

# Workshop on

# Water and wastewater analysis

26<sup>th</sup> July, 2011 to 31<sup>st</sup> July, 2011

# **About SEA**

Shrushti Environment Academy (SEA), an organization committed to developing professionals to work for healthy environment in harmony with economic development is sister concern of Shrishti Eco-Research Institute (SERI). As a major contribution from its expert resources, is announcing a **workshop on Water and Wastewater Analysis** which is need of the hour as environmental issues are taking front seat in the development process. SEA has organized this programme in association with Shrishti Eco-Research Institute (SERI), Pune, Indian Environment Association (IEA), Pune Chapter, and Aavanira Biotech Pvt. Ltd, Pune.

### Preamble

Though there are several courses on environmental sciences at present in the formal educational system, there are no structured courses available outside the formal system for people who desire to learn about environmental analysis as a part of professional career. Workshop Course involves field studies, presentations, lectures, discussion, and interaction with policy makers, experts. Additionally there will be discussions on resources utilization, project management and pollution load on environment.

The course syllabus is designed so that it will help in capacity building and to build confidence in environmental monitoring and analysis. The course content involves introduction to Aquatic Chemistry and Microbiology, Instrumentation, water related laws, practical of water analysis and introduction to ISO: 17025 Lab quality system.

### **Syllabus**

- 1. Introduction to ISO: 17025 for Laboratory Quality Systems
- 2. Aquatic Chemistry
- 3. Aquatic Microbiology
- 4. Chemistry of testing parameters
- 5. Instrumentation for Environmental Monitoring
- 6. Water Quality Models
- 7. Legal Compliance Act, Rules & Standards for water quality

### **Course Duration**

The course is from 26<sup>th</sup> July to 30<sup>th</sup> July, 2011. The period can be extended upto 6 days. On 6<sup>th</sup> day i.e. 31<sup>st</sup> July early morning visit to the polluted sites and interaction with local peoples to analyze the impacts of water pollution on environment and people.

Shrushti Environment Academy B-106, Devgiri, Opp. P. L. Deshpande Garden, Near Ganesh Mala, Sinhagad Road, Pune 411030. Phone: 91-20-24253773/ Telefax: 91-20-66206539. Email: <u>sea.education@gmail.com</u>



## Registration

For smooth and effective organization of the workshop, students of B. E (Civil, Environment etc.) B. Sc. and M. Sc (Chemistry, Microbiology, Zoology, Botany etc. including all life sciences subjects) and industrial and institutional employees (including governments labs also) interested in participating in the workshop are requested to register their names by filling the *Registration Form* well in advance.

## **Registration Fee:**

**For Students:** The Registration Fee for the workshop is **Rs. 4000/-per delegate** (Inclusive of Workshop Material, Lunch, Breakfast and Tea for a day i.e. for 5 days 26<sup>th</sup> July to 30<sup>th</sup> July, 2011 and travelling charges for field visit).

**For Professional:** The Registration Fee for the workshop is **Rs. 7000/-per delegate** (Inclusive of Workshop Material, Breakfast, Lunch, and Tea for 5 days i.e. 26<sup>th</sup> July to 30<sup>th</sup> July, 2011 and travelling charges for field visit)

### **Please Note:**

- 1. Registration will be accepted in the form of E-mails only
- 2. The D. D. should be drawn in favour of Shrushti Environment Academy payable at Pune
- 3. We don't provided any accommodation, each participates will arrange on its own.
- 4. Fees paid are Non refundable or Non Transferable.
- 5. All rights are preserved by the Shrushti Environment Academy.
- 6. Last date of registration: **10<sup>th</sup> July 2011**
- 7. If you are interested in attending workshop please send the mail to <u>contact@seriecotech.com</u>. Registration form will be send to you on your email id. Send the completed form with scan copy of DD to <u>contact@seriecotech.com</u> and the hard copy along with request letter from institutes by post to:

#### Shrushti Environment Academy (SEA)

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### **First Come First Serve Basis**

#### **Organizers:**

- 1. Shrushti Environment Academy (SEA), Pune
- 2. Shrishti Eco-Research Institute (SERI), Pune
- 3. Indian Environment Association (IEA), Pune Chapter
- 4. Aavanira Biotech Pvt. Ltd., Pune



## Programme Schedule Workshop on Water and Wastewater Analysis (26<sup>th</sup> July, 2011 to 31<sup>st</sup> July, 2011)

**Program on** - 26<sup>th</sup> July to 31<sup>st</sup> July, 2011

Venus – 'Growth Lab' Science & Technology Park, Pune-Nashik Road, Opp. Panjerpole, Bhosari, Pune 411 039

Time - 9.00 a.m. to 1.30 p.m. & 2.30 pm to 6.00 p.m.

#### Syllabus :

- 1. Introduction to ISO: 17025 for Laboratory Quality Systems
- 2. Aquatic Chemistry
- 3. Aquatic Microbiology
- 4. Chemistry of testing parameters
- 5. Instrumentation for Environmental Monitoring
- 6. Water Quality Models
- 7. Legal Compliance Act, Rules & Standards for water quality

## Day 1: 26<sup>th</sup> July, 2011

Time	Activity	Topic of discussion	Conducted By
9.00 - 9.30	Registration	-	-
9.30 - 10.30	Lecture 1	Introduction to ISO: 17025 for Laboratory Quality Systems	Mrs. Sayali Joshi
10.30 – 10.45		Interactive Session	
10.45 – 11.45	Lecture 2	Aquatic Chemistry	Dr. Jayant Mandalik
11.45 – 12.00		Interactive Session	
12.00 - 1.00	Lecture 3	Aquatic Microbiology & Sampling Methods	Mrs. Sayali Joshi
1.00 – 1.15		Interactive Session	
1.15 – 1.45	Lunch Break	-	-
1.45 – 2.45	Lecture 4	Instrumentation for Environmental Monitoring	Dr. A. D. Patwardhan
2.45 - 3.00		Interactive Session	
3.00 - 6.30	Practical		

Day 2:	27 <sup>th</sup>	July	2011
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Time	Activity	Topic of discussion	Conducted By
9.30 - 10.30	Lecture 1	Introduction to ISO: 17025 for Laboratory Quality Systems	Mrs. Sayali Joshi
10.30 - 10.45		Interactive Session	
10.45 – 11.45	Lecture 2	Chemistry of Testing Parameters	Mr. Promod Salaskar
11.45 - 12.00		Interactive Session	
12.00 - 1.00	Lecture 3	Instrumentation for Environmental Monitoring	Dr. A. D. Patwardhan
1.00 - 1.15		Interactive Session	
1.15 – 1.45	Lunch Break	-	-
1.45 – 2.45	Lecture 4	Chemistry of Testing Parameters	Mr. Promod Salaskar
2.45 – 3.00		Interactive Session	
3.00 - 6.30	Practical		-

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#### SHRUSHTI ENVIRONMENT ACADEMY

# Day 3: 28<sup>th</sup> July, 2011

Time	Activity	Topic of discussion	Conducted By
9.30 - 10.30	Lecture 1	Introduction to ISO: 17025 for Laboratory Quality Systems	Mrs. Sayali Joshi
10.30 – 10.45		Interactive Session	
10.45 - 11.45	Lecture 2	Water quality model	Mr. Amar Supate
11.45 – 12.00		Interactive Session	
12.00 - 1.00	Lecture 3	Aquatic Chemistry	Dr. Jayant Mandalik
1.00 – 1.15		Interactive Session	
1.15 – 1.45	Lunch Break	-	-
1.45 – 2.45	Lecture 4	Water quality model	Mr. Amar Supate
2.45 – 3.00		Interactive Session	-
3.00 - 6.30	Practical		-

# Day 4: 29<sup>th</sup> July, 2011

Time	Activity	Topic of discussion	Conducted By	
9.30 - 10.30	Lecture 1	Aquatic Chemistry	Dr. Jayant Mandalik	
10.30 - 10.45		Interactive Session		
10.45 - 11.45	Lecture 2	Aquatic Microbiology	Mrs. Sayali Joshi	
11.45 – 12.00		Interactive Session		
12.00 - 1.00	Lecture 3	Instrumentation for Environmental	Mr. R. C. Vaidya	
		Monitoring		
1.00 – 1.15		Interactive Session		
1.15 – 1.45	Lunch Break	-	-	
1.45 – 2.45	Lecture 4	Legal Compliances – Acts, Rules, &	Mr. Devale	
1.45 - 2.45		Standards for water quality		
2.45 – 3.00		Interactive Session		
3.00 - 6.30	Practical		-	

Day 5: 30 <sup>th</sup> July, 2011				
Time	Activity	Topic of discussion	Conducted By	
9.30 - 10.30	Lecture 1	Aquatic Microbiology	Mrs. Sayali Joshi	
10.30 - 10.45		Interactive Session		
10.45 – 11.45	Lecture 2	Legal Compliances – Acts, Rules, &	Mr. Devale	
		Standards for water quality		
11.45 – 12.00		Interactive Session		
12.00 - 1.00	Lunch Break	-		
1.00 - 3.30	Practical		-	
3.45 – 4.15		Exam session		
4.15 – 5.00		Group discussion & Review Session	Dr. Sandeep Joshi	

Day 6: 31 <sup>st</sup> July, 2011				
8.00 – onward		Field visit		
		Distribution of Certificates		

#### Organization

- 1. Shrushti Environment Academy (SEA), Pune
- 2. Shrishti Eco-Research Institute (SERI), Pune
- 3. Indian Environment Association (IEA) Pune Chapter
- 4. Aavanira Biotech Pvt. Ltd., Pune

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