

The Payment may also be wire transferred to RGCA A/c : 10948711219  
(Mayiladuthurai, IFSC Code. SBIN0000875)

Receipt to be sent along with application form

\* No refund of registration fee will be entertained.

### Accommodation and Conveyance :

Double occupancy accommodation will be arranged by RGCA in a Hotel at Vaitheeswaran koil, TamilNadu. Conveyance will be provided to the participants from the place of stay to the venue and back at no additional cost.

### Contact Us

For any further details Contact:

**Shri. V.N. Biju**, Workshop Co-ordinator. Phone: 04364 -265214/ 265200;  
+91 9486702157, email: rgcapatholab@gmail.com, rgcaho@gmail.com

### How to Reach Workshop

By Train: Nearest Railway stations 1) Sirkali- 6 kms 2) Mayiladurai - 20 kms  
3) Tiruchirapalli - 160Kms. By Bus: 1) From Chennai 250 Kms- Private travel bus ( Rathimeena, Univercel etc) and TamilNadu State Transport Buses operate on this route.

2) From Tiruchirapalli 160kms - Both private and TamilNadu State Transport Buses operate on this route.



# RAJIV GANDHI CENTRE FOR AQUACULTURE

(MPEDA, Ministry of Commerce & Industry, Govt of India)

IN COLLABORATION WITH

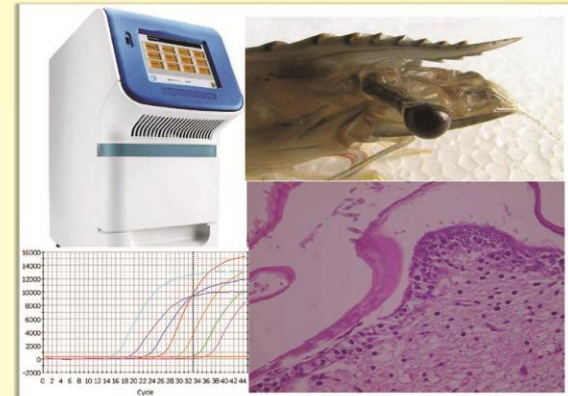
## AQUACULTURE PATHOLOGY LABORATORY

(Department of Veterinary Science and Microbiology, University of Arizona, USA)

ANNOUNCE WORKSHOP ON

### "SHRIMP PATHOLOGY"

(7<sup>th</sup> January to 12<sup>th</sup> January, 2013)



Venue:

### TECHNOLOGY TRANSFER TRAINING & ADMINISTRATIVE COMPLEX RAJIV GANDHI CENTRE FOR AQUACULTURE

Poombuhar Road, Karaimedu Village, Sattanathapuram P.O.,  
Sirkali Taluk, Nagapattinam District, TamilNadu-609 109.

E-mail: rgcaho@gmail.com Web: www.rgca.org.in



**THE UNIVERSITY  
OF ARIZONA**



## Introduction

Rajiv Gandhi Centre for Aquaculture (RGCA) is the R & D arm of the Marine Products Export Development Authority under the Ministry of Commerce & Industry, Govt. of India. RGCA is actively involved in the development of new Aquaculture technologies and supporting the existing available technologies in India to strengthen the Aquaculture production base in the country for increased exports. RGCA has established Technology Transfer, Training and Administrative Complex at Sirkali, TamilNadu for disseminating the technologies evolved through training the professionals, fishermen, aquaculture farmers and entrepreneurs from all over the country. RGCA also established Central Aquaculture Pathology Laboratory and Central Aquaculture Genetics Laboratory at this complex to support the Aquaculture industry.

RGCA is organizing Shrimp Pathology Workshop in collaboration with Aquaculture Pathology Laboratory (APL), Department of Veterinary Science and Microbiology, University of Arizona at this complex at Sirkali, from 7<sup>th</sup> to 12<sup>th</sup> Jan.2013.

Aquaculture Pathology Lab of University of Arizona is a specialised laboratory committed for shrimp pathology diagnostic services for more than three decades. APL is headed by Dr.Donald V Lightner, Professor, Department of Veterinary Science and Microbiology, University of Arizona and supported by Dr.Carlos Pantoja, Dr.Linda Nunan and Dr.Kathy Tang Nelson. APL is a World Organization for Animal Health (OIE) reference laboratory and United States Department of Agriculture, Animal and Plant Health Inspection Service – approved laboratory for crustacean diseases. APL is serving international shrimp farming industry for 30 years by developing diagnostic methods for control and prevention of shrimp diseases; by being part of the team that produced the first domestic pathogen-free stocks of the Pacific white shrimp; by training more than 1,000 national and international shrimp disease specialists; and by identifying new shrimp pathogens and diseases. Much of what is known about shrimp diseases and the methods to diagnose and manage them was developed at the APL.

## Workshop Details:

This is a 6 day workshop from 07<sup>th</sup> -Jan. to 12<sup>th</sup> -Jan.2013 and is designed to provide and share latest information and developments on Shrimp Pathology to the professionals and technicians in Shrimp aquaculture sector. The workshop includes hands on training. This is open for 14 participants from Industry and registrations are issued on first come first serve basis.

## Training Faculty & Facility

Dr. Carlos R. Pantoja and Linda Nunan of Aquaculture Pathology Laboratory, University of Arizona (an OIE reference laboratory for diseases of penaeid shrimp). They forms part of a team that provides disease diagnostic services to the international shrimp farming industry and conducts research on new and emerging diseases of penaeid shrimp.

The facility, equipments, reagents and consumables for the workshop is provided by RGCA.

## Course Contents

- Introduction to gross anatomy and Normal histology of Penaeid Shrimp
- Major types of Diseases affecting Shrimp
- Disease Diagnostic and detection methods and the equipment used for these purposes
- Viral diseases in Shrimp and their management
- Bacterial and other diseases in Shrimp and their management
- Bio-security in Farms and Hatcheries
- Disease identification methods
- Fixation procedures for samples for histology and sampling methods for molecular tests.
- Viral Diseases – WSSV, IMNV, TSV, IHHNV, YHV, BP, MBV, MoV, LSNV, SMV and HPV
- Bacterial Diseases – Vibriosis, Necrotizing Hepatopancreatitis (NHP), Spiroplasma penaei, Streptococci
- EMS/AHPNS
- Idiopathic Hyaline Granulomatous Syndrome - (IHGS)
- Review of Molecular methods for detection of Shrimp Pathogens
- Practical sessions on Real time PCR for IMNV and IHHNV
- Histopathology of IMNV, WSSV, IHHNV and TSV
- DNA & RNA extraction, Spectrophotometer measurements of extracted DNA & RNA

## Who Should Attend

Post graduates in Life Science working in Shrimp Disease screening Laboratories involved in Shrimp Aquaculture Industry, Academicians, Researchers etc.

## Registration Fees

Registration fee - Rs.1 5,000/-

Fees include CD containing Lectures, Accommodation, Working Lunch and printed protocols of Practical Laboratory sessions.

## How to apply

Fill up the registration form enclosed with this brochure or downloaded form from MPEDA website. Duly filled-in registration forms along with Demand Draft for requisite course fee, drawn in favour of “Rajiv Gandhi Centre for Aquaculture” payable at Mayiladuthurai, should reach the workshop venue address on or before the **last date of registration : 10<sup>th</sup> December 2012**

**SHRIMP PATHOLOGY WORKSHOP - REGISTRATION FORM**



Name: Dr/Mr/Ms : \_\_\_\_\_  
Company/ Institution : \_\_\_\_\_  
Address : \_\_\_\_\_  
\_\_\_\_\_  
City : \_\_\_\_\_  
State : \_\_\_\_\_ Pin: \_\_\_\_\_  
Phone/ Mobile : \_\_\_\_\_  
E mail : \_\_\_\_\_

Registration Fee for Shrimp Pathology Workshop - Rs. 15,000/-

- Demand Draft in favour of "Rajiv Gandhi Centre for Aquaculture"  
 Online Transfer Receipt

Fees include CD containing Lectures, Accommodation, Working Lunch and Printed Protocols of Practical Laboratory Sessions.

**Last Date for Registration: 10<sup>th</sup> DECEMBER 2012**

Duly filled-in registration forms along with Demand Draft for requisite course fee, drawn in favour of "Rajiv Gandhi Centre for Aquaculture" payable at Mayiladuthurai, should reach us at the address given below on or before the last date of registration. The Payment may also be wire Transferred to RGCA A/C: 10948711219 (Mayiladuthurai, IFSC code. SBIN0000875). Receipt should be send along with this form

**RAJIV GANDHI CENTRE FOR AQUACULTURE**  
**TECHNOLOGY TRANSFER TRAINING & ADMINISTRATIVE COMPLEX,**  
Poompuhar Road, Karaimedu Village, Sattanathapuram P.O.  
Sirkali Taluk, Nagapattinam District, TamilNadu. 609 109  
Tel: 04364 -265214/ 265200 E-mail: rgcaho@gmail.com, rgcapatholab@gmail.com

Registration confirmation and Receipt will be emailed to you after processing. No cancellation requests will be entertained.

DD No: \_\_\_\_\_ Date: \_\_\_\_\_ Bank: \_\_\_\_\_

Date: \_\_\_\_\_ Signature: \_\_\_\_\_