of Nutrition and Food Science (INFS), University of Dhaka. This event was organized through the Higher Education Quality Enhancement Project (HEQEP) funded by the World Bank and executed by the Bangladesh University Grants Commission (UGC). Dr. Ragib Ahsan, Assistant Professor, Division of Biology and Medicine, Brown University, Providence, USA was the Keynote speaker. Prof. Dr. Yousuf Ali Mollah, Member, Bangladesh University Grants Commission graced the seminar as the Chief Guest while Prof. Dr. M. Imdadul Hoque, Dean, Faculty of Biological Sciences, University of Dhaka was present as the Special Guest. Prof. Dr. Nazma Shaheen, Director, Institute of Nutrition and Food Science & the Sub Project Manager of the HEQEP project chaired the seminar.

Post-graduate students and faculty members of INFS, and faculty members of other departments under the Faculty of Biological Sciences were invited to attend this seminar. In his presentation, Dr. Nagib Ahsan described the importance of proteomics and its impact on the identification and quantification of plant food derived allergens. He mentioned that proteomics has several applications, namely, the possibility to identify novel allergens; diagnose allergens; quantify allergens; discover the diversity of allergens as well as be used for the



safety assessment of foods derived from genetically modified plants. Dr. Ahsan shared different methods of identification and quantification of plant food allergens. He also showed the labeling requirements of the food ingredients by different countries and organizations.

Prof. Hoque mentioned that the Ministry of Environment and Forests (MOEF) has already given permission for the limited field release of fruit and shoot borer resistant Bt brinjal. Additional genetically modified food crops like late blight resistant potatoes, Vitamin A rich Golden Rice, as well as salinity and drought tolerant rice are under the different stages of contained and confined trials. Proteomic techniques may be useful to assess the possible allergenicity, if any, in the foods derived from these crops.

Prof. Dr. Yousuf Ali Mollah, the Chief Guest, thanked the Sub-Project Manager of the HEQEP-supported project for organizing this important seminar and the hands-on training for the project personnel as well as for selected researchers of INFS. He also thanked the speaker of the seminar for giving a very informative presentation, which especially engaged the young researchers. He also showed his appreciation to the speaker for volunteering his valuable time to train the Bangladeshi researchers. There was lively discussion by the participating scientists. The seminar ended with a closing remark offered by Prof. Dr. Nazma Shaheen.

EVENT	ORGANIZED BY	DATE	WEBSITE
<b>INDIA</b>			
Series of Training Workshop for Customs officials and Plant Quarantine officials on Transboundary movement of Living Modified Organisms	Ministry of Environment, Forest and Climate Change (MoEFCC), ICAR-National Bureau of Plant Genetic Resources (NBPGR), Directorate of Plant Protection, Quarantine & Storage (DPPQS) and National Academy of Customs, Excise and Narcotics (NACEN)	1. May 4-5, 2017 Kandla, Gujarat 2. May 25-26, 2017 Shillong 3. June 6-7, 2017 Amritsar	www.bcil.nic.in
International Symposium on Horticulture: Priorities & Emerging Trends	Indian Council of Agricultural Research (ICAR), New Delhi, Indian Institute of Horticultural Research, Bengaluru, India Society for Promotion of Horticulture, IIHR, Bengaluru, India International Society for Horticultural Science (ISHS), Belgium	September 5-8, 2017 Bangalore	http://www.iihr.res.in/content/international-symposium-horticulture-priorities-emerging-trends
5 <sup>th</sup> Annual South Asia Biosafety Conference	SABP, ILSI Research Foundation, Biotech Consortium India Limited (BCIL)	September 11-13, 2017 Bangalore	http://sabc.biotech.co.in/
<b>INTERNATIONAL</b>			
Risk Analysis for the Release of GMOs into the Environment	International Centre for Genetic Engineering and Biotechnology (ICGEB) Biosafety Group	May 22-26, 2017 Trieste, Italy	www.icgeb.org/meetings-2017.html
14 <sup>th</sup> International Symposium on the Biosafety of Genetically Modified Organisms (ISBGM014)	International Society for Biosafety Research (ISBR)	June 4-8, 2017 Guadalajara, Mexico	http://isbr.info/ISBGM014
BIO International Convention	Biotechnology Innovation Organization	June 19-22, 2017 San Diego, CA, USA	www.convention.bio.org

### Bringing Indian Biosafety Regulations into the Digital Age

To enhance transparency and increase the ease of doing business by going green, the Ministry of Environment, Forest and Climate Change (MoEF&CC), Government of India, launched a new website for the Genetic Engineering Appraisal Committee (GEAC) during the workshop on "Phase II Capacity Building Project on Biosafety: Outcomes and Way Forward" held on March 15, 2017. **The GEAC will now receive all applications related to conduct of confined field trials and large scale use of GMOs through online submission only through [www.geacindia.gov.in](http://www.geacindia.gov.in).** GEAC, the Apex regulatory agency, has taken this initiative to streamline the process of application submission and review. The website details GEAC's functions, composition, meetings and products approved, and serves as a repository for the relevant acts, rules, guidelines, protocols, and policies in relation to regulation of GMOs and products.



SOUTH ASIA  
BIOSAFETY PROGRAM

**The South Asia Biosafety Program (SABP)** is an international developmental program implemented in India and Bangladesh with support from the United States Agency for International Development. SABP aims to work with national governmental agencies and other public sector partners to facilitate the implementation of transparent, efficient and responsive regulatory frameworks for products of modern biotechnology that meet national goals as regards the safety of novel foods and feeds, and environmental protection.



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To receive an electronic copy of this newsletter send your name, institutional information and e-mail address to: [vibhaahuja.bcil@nic.in](mailto:vibhaahuja.bcil@nic.in)

# Registration Form

## 5<sup>th</sup> Annual South Asia Biosafety Conference

September 11-13, 2017

Taj West End, Bangalore, India



Registrations are limited to 120 for the conference. Registrants that cannot be accommodated will be added to a waitlist, and notified if space becomes available.

Attach mailing label from brochure,  
or your business card.

Name Preferred on Badge \_\_\_\_\_

Complete the following if the information on the mailing label is incorrect or no label is provided.

Registrant is:

Gender            Male    Female

Title             Mr.     Mrs.    Ms.    Dr.

First Name \_\_\_\_\_

Middle Initial \_\_\_\_\_

Last/Surname \_\_\_\_\_

Job Title \_\_\_\_\_

Employer/Company/Institution \_\_\_\_\_

Address \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_

State/Province \_\_\_\_\_

Zip/Postal Code \_\_\_\_\_

Country \_\_\_\_\_

Telephone \_\_\_\_\_

Facsimile \_\_\_\_\_

E-mail \_\_\_\_\_

Select one optional workshop to attend on September 12:

Workshop I: Thinking Ahead: Designing Confined Field Trials to Maximize Data Transportability (limited to 30 attendees)

Workshop II: Best Practices for Public Sector GE Product Development Programs (limited to 25)

Workshop III: Intersection of the Cartagena Protocol and the Indian Biosafety Regulatory System (limited to 40)

### Registration\*

Category	Fee	
	INR	US\$
Industry	Rs. 6,500/-	\$100
Research Institution, Universities, Individual Experts	Rs. 3,500/-	\$50
Students	Rs. 2,700/-	\$40
BCIL Biotech Club Members	25% discount	
Additional delegates from same organization (except students)	25% discount	
Government Departments and Ministries	No fee up to two nominations and Rs. 2,000/- each for additional nomination. Registration must be submitted through email to vibhaahuja.bcil@nic.in and confirmed by organizers. No online registration.	

\*No free on-the-spot registrations.

In case you face difficulty in the online registration, please download the registration form and send it to us along with payment through bank transfer. The details for Bank Transfer are as follows:

**Beneficiary Name: Biotech Consortium India Limited**

**Account Number: 00032320008527**

**IFSC Code: HDFC0000003 (HDFC Bank Limited)**

### Cancellation/Refund Policy

Registration cancellations must be made in writing and received by BCIL no later than September 1, 2017. Cancellations received by this date are subject to a 20% processing fee. Registration and ticketed event cancellations received after September 1, 2017, are NOT subject to a refund.

### Registration forms should be sent to:

Dr. Vibha Ahuja, Chief General Manager  
Biotech Consortium India Limited (BCIL)  
Anuvrat Bhawan, 5th Floor, 210, Deen Dayal Upadhyaya Marg  
New Delhi, India - 110 002  
Telephone Number +91-11-23219064-67 (Ext. 204; 205);  
23219059(D)  
Fax Number +91-11-23219063  
Email: vibhaahuja@biotech.co.in; vibhaahuja.bcil@nic.in

# Abstract Submission Form

## 5<sup>th</sup> Annual South Asia Biosafety Conference

September 11-13, 2017

Taj West End, Bangalore, India



Participants are encouraged to participate in this year's program in two ways:

1. **Submit an abstract for an oral presentation** in Plenary Session II: Crop Biotechnology and Biosafety in South Asia or Plenary Session V: New Applications of Biotechnology: Focus on Forestry and Biofuels. Submissions should describe research directly relevant to either of these topics, with preference to research that directly addresses biosafety risk assessment. Areas of particular interest include:

- Innovations for resistance to plant pathogens and insect pests
- Biotechnology as a tool for managing post-harvest losses
- Genetically engineered trees for use in timber or biofuel production, and mechanisms to manage gene flow
- Genetically engineered algae for biofuel production
- Biotechnology and genetic conservation in natural forests

Abstracts submitted for oral presentations will be evaluated by the conference organizers for quality and applicability. Abstracts that are not selected for oral presentations may be considered for posters instead.

2. **Submit an abstract for a poster presentation** during the Poster Program. Presenting a poster is a noteworthy way to share expertise or accomplishment, and poster presenters will have a dedicated time to present and discuss their work with the diverse group of attendees. All posters must convey relevance to biosafety research, environmental risk assessment of genetically modified organisms (GMOs), or the regulation of GMOs— plants, animals, arthropods, or micro-organisms.

### Guidelines for Submission

The following are suggestions that will contribute to ensuring the readability and quality of abstracts submitted for oral or poster presentations:

- Check for proper spelling and grammar.
- Use a standard typeface such as Times Roman with a font size of 12.
- Begin sentences with words (not numbers).
- Standard abbreviations may be used without definition, but nonstandard abbreviations/acronyms should be placed in parentheses after the first use of the terminology. It is important to keep nonstandard abbreviations/acronyms to a minimum, to allow for readability and understanding.
- Do not include tables, figures, or graphs in the abstract.
- Limit the abstract to 300 words.
- Try to organize the abstract with the following headings where appropriate: purpose, methods, results, conclusions (e.g., for research projects) OR purpose, description, evaluation and outcomes (e.g., for capacity building projects).

Space is limited. Abstracts will be considered on a first come, first served basis.

### Deadlines

June 15, 2017 for oral presentations

August 1, 2017 for poster presentations

*Please complete the form below and email it to [lwilliams@ilsa.org](mailto:lwilliams@ilsa.org) and copied to [vibhaahuja.bcil@nic.in](mailto:vibhaahuja.bcil@nic.in). You will receive a return email acknowledging receipt of your abstract and subsequently a second email informing you if your abstract has been accepted into the program.*

### I. Lead Presenter

First Name \_\_\_\_\_

Last/Surname \_\_\_\_\_

Institution \_\_\_\_\_

Telephone \_\_\_\_\_

E-mail \_\_\_\_\_

III. Co-Presenters (Include name, organization, e-mail)

### III. Abstract Submission for

Oral Presentation Plenary Session II: Crop Biotechnology and Biosafety in South Asia

Oral Presentation Plenary Session V: New Applications of Biotechnology: Focus on Forestry and Biofuels

Poster Presentation

### IV. Abstract Title

### V. Abstract (Maximum 300 words)

*(Note: Presenters must register for the 5<sup>th</sup> Annual South Asia Biosafety Conference. If an abstract is received from an author who is not registered, the abstract will NOT be included in the review process.)*