

Programme

Session I:

Robotics: The Future of Biotechnology

9:30 a.m. - 9:40 a.m.

Inaugural and Welcome Note

*Dr. Mallika Verma, Department of Physics,
Miranda House*

9:40 a.m. - 12:30 p.m.

Workshop: Use of Arduino and IOT in
making biomedical Devices

*Dr. Monika Tomar, Department of Physics,
Miranda House*

Session II (Luncheon) :

Poster presentation

12:30 p.m. - 1:30 p.m. (LUNCH)

Students poster presentation on
Contemporary Biotechnology

Session III:

Understanding one of the Major
Healthcare Challenges of Today

1:30 p.m. - 1:45 p.m.

Introductory Note: Antimicrobial

Resistance Online Games (AMR Games)

Dr. Anshu Bhardwaj, CRI France & IMTECH, Chandigarh

1:45 - 2:15 p.m.

AMR Survey

2:15 - 4:15 p.m.

Playing Online Game and Game

Evaluation Survey

4:15 - 5:00 p.m.

Special Lecture: AMR- Major Challenge in
Healthcare Sector

*Dr. Anuj Sharma, Technical Officer - Antimicrobial
Resistance; Health Laboratories, WHO*

5:00 - 5:10 p.m.

Concluding Remarks

*Dr. Sadhna Sharma, Department of Zoology,
Miranda House*

Organizing Committee

Patron

Dr. Bijayalaxmi Nanda
Acting Principal, Miranda House

Dr. Janaki Subramanyan
Bursar, Miranda House

Coordinator

Dr. Sadhna Sharma
Department of Zoology, Miranda House

Co- Coordinators

Dr. Mallika Verma
Department of Physics, Miranda House

Dr. Monika Sharma
Department of Zoology, Miranda House

Dr. Saloni Bahri
Department of Botany, Miranda House

Dr. Mallika Pathak
Department of Chemistry, Miranda House

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Department of Zoology
University of Delhi

Prof. K. Natarajan
Dr. BR Ambedkar Center for Biomedical Research
University of Delhi

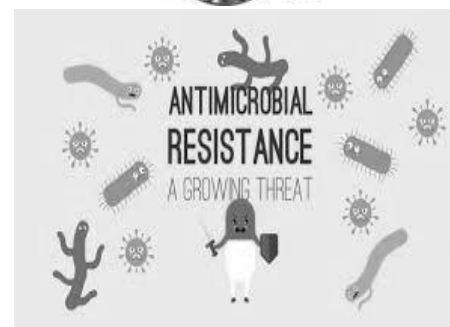
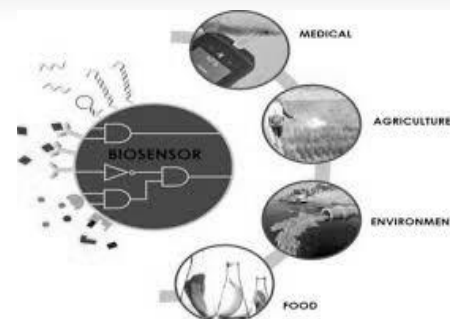
MIRANDA HOUSE

University of Delhi



DBT- Biotechnology Popularization Programme

2 August, 2019



Organized By
Miranda House DBT Star Departments
Physics, Chemistry, Botany, Zoology
University of Delhi

Objectives and Scope of Programme

To popularize Science in general and biotechnology in particular activities involving hands on workshops and online games makes it interesting. We have chosen Robotics in Biotechnology and Antimicrobial resistance awareness as two important aspects in these activities.

Free Registration

Registration Link

<https://forms.gle/q2D86xoNHfZKL9ws5>

Guidelines: Poster Presentation

**Poster Size: 80 cm width and
100 cm height**

**An abstract with word limit of 250 words
in Times New Roman Format, Font size
12 should be submitted latest by
29 July 2019 to
Email: dskc2008.miranda@gmail.com**

***Top Three Posters in each stream (Life
Sciences, Chemical Sciences and Physical
Sciences) will be given cash awards of Rs.
5000, Rs. 3000 and Rs. 2000 each***

Venue

**Seminar Hall, Miranda House
University of Delhi,
Delhi-110007**

Contact details :

Email: dskc2008.miranda@gmail.com

Focus Area

Robotics being the future of biotechnology can easily be understood using simple open platforms like Ardiuno and IOT. Arduino UNO, being a tool of infinite applications serve a great job in the field of Biotechnology. Sensors are combined with small tools to create many projects that use Arduino UNO to process the information. The workshop enables young minds to learn sensor based applications and to create something of wider applicability. The participants are encouraged to create something that can be used in daily life. Using simple sensors like ultrasonic sensors or infrared sensors, students came up with interesting ideas like blind stick (a stick that can be used by blind people to detect object in front of them), automation systems (to provide energy efficiency in the workplace), sensor based indicators, etc. The ideas are inter-disciplinary and innovative.

Antimicrobial resistance (AMR) is a major public health problem globally so it is important to make everyone aware of this. Factors like self medication, access to antibiotics without prescription, use of pharmacies and informal healthcare providers as sources of healthcare, and lack of knowledge about when to use antibiotics has led to increased incidence of AMR in India. Developing methods for communicating the issue of antibiotic resistance to the general public particularly young students will reap better results in tackling antimicrobial resistance. This is being done in collaboration with CRI, France and IMTECH Chandigarh.

ABOUT MIRANDA HOUSE

Miranda House is a premier women's institution at the University of Delhi. Miranda House is reputed for the quality of its science teaching and has been NIRF rank one institute for science education in the country for three consecutive years 2017-2019. Offering a full range of B.Sc. Honours, M.Sc. and Ph.D. programmes in basic sciences, its state of the art infrastructure makes it one of its kind in the University.

DSKC Inter-disciplinary Research Facility

Miranda House promotes creativity and excellence in science through DSKC with special focus on attracting young students to careers in science and nurturing their innate talent.

DSKC mission is:

- activity-based science teaching-learning programmes
- research in science education
- capacity building and nurture programmes
- outreach programmes

The research facility in college has developed educational resources, innovative curricular materials and pedagogic instruments. It has developed research-based programmes for providing the highest quality Continuing Professional Development for those involved in science education, at all levels. The popularization programme deals with various thrust areas of biotechnology like Medical, Animal and Pharmaceutical biotechnology, Bioengineering and Biomedical Devices. The workshop, online games, poster presentation and expert talk organized on these themes provide a platform to students to enhance and update their concepts of biotechnology.