

**Practical and Theoretical Course****“Biopesticidal Proteins: From Isolation to Molecular Characterization and Applications”
4-14 April 2011, Damascus, Syria.**

Organizer: Atomic Energy Commission of Syria (AECS), Damascus, Syria.

Location: Labs of Molecular Biology and Biotechnology Department, AECS.

Scientific Supervisor: Dr. Hassan AMMOUNEH.

International speakers:

Prof. Raj Kamal Bhatnagar (ICGEB New Delhi Component, India)

Prof. Samir JAOUA (College of Arts and Sciences, Qatar University, Doha, Qatar)

Prof. Yuan Zhiming (Wuhan Institute of Virology Chinese Academy of Sciences, Wuhan, China)

List of the topics and experimental techniques:**Lecture Topics:**

- Insecticidal proteins of *Bacillus thuringiensis*.
- Regulatory issues for application of *Bt* proteins.
- Insecticidal proteins from other organisms.
- Antifungal and antibacterial proteins.
- Large scale production of biopesticidal proteins.

Laboratory Topics:

- Isolation of *B. thuringiensis* strain from soil and insects.
- Insect bioassays.
- Isolation of plasmids from *B. thuringiensis* strain.
- Multiplex PCR for the identification of insecticidal protein coding genes.
- Sporulation and purification of crystal proteins.
- Transformation of *B. thuringiensis* strains by electroporation.
- Cloning of *cry* genes.
- Isolation and characterization of the antifungal and antibacterial proteins.
- Mass production of biopesticidal proteins.

Participants:

Participants should have a basic working knowledge in applied molecular microbiology and should be directly involved in research covered by the course. Admission is limited to 15 participants (10 non local).

Closing date for applications:

31 December 2010.

Funding:

National of ICGEB Member states who are selected to participate on an ICGEB grant will receive their accommodation and local hospitality for the duration of the course; travel NOT funded. Please note that there is no registration fee.

Requests for information and applications directed to:

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