

**DEPARTMENT OF BIOTECHNOLOGY** 

ORGANIZING
BIOLOGICAL SCIENCE EXHIBITION
BIOCHROME-2017



# **VENUE**

Dr. MPS COLLEGE OF BUSINESS STUDIES SIKANDRA, NEAR NAVIN SABZI MANDI, AGRA-282007

Biotechnology is a contemporary branch of 'Biological Sciences' utilized integrated principles of Biological and Engineering sciences, to enhance the Industrial production & laboratory researches for human welfare through genetic manipulations. Biotechnology has various imperative multi disciplinary allied branches like; *Red*, *White*, *Green* and *Environmental Biotechnology* are emerging branches of Biotechnology for Human welfare. Department of Biotechnology successfully running M.Sc. and B.Sc. Biotechnology courses affiliated to Dr B.R.A. University, Agra. Department aims to create highly qualified and skilled professionals to take challenges in respect of their future prospects. Key activities of the department are education, research & development, well equipped laboratories and libraries. Department has continuously organized guest lectures from the eminent Academicians/ Industrialist/ Scientists, Industrial visits, Educational tours, Conferences, Seminars, Workshops, in house projects, routine debate and quiz, for making our students creative and innovative for better employability.

#### "BIOCHROME-2017"

We are organizing a Biological Science fest **BIOCHROME-2017** in the department of Biotechnology as a platform for the students to explore their creativity, innovations and skills on the recent advances of Biological Sciences in respect of working models and posters. We are trying to introduce enthusiasm, creativity, innovativeness and skills for their 360° development. We hope that **BIOCHROME-2017** would inculcate passion for this emerging discipline in the youth and will provide a forum for students and researchers to highlight their valuable thought, aptitude and contribution in the field of Biological Science for society development

# Theme of BIOCHROME -2017 BIOFUELS: AN ALTERNATE OF CONVENTIONAL FUELS FOR SUSTAINABLE ENVIRONMENTAL MANAGEMENT

Liquid fuels are the primary sources to run our transportation, industries, machines, power generation in present scenario. To meet this increasing demand of conventional fuels like petrol and diesel have to import it from Arabian countries on higher prices. Additionally they are going to cause hazardous pollutants cusing global warming, pollution, soil erosion, acid rain and many diseases. However, biofuels have gained significant attention in recent years since they are considered as viable source of energy and safe alternative approaches to environment. To sustain our environment we have to focus on green and safer technology like biofuels, biogas and solar energy for saving our environment. Biofuels are globally considered as sustainable and ecofriendly source of energy to enhance national energy security and decrease dependence on the fossil fuels. Biofuel act as a renewable fuel produced through biological processes. These biofuels are produced from the biological materials like seeds, composts, plant materials, agricultural, commercial, domestic, industrial wastes and manures etc. as a renewable resources through various biological process like fermentation, esterification and microbial degradation. Renewable biofuels generally involve contemporary carbon fixation, such as those that occur in plants or microalgae through the process of photosynthesis. The most commonly used biofuels are ethanol, biodiesels and biogas produced from various feedstocks, such as Jatropha ,sugarcane, bagasse, maize,soybean and cassava etc.

During the past one decade, Government of India has taken many initiatives for enhancing production and use of biofuels. The National Biofuel Mission launched in 2003 and The 'National Policy on Biofuels' released in 2009, which have vision to foresees to processing of biofuels as a potential means to stimulate rural development and generate more employment opportunities by expanding vast horizon of research and development as well. The Policy aims at the mixing of biofuels with blending upto 20% with petrol and diesel in the transport sector by the year 2017 (enhanced upto year 2030). Biofuels can be a more affordable alternative, especially when it is sourced and produced locally. If the supply and demand for this alternative energy source will increase, they can become even cheaper. Bio-fuels are renewable, bio-degradable, sustainable, environment friendly and can be seen as alternative fossil fuels. Biofuels are still in a nascent stage and need lots of research and development to make it more popular among society so that 10<sup>th</sup> August observed as World Biofuel day all over the world to create awareness about non fossil-fuels (Green Fuels or Bio-fuels). In recent years to meet the global demand there is an urgent need to develop alternative and non-petroleum-based fuels, so that by using advanced biotechnological approaches we can improve biofuel production. Specifically, numerous strategies have evolved by which biotechnology is being used to create improved biofuels products or processes, involving the creation of engineered or synthetic microorganisms for use in production of ethanol, biodiesel, biogas or other fuels which are used as improved fuel feedstocks for better production of biofuels. Various biotechnological tools like genetic engineering, transgenesis, sequencing, microarray, tissue DNA culture,plant breeding, Recombinant technologies, environmenatal industrial biotechnology, plant breeding, gene mutation are widely employing for enhancing productivity of different plants having capability to produce biofuels on large scale.

## PROGRAMME SCHEDULE (27th -28th October,2017)

Day 01			
Time	Date	Schedule	
8:00– 9.30 AM	27.10.2017	Registration	
9:30 –10.30AM	27.10.2017	Inaugural Ceremony by Guests	
10:30–12:30 PM	27.10.2017	Seminar/ speech of Guests	
12:30-01.00 PM	27.10.2017	Lunch Packets distribution	
01.00 –4.00 PM	27.10.2017	Models Presentation and evaluation	
Day 02			
Time	Date	Schedule	
9:00-10.30 AM	28.10.2017	Role of Biotechnology for enhancing the efficacy the Bio- fuels and applications (Lecture/seminar)	
10.30- 11.30 AM	28.10.2017	Posters presentation and evaluation for all categories	
	28.10.2017	General talk and discussion	
11.30-12.30 PM	28.10.2017	Result announcement, prize distribution and Valedictory function (auditorium)	

#### **Subthemes for Model/Poster Presentation:**

- ➤ Bio Fuels (biodiesel & bioethanol) and Biogas production
- > Green energy (solar energy & wind power energy)
- Agriculture Biotechnology
- Plant science and Tissue culture
- ➤ Industrial biotechnology
- Bioremediation
- ➤ Biomass and Bio-energy (biomass energy, energy conservation & recycling)
- Microbial Biotechnology
- ➤ Agricultural practices for climate change

#### Eligibility for participation (Students who are studying in):-

12<sup>th</sup> (Science) & B.Sc. (Biological Sciences) students are eligible to participate.

#### **Registration Details:-**

Last Date of Registration: 25<sup>th</sup> October 2017

Registration : Rs. 50/- per students for Inter mediate level

: Rs. 100/- per students for UG

**Note:-** Registration forms are also available at our college website **http://www.mpsgroup.org.in** which should submit along with the mentioned registration fee to the Department of Biotechnology.

#### **CATEGORIES (MODEL/POSTERS)**

- 1. Intermediate level
- 2. Graduation level
- Winners will get medals and certificates of **Presentation Category** along with their team mates.
- Remaining Participants will only get the certificates of **Participation** category.
- Faculty member will also get certificates of **Participation**.
- College will provide Lunch packets and Tea to the participants students and their mentor.

#### **CONTACT DETAIL:**

For any further detail and assistance please contact to

#### **Head-Coordinator**

#### Dr. Kavita Parihar

**Assistant Professor** 

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### Dr. Shiv Om Pratap

Head

Department of Biotechnology

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## **CORRESPONDING ADDRESS**

DEPARTMENT OF BIOTECHNOLOGY DR. M.P.S GROUP OF INSTITUTIONS, SIKANDRA, NEAR NAVIN SABZI MANDI, AGRA-282007

Website: www.mpsgroup.org.in

# **REGISTRATION FORM**

Name of Applicant:				
Date of Birth:				
Educational Qualification:				
Gender: (Please Tick): Male	Female			
Father Name:				
Father Occupation:				
Corresponding Address:				
Permanent Address:				
School/College/Institution Name & Address:				
Candidate Mobile No.:				
Parent's Mobile No				
E-mail Address:				
Area of Interest:				
Participation (Please Tick):				
Model presentation Poster Presenta	tion Participation			
Date:				
Place:	Signature of Applicant			