

South Asia Biosafety Program

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REGISTER NOW

3rd Annual South Asia Biosafety Conference

September 19-20, 2015
Dhaka, Bangladesh



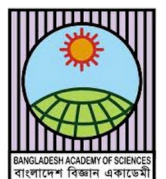
SOUTH ASIA
BIOSAFETY PROGRAM



Center for
Environmental
Risk Assessment

Featuring Sessions on:

- Perspectives on the Regulation of Biotechnology in South Asia
- Nutritionally Enhanced Crops and their Safety Assessments
- Biotechnology and Climate Change: A Response to Pests, Diseases and Abiotic Stress
 - Biotechnology Research in South Asia
- What Happens After Release: Stewardship and Monitoring
- Considerations for International and Regional Harmonization



Show your work during the Poster Session!

The 3rd Annual South Asia Biosafety Conference Poster Program is an opportunity for individuals to share their research, findings and achievements, with colleagues at the conference. Presenting a poster is a noteworthy way to share expertise or accomplishment. Poster presenters will have a dedicated time to present and discuss their work with the diverse group of attendees.

Information for registering for the conference and submitting poster abstracts is available on pages 5-6.



Follow along to @Sasiabiosafety on Twitter for updates and live tweets during the conference! #SABC2015

Stakeholder Workshop on the Biosafety Regulatory Process

MOHAMMED SOLAIMAN HAIDER, DEPUTY DIRECTOR, DEPARTMENT OF ENVIRONMENT, DHAKA



The South Asia Biosafety Program (SABP), in collaboration with the Bangladesh Department of Environment (DoE), organized a workshop on March 12, 2015 at the Hotel Amari in Dhaka. The aim of the workshop was to provide an overview and build awareness of the biosafety regulatory process of genetically engineered (GE) organisms in Bangladesh. It was also an opportunity to begin a process of stakeholder consultation for the development of guidance to help current and future applicants better understand the system as well as to develop transparent and predictable regulatory timelines. More than 70 stakeholders attended the workshop, representing the Ministries of Environment, Agriculture, Commerce, Fisheries and Livestock; the Bangladesh Academy of Sciences; agricultural research institutions; public and private universities and private companies.

The inaugural session of the workshop was chaired by Mr. Md. Raisul Alam Mondal, Director General, Department of Environment (DoE). Dr. Kamal Uddin Ahmed, Secretary, Ministry of Environment and Forests, Government of Bangladesh, provided remarks as the chief guest. Dr. Md. Abul Kalam Azad, Executive Chairman, Bangladesh Agricultural Research Council (BARC), witnessed the inaugural ceremony as the special guest. The workshop began with a welcoming address given by Mr. Mohammed Solaiman Haider, Deputy Director, DOE & Member Secretary, Biosafety Core Committee (BCC). After the welcoming address, Dr. Andrew Roberts, Director, ILSI Research Foundation Center for Environmental Risk Assessment, summarized the objective of the workshop.

The scientific session started after the short inaugural ceremony. There were five presentations during the scientific session given by Dr. Andrew Roberts; Dr. Joe Huesing, Senior Biotechnology Advisor, USAID; Mr. Mitchell Nelson, Agriculturist, Economic Growth Office, USAID, Bangladesh; and Dr. M. Imdadul Hoque, Bangladesh Country Coordinator, SABP. These presentations provided attendees with a summary of the Bangladesh biosafety regulatory system as well as an explanation of the purpose of regulation and the benefits for both regulators and applicants.

In his presentation, Dr. Roberts described the purpose of regulations. Biosafety regulations are intended to facilitate the safe use of

biotechnology while safeguarding the environment and protection of human health. He also highlighted the importance of transparency in regulation and forms of transparency. Putting it into context for Bangladesh, he shared that the rules and regulations are in place to allow technical transparency although there needs to be more outreach. However, the process of transparency is currently lagging behind and through this workshop, this process may begin to be addressed.

Dr. Huesing highlighted USAID's biotech projects and described why the regulatory path needs to be transparent and predictable. He also shared the adoption rate and the time for getting a biotech crop to market including the biotech regulatory costs in the United States.

In summary, he pointed out that:

- GE crops are expensive to develop but are scale neutral.
- GE crops take a long time to develop, usually over 10 years, including the regulatory process which covers about 26-37% of the total time.
- GE crops are profitable but significant liability and stewardship are needed.
- To invest in biotechnology as a business, it would need a regulatory environment that is practical, transparent and predictable.

Mr. Nelson presented his paper on the importance of the regulatory process for regulators. In his presentation Mr. Nelson described how the regulations of GE organisms benefit developers, regulators and the public. He also described why transparency matters. He pointed out that the goal of the government, regulators, developers, environmentalists and societies is the same. All of these stakeholder groups are working towards compliance to result in a safe food product. He also mentioned that the goal of compliance is not punishment.

Prof. M. Imdadul Hoque described contained, confined and open field trials of GE crops. He also highlighted the aims and objectives of different trials including their precautionary principles.

The final presentation was given by Dr. Roberts, who reviewed areas of ambiguity within the regulations and proposed the development of a written guidance document to provide predictable timelines and serve as a reference for stakeholders.



INTERESTED IN DIAGNOSTIC TESTING KITS FOR GENETICALLY ENGINEERED CROPS?

Find out more about what Amar Immunodiagnostics is doing in India on page 3!

Government Funded Indian Company Takes the Lead in Developing Inexpensive GE Testing Kits

DR. JAYANT BHANUSHALI, CHIEF SCIENTIFIC OFFICER, AMAR IMMUNODIAGNOSTICS, HYDERABAD

Many countries today allow cultivation of genetically engineered (GE) crops and/or use of GE products for food or feed purposes. Currently, the most prominent GE crops based on area of cultivation are soybean, corn, cotton and canola. In order to effectively regulate and control cultivation and distribution of GE crops, most countries have established stringent regulatory guidelines.

As part of this regulatory process, India has taken a leadership role in Southeast Asia and has started a capacity building program to effectively test and monitor the presence of GE organisms. The Indian Government, through the Department of Biotechnology, has funded local companies to innovate and develop simple and inexpensive diagnostic test kits to detect GE organisms. These test kits help regulators monitor the cultivation of GE organisms and help seed companies in their trait introgression program as well as ensuring that seeds sold by them to farmers have the required trait purity. In addition, when countries export soybean or import corn as a non-GE grain for animal feed, it is necessary to do adventitious presence testing (AP testing) to ensure that there is no accidental presence of GE organisms in the exported and imported grain. This is because India does not allow import or cultivation of GE corn or soybeans. These rapid test strips also help in quick AP testing at the port of entry.

Most user friendly diagnostic test kits work on immunoassay based technology which detects presence of newly introduced gene product (protein) and this is done by ELISA based test kits which take about an hour to perform under laboratory conditions or rapid lateral flow test kits which can give results in two minutes even under farm conditions. These kits can be used for testing leaf, seed, plant tissue or grain but not multi-ingredient processed food.

With funding from the Indian Government, an Indian company called Amar Immunodiagnosics has been able to develop several ELISA as well as rapid lateral flow diagnostic test kits for many genes such as Cry1Ac, Cry2A, CP4EPSPS (RR), Cry1Ab, Vip3, Cry1F, Cry1C, PAT/Pat, PAT/Bar, Barnase and Barstar. In addition, they have also developed rapid test kits where it is possible to test even three different traits in one strip (Cry1Ac, Cry2A and RR). These kits use monoclonal antibodies which increases their specificity and sensitivity and still cost significantly less compared to expensive kits imported from western countries. The sensitivity of a rapid test kit in the case of soybean is so high that it can detect 0.1% soybean (one positive seed in 1000 seeds). These rapid test kits can be used at the port of entry to quickly determine GE organism status of imported grain. **For more information, please contact Dr. Jayant Bhanushali at info@amarimmunodiagnosics.com.**

Policy Makers and Practitioners Awareness Workshop

DR. ZABITA KHAN SHINWARI, CHAIRMAN, DEPARTMENT OF BIOTECHNOLOGY, QUAID-E-AZAM UNIVERSITY, ISLAMABAD



The Pakistan Academy of Sciences (PAS) has been actively engaged in raising awareness and promoting education on dual use related concepts in science, specifically with emerging disciplines like biotechnology. Several training workshops have been conducted in Pakistan for scientists who are both faculty and young researchers. In this regard, a one day international workshop entitled "Policy Makers and Practitioners Awareness Workshop on Dual Use Education" was organized by PAS in collaboration with the Department of Biotechnology, Quaid-I-Azam University, Islamabad on March 30, 2015.

The main agenda of this workshop was to provide a platform for policy makers, stakeholders and practicing scientists to come together for a comprehensive overview and discussion on the importance of policies pertaining to dual use research issues in life sciences. As compared to the previous activities, this workshop stands unique because it was the first time greater emphasis was placed on the involvement of policy makers to address the dilemma of emerging sciences. Serious considerations were given to developing regulatory measures and new science policies for safe conduct of research.

Government representatives, fellows of PAS, heads of various scientific organizations as well as eminent foreign scientists participated in the workshop. Dr. Mukhtar Ahmed, Chairman, Higher Education Commission Pakistan, was the guest of honor while Mr. Ahsan Iqbal Chaudhry, Federal Minister, Planning, Development and Reforms, was invited as the chief guest in the inaugural session.

During the workshop, various speakers delivered their talks on a range of subjects related to policy issues of science. Dr. Anwar Nasim, President, PAS, gave a brief history of PAS during his welcome note. He emphasized the importance of the role of science in the development of the country and the need for active engagement of the Pakistan government with scientists. Keeping in view with the current trend of a science based economy, Prof. Dr. Zabta Khan Shinwari, Secretary General, PAS, advised the government representatives that emerging sciences like biotechnology should be included in the economic agenda of the country. He further added that the voice of the scientists should be given importance in policy making.

Moreover, following the concept of imparting dual use education through active learning programs, young researchers were given the opportunity to present posters relevant to the theme of the workshop. The poster groups were divided into the following subcategories:

- Bio-laboratory management
- Enhancing national preparedness to bio-threats
- Policy issues and dual use education
- Strategies to mitigate biosafety and biosecurity concerns in research

Two skits, titled "Dual Use Education: The Level of Awareness" and "Potential Threats of Emerging Technologies", were also presented highlighting the need for awareness and greater control over use of scientific research.

EVENT	ORGANIZED BY	DATE	WEBSITE
INDIA			
Media Workshops on Communicating Science and Biosafety	Indian Institute of Mass Communication (IIMC)	April 21-22, 2015, Mumbai April 29-30, 2015, Kolkata May 15 -16, 2015, Bangalore May 22-23, 2015, Bhopal June 2-3, 2015, New Delhi July 22-23, 2015, Ahmedabad July 28-29, 2015, Chandigarh	www.iimc.nic.in
International Conference on Low Temperature Science and Biotechnological Advances	ICAR, National Academy of Agricultural Sciences, India, and Royal Botanic Gardens, Society for Low Temperature Biology, UK	April 27-30, 2015 New Delhi	www.cryobiotechasia2015.in
2 nd World Congress on Biotechnology	Bright International Conferences & Events Organization	June 29-30, 2015 Hyderabad	www.rsc.org/events/detail/17047/2nd-world-congress-on-biotechnology-2015
INTERNATIONAL			
International Conference on Biotechnology, Nanotechnology and Environmental Engineering (ICBNE'15)	International Academy of Arts, Science & Technology	April 22-23, 2015 Bangkok, Thailand	www.iaast.org/2015/04/23/44
5 th Meeting of the Society for Promotion of Science	Pakistan Academy of Sciences	May 2, 2015 Lahore, Pakistan	www.paspk.org
IOSBC/WPRS Group "GMOs in Integrated Plant Production"	Agroscope	June 1-3, 2015 Sofia, Bulgaria	www.eigmo.info/content/home
7 th Asia Pacific Biotech Congress	Omics International	July 13-15, 2015 Beijing China	www.biotechnologycongress.com/asia-pacific/
3 rd Annual South Asia Biosafety Conference	South Asia Biosafety Program (SABP)	September 19-20, 2015 Dhaka, Bangladesh	www.cera-gmc.org/upcoming_Meetings_&_Events



SOUTH ASIA
BIOSAFETY PROGRAM

The South Asia Biosafety Program (SABP) is an international developmental program implemented in India, Bangladesh and Pakistan 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



Registration Form

3rd Annual South Asia Biosafety Conference

September 19-20, 2015

BRAC Centre Inn, Dhaka, Bangladesh



SOUTH ASIA
BIOSAFETY PROGRAM

Registrations are limited to 100 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 _____

Registration*

Category	Fee	
	INR	US\$
Industry	Rs. 5,000/-	\$85
Research Institution Universities Individual experts	Rs. 3,000/-	\$50
Students	Rs. 2,000/-	\$35
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	

*In case you face difficulty in 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, 2015. Cancellations received by this date are subject to a 20% processing fee. Registration and ticketed event cancellations received after September 1, 2015, 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 - 110 002
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Fax Number +91-11-23219063
Email: vibhaahuja@biotech.co.in; vibhaahuja.bcil@nic.in

Poster Program Abstract Submission Form

3rd Annual South Asia Biosafety Conference

September 19-20, 2015

BRAC Centre Inn, Dhaka, Bangladesh

THE 3RD ANNUAL SOUTH ASIA BIOSAFETY CONFERENCE POSTER PROGRAM is a new opportunity for individuals to share their research, findings and achievements with colleagues at the conference. 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 poster abstracts must convey relevance to biosafety research, risk assessment, or regulation of genetically modified organisms (including programs or activities to improve capacity and knowledge generation).

The following are some suggestions about poster abstracts that will contribute to ensuring the readability and quality of the submission. Abstracts of accepted posters will be included as part of the conference onsite program and will be published as submitted, without content editing.

- 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. Such content is appropriate for the poster.
- 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. Posters will be considered on a first come, first served basis, based on the relevance to the program.

ABSTRACT SUBMISSION FORM FOR POSTER PROGRAM

PLEASE COMPLETE THE FORM BELOW AND E-MAIL IT TO lwilliams@ilsa.org AND COPIED TO vibhaahuja.bcil@nic.in.

You will receive a return email acknowledging receipt of your abstract and subsequently a second email informing you if your poster has been accepted for the conference poster program.

I. Lead Presenter

First Name: _____

Last Name: _____

Institution and Address: _____

E-mail: _____

Telephone Number: _____

(NOTE: Poster Presenters must register for the 3rd 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).

II. Poster Title: _____

Poster Authors: _____

(NOTE: list all poster authors including their name, organization, address and e-mail. Separate authors with a semi-colon and please INCLUDE the lead presenter also).

III. Poster Abstract (maximum 300 words)

