



**S.K.B.R.COLLEGE, AMALAPURAM**  
**Department of Zoology**

***LIST OF MEMORANDA OF UNDERSTANGINGS (MoUs)***

**The Dept. of Zoology entered into MoUs with the following organisations**

<b>Department</b>	<b>Name of the Organization</b>	<b>Purpose</b>
Zoology	1.S.V.R.R ShrimpHatchery, Komaragiripatnam, E.G District	Establishment of PCR laboratory in hatchery as per the norms of Coastal Aquaculture Authority
	2.Aqua Tech-Bilingual Monthly Magazine, Vijayawada	Publication of articles & sharing of knowledge
	3. Hi-Tech Vet Pharma <sup>TM</sup> Aqua Pharmaceutical company, Nellore	Innovation of new products in shrimp disease management
	4.Srinivasa Aqua Farms, Mummidivaram, E.G District	To develop expertise on shrimp culture among the students
	5. Sapthagiri Aqua Labs, Aqua Disease Diagnostic Laboratory, Amalapuram	Sharing of knowledge & expertise in laboratory skills
	6.Srinivasa Shrimp Hatchery, Mummidivaram, E.G District	Monitoring larval diseases during seed production

**The details of individual MoU's are prepared as separate folders**

# 1. MoU with Sri Venkata Rama Raju (SVRR) Shrimp Hatchery, Komaragiripatnam, E.G District, A.P

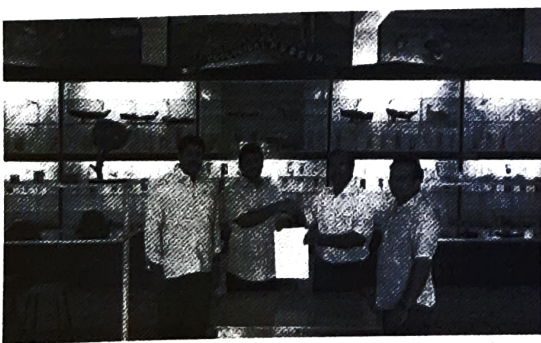
*Purpose of MoU: To provide consultancy services for setting up Aqua Disease  
Diagnosis Laboratory in the hatchery as per the norms of Coastal Aquaculture  
Authority (CAA)*

This MoU is made on the 21<sup>st</sup> day of April 2014 between the Department of Zoology, S.K.B.R College, Amalapuram represented by its Principal Capt.N.Lakshmana Rao on the one part and Sri.A.Suresh Varma, Managing Director of S.V.R.R Shrimp Hatchery, Komaragiripatnam on the other part *for setting up Aqua Disease Diagnostic laboratory in the hatchery as per the specifications of Coastal Aquaculture Authority (CAA).*

S.V.R.R Hatchery is a coastal shrimp hatchery intended to produce *P. vannamei* seed. As per the directions of CAA, Shrimp hatcheries intended to produce *P. vannamei* seed are required to get registered with CAA and obtain approval of CAA by applying in the prescribed format for import of broodstock of *SPF P. vannamei* from the approved suppliers by paying the prescribed processing fee. As per the norms of CAA one PCR lab is to be established in the hatchery.

As a part of MoU we have guided the Hatchery operator and processed the application to obtain approval of CAA certificate and extended consultancy *for setting up Aqua Disease Diagnostic laboratory in the hatchery as per the specifications of Coastal Aquaculture Authority (CAA).*

**Photo of suresh with principal**



**Dr.P.Saibaba, HOD of Zoology and  
Sri.A.Suresh Varma in Museum**

## 2. MoU with AQUA TECH-Bilingual Monthly Magazine, Vijayawada, Krishna District, A.P

***Purpose of MoU: Publication of research articles related to Aquaculture and to extend suggestions for planning seminars and exhibitions***

This MoU is entered into on the 23<sup>rd</sup> day of June 2014 between the Department of Zoology, S.K.B.R College, Amalapuram represented by its Principal Capt.N.Lakshmana Rao on the one part and Sri.K.Joseph, the Chief Editor of Aqua Tech, Bilingual Monthly Magazine, Vijayawada on the other part ***for publication of research articles related to Aquaculture.***

**AQUA TECH** is one of the leading national magazines devoted to publish research articles, reviews and other events of Aqua Industry. The magazine aims to provide the most complete and reliable source of information on current developments in the field of Aquaculture.

**As a part of MoU** with AQUA TECH Magazine, Dr.Pindi Saibaba of Zoology department has been **publishing research articles addressing the problems emerging in shrimp farming.** He is also participating in the seminars organized by the magazine and delivering guest lectures.



Sri.N.Lakshmana Rao, Principal (Left) and Sri.K.Joseph, Chief Editor (Right) signed MoU



Sri.K.Joseph, Chief Editor of AquaTech Magazine (Left) in Zoology Museum

### 3. MoU with Hi-Tech Vet Pharma™, Nellore Aqua Pharmaceutical Company

***Purpose of MoU: Development of innovative products for shrimp health management through in-house R & D***

This MoU is entered in to on the 14<sup>th</sup> day of July 2014 between the Department of Zoology, S.K.B.R College, Amalapuram represented by its Principal Capt.N.Lakshmana Rao on the one part and Sri.N.V Ramana Reddy, CEO of High-Tech Vet Pharma™ (Innovative Bio-Solutions), an ISO 9001:2008 Certified Company Nellore on the other part *for the development of innovative products for shrimp health management.*

**Hi-Tech Vet Pharma™** is an ISO certified Aqua Pharmaceutical company located in Nellore, Andhra Pradesh. It is involved in the development and production of innovative products for Aquatic Animal Health through in-house R&D facility.

As a part of MoU we have carried out our research work on **“White Gut/White Feces Disease”** in vannamei shrimp, a silent disease causing substantial financial loss to shrimp farmers in Andhra Pradesh. Our research findings indicate that the disease is primarily caused by toxins released by toxic blue green algae followed by secondary infection of vibrio bacteria. Basing on our research results we have developed a product-**“Gut Stim”** with one of the herbal ingredient imported from Japan. The product is highly effective in treating the WGD/WFD in vannamei shrimp farming.



Sri.N.V Ramana Reddy, CEO-HiTech Vet Pharma and Dr.P.Saibaba signed MoU

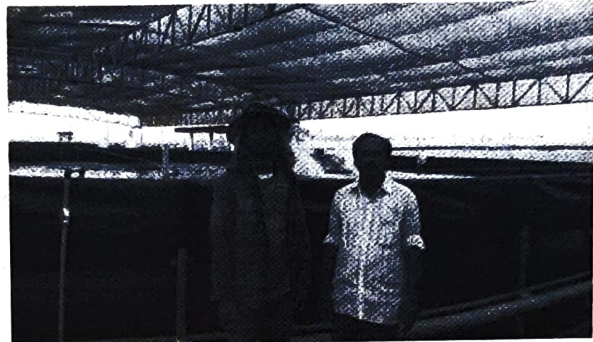


Dr.P.Saibaba with Technical Team of HI-TECH Vet Pharma in Zoology Museum

#### **4. MoU with Srinivasa Aqua Farms (Shrimp Farm), Mummidivaram, E.G. District, A.P**

**Purpose of MoU: *To develop expertise on shrimp culture among the students***

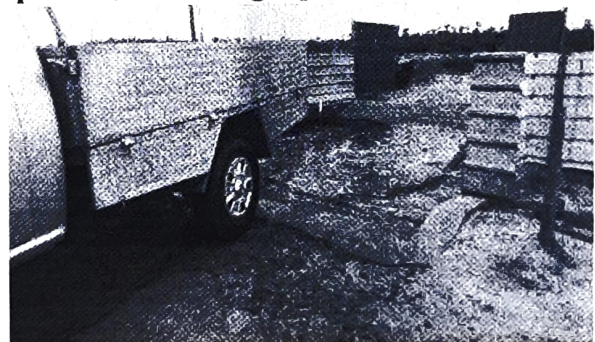
This MoU is entered in to on the 10<sup>th</sup> day of February 2015 between the Department of Zoology, S.K.B.R College, Amalapuram represented by its Principal Capt.N.Lakshmana Rao on the one part and Sri.I.Srinivasa Raju, Managing Director of Srinivasa Aqua Farms, Mummidivaram on the other part to develop expertise on shrimp culture among the students.



**Dr.P.Saibaba and Chief Technician  
at Indoor Green House Shrimp farm, Komaragiripatnam**



**Indoor Green House Shrimp farm  
at Komaragiripatnam**



**Car tyre dip at entrance of farm gate**

As a part of MoU we have offered technical guidance for the scientific management of the shrimp farm and to obtain high production.

## **5. MoU with Sapthagiri Aqua Labs, Shrimp Disease Diagnostic Laboratory, Amalapuram**

***Purpose of MoU: Sharing of knowledge and expertise in laboratory skills and aquatic animal health management***

This MoU is signed on the 15<sup>th</sup> day of February 2015 between the Department of Zoology, S.K.B.R College, Amalapuram represented by its Principal Capt.N.Lakshmana Rao on the one part and Smt.P.Satyaveni, Managing Director of Sapthagiri Aqua Labs (Shrimp Disease Diagnostic Laboratory), Amalapuram on the other part *for sharing of knowledge and expertise in laboratory skills and aquatic animal health management.*

Sapthagiri Aqua Labs is the First Aqua Disease Diagnostic Laboratory in East Godavari District established with the financial assistance of MPEDA serving the needs of Aqua Industry with Soil & water quality analysis. Microbiology, Histopathology and PCR facilities.

As a prt of MoU, Dr.P.Saibaba of Zoology department regularly visits Sapthagiri Aqua Labs working on Aquatic Animal Health Management and enlightening the lab technicians with the newly emerging disease outbreaks.

## **6. MoU with Srinivasa Hatchery (Shrimp Hatchery), Mummidivaram, E.G District, A.P**

### ***Purpose of MoU: Monitoring larval diseases in vannamei shrimp hatchery***

This MoU is entered in to on the 13<sup>th</sup> day of August 2015 between the Department of Zoology, S.K.B.R College, Amalapuram represented by its Principal Capt.N.Lakshmana Rao on the one part and Sri.I.Srinivasa Raju, Managing Director of Srinivasa Hatchery (Shrimp Hatchery), Mummidivaram on the other part *for monitoring larval diseases in vannamei shrimp hatchery.*

Srinivasa Hatchery, Mummidivaram, E.G District, Andhra Pradesh is an inland shrimp hatchery located about 30 kms away from sea coast of the Bay of Bengal, producing seed of *P.vannamei* with using brine or hyper saline water transported from sea coast by trucks. Diseases are of common occurrence in hatchery management as the seed is reared under high density.

We extended consultancy and suggestions for monitoring of larval diseases under this MoU with the shrimp hatchery and identified some disease conditions during the process of seed production.