#### SATISH CHANDER

Director General

## THE FERTILISER ASSOCIATION OF INDIA



T/27.1 12<sup>th</sup> December, 2019

Dear Sir(s),

Subject: FAI Training Programme for Senior Maintenance Engineers in Fertilizer Industry during 27th January to 1st February 2020, Vadodara, Gujarat.

The Fertiliser Association of India organizes need based training programmes for technical personnel in fertilizer industry. The response to these programmes has always been overwhelming. The fertilizer companies in India and from our neighboring countries have been sponsoring their engineers regularly to our programmes.

We are glad to announce the next 6-day residential Training Programme for Senior Maintenance Engineers in the Fertilizer Industry during 27<sup>th</sup> January to 1<sup>st</sup> February 2020 at Fortune Inn Promenade, Near Akota Gardens, Vadodara – 390020, Gujarat.

The objectives and other details of the programme are given in the enclosed brochure. The programme has been structured to primarily serve the development needs of the maintenance engineers working at senior/middle level in the fertilizer industry. Taking into consideration the specific requirement of the fertilizer industry, the faculty is drawn from the pool of known experts in their respective fields both within and outside the industry. A visit to fertilizer plant/workshop for retrofit of turbomachinery will also be part of the programme.

We hope that your organization would like to avail of this unique opportunity by nominating maintenance engineers to this programme. The nominations may please be sent in the enclosed Registration Form together with a Bank Draft/Cheque/ Bank transfer acknowledgement for Rs. 29,500/- (Rupees Twenty-nine thousand five hundred only) plus 18% GST per participant (Double occupancy) or Rs 40,000/- (Rupees Forty thousand only) plus 18% GST per participant (Single occupancy) towards the programme fee, drawn in favour of "The Fertiliser Association of India" payable at New Delhi. The fee includes lodging and full boarding (for 6 days and 5 nights), programme lectures/notes, reading material and cost towards study visit. However, it does not include travel and incidental expenses of the participants.

It is requested that your nomination(s) should reach latest by 15<sup>th</sup> January, 2020 to Dr. S Nand, Dy. Director General, via Fax/Email as given in the brochure.

Thanking you,

Yours faithfully,

(Satish Chander)

Encl.: As above



# FAI Training Programme for Senior Maintenance Engineers in Fertilizer Industry



27<sup>th</sup> January to 1<sup>st</sup> February 2020 Vadodara, Gujarat

THE FERTILISER ASSOCIATION OF INDIA FAI House, 10, SHAHEED JIT SINGH MARG NEW DELHI-110 067

Tel: 011-26567144
Fax: 011-26960052
Email: tech@faidelhi.org
Website: www.faidelhi.org
CIN U85300DL 1955NPL002999

### **Fertiliser Association of India**

The Fertiliser Association of India (FAI) is an apex body of all the fertilizer manufacturers in India incorporated in 1955. All the fertilizer manufacturers across the country are active members of the FAI. The Association cooperates actively with the Government of India (GOI) and acts as an interface between the Industry and the Government by maintaining close contacts and rapport. At present, about 50 Indian fertilizer companies and other organisations are active members of FAI comprising of the private, public and cooperative sectors. There are about 200 associate members which include suppliers of technology, equipment & catalysts, engineering companies, research institutions, etc. besides around 30 overseas members and a large number of individual, technical and professional members.

As a part of our multifarious activities, we organize need based programmmes in the areas of production, maintenance, instrumentation, environment, safety, etc. for the benefit of plant personnel. Our programmes attract participants from all major fertilizer plants in India and abroad. The response to these programmes both from within and outside the country has been overwhelming and there have been repeated requests for the continuation of this activity.

## Introduction

Maintenance, operational efficiency and safety go hand in hand in all industries. Fertilizer Industry is no exception. The use of complex and sophisticated equipment and systems under severe operating conditions has necessitated the need for keeping pace with advances in techniques of operation, maintenance and inspection of the plants. Most of the plants have debottlenecked the capacity. This alongwith ageing of equipments posses challenges of reliability for continuous operation.

Fertilizer plants are capital intensive and the breakeven point is at a high level of capacity utilisation. Equipment, spares and components are sophisticated, expensive and quite often imported. Their replacement, therefore, is costly and involves long lead-time. The magnitude of the problem is compounded by corrosion of critical equipments and interruption in supply of raw materials and utilites. To

achieve high operating factors, equipments need to be operated closer to its design capacity. This in turn requires condition monitoring and predictive /preventive maintenance. Last but not the least, maintenance has to be cost effective.

It is in this context that the FAI, in the interest of the fertilizer industry conducts a special Training Programme for Senior Maintenance Personnel every year so that these men are better equipped to plan and tackle the maintenance problems effectively.

## **Objectives**

Maintenance is treated in the light of the total environment in which it functions: design, engineering, logistics, organisation and philosophy for operation and maintenance. With increasing sophistication, maintenance is concerned with factors such as reliability, availability and maintainability. The objectives of the programme are to raise the level of knowledge and competence of the maintenance personnel, upgrade their skills in order to enhance their on-the-job efficiency and to prepare them for shouldering higher responsibility. The programme will provide the engineers an opportunity to exchange information, share experience and have cross-fertilisation of ideas not only with experts in the field but also with their counterparts. This in turn will lead to improvement in plant productivity.

#### **Course Content**

The programme covers practical aspects of various facets of maintenance engineering and management and is structured laying emphasis on maintenance of critical equipment and machinery, and methods and practices to improve maintenance efficiency. The subjects to be covered may be broadly classified into:

- Advances in materials of construction,
- Maintenance of critical static equipments, e.g. reactors, waste heat boilers, etc.,
- Maintenance of HP critical pumps,
- ➤ Maintenance & Refurnishment of compressors and turbines,
- Maintenance problems in ammonia, urea, acid and complex fertilizer plants,
- Effective maintenance management at unit level,

➤ Case studies of inspection, repair, replacement and maintenance practices. The methods of instruction aim at stimulating individual thinking and maximum involvement of the participants in the programme. Each participant is required to present a case study. Emphasis is laid on discussions and sharing of experiences.

## **Study Visit**

Visit to facilities of fertilizer plant/engineering company involved in repair and refurbishment of rotationg machines will form part of the programme.

## **Faculty**

The faculty consists of practising experts drawn from the fertilizer industry, engineering companies, vendors and specialised institutions.

#### **Duration**

The programme is scheduled from the afternoon of Monday, the 27<sup>th</sup> January 2020 to the evening of Friday, 31<sup>st</sup> January 2020.

The check-in time at hotel is 1200 hrs on Monday, the 27<sup>th</sup> January 2020 and participants have to check out by the noon of Saturday, the 1<sup>st</sup> February 2020 (stay for 5 nights). Charges for extra stay will have to be paid by the participant to the hotel directly.

## **Residential Course**

The course is residential. Apart from facilitating administrative arrangements, it provides ample opportunities for informal discussions and better interaction amongst the participants.

## **Eligibility**

The programme is designed for senior/middle level engineers. To derive optimum benefit from it, the participant should be a qualified engineer with more than five years experience in the fertilizer industry. The Training Programme has been developed in consultation with the industry.

## Venue



The programme and participants' stay is arranged at Hotel Fortune Inn Promenade, Near Akota Gardens, Vadodara, Gujarat. The Hotel is equipped with all modern facilities. The Hotel is about 9 kms from Vadodra Airport and about 4.5 kms from Railway station.



## **About Vadodara**

Over 2,000 years old, Vadodara, also known as Baroda, is one of the most popular cities in the state of Gujarat. The city is located on the banks of the Vishwamitri River, the water stream named after the revered rishi (saint) Vishwamitra. The city has been ruled by Hindus, Pathans, Mughals and Marathas and today houses a diverse population speaking various languages such as Gujarati, Hindi, Marathi and English to name a few. Vadodara is littered with ancient palaces and old markets along with modern shopping malls and gourmet restaurants, but the main reason for coming here is the stunning UNESCO World Heritage Site of Champaner and Pavagadh nearby. Statue of Unity is about 100 kms from Vadodara.

Tourist Attractions : Laxmi Vilas Palace, Sayaji Baug, Aurobindo Ashram, Vadodara Museum and Picture Gallery, Sursagar Lake, etc.

Temperatue: During the time of the Programme expected temperature are maximum 28 °C and minimum 10 °C.

## **Registration Fee**

The contribution to defray the expenses during training is fixed at Rs. 29,500/-plus 18% goods and services tax (GST) per participant on double occupancy and Rs. 40,000/- plus 18 % GST per participant on single occupancy basis. It covers lodging and full boarding (for 6 days and 5 nights), programme lectures/notes, reading material and cost towards study visit. The package will start with the lunch

on the 27<sup>th</sup> January (Monday) and will end with breakfast on the 1<sup>st</sup> February 2020 (Saturday). The contribution does not include any other costs like participants' travel and incidental expenses.

## **Mode of Payment**

The payment can be made by drawing a Demand Draft or at par cheque in favour of "The Fertiliser Association of India" payable at New Delhi. The payment can also be acceptable through on-line transfer. The details are given below:

Saving Bank A/c No. : 1484101006029 Bank Name and Address : CANARA BANK, Jit Singh Marg,

New Delhi – 110 067

Branch code : 1484

IFSC code : CNRB0001484 MICR code : 110015015

GSTIN : 07AAACT0097M1Z3 PAN No. : AAACT0097M

## **How to Register**

Registration to be made by filling in and returning to FAI the Registration Form (attached) together with the prescribed fee to reach on or before the **15**<sup>th</sup> **January 2020**. The Registration Form along with the bank draft should be sent to:

#### Dr. S. Nand

Deputy Director General

The Fertiliser Association of India FAI House, 10, Shaheed Jit Singh Marg

New Delhi 110 067

Tel: 011-26567144/Fax: 011-26960052

E-mail: tech@faidelhi.org



## FERTILISER ASSOCIATION OF INDIA FAI House, 10, SHAHEED JIT SINGH MARG NEW DELHI – 110 067

## **Registration Form**

## FAI TRAINING PROGRAMME FOR SENIOR MAINTENANCE ENGINEERS 27th January to 1st February 2020

Fortune Inn Promenade, Near Akota Gardens, Vadodara – 390020, Gujarat

Dr. S. Nand

Dy. Director General The Fertiliser Association of India FAI House, 10, Shaheed Jit Singh Marg New Delhi 110 067

Tel: 011-26567144, Fax: 011-26960052

E-mail: tech@faidelhi.org

Please register the following engineer(s)

His/their particulars are given below:

S1. No.	Name	Design.	Email/mobile	Occupancy Single/ Double
1				
2				
3				

Name of the Organisation					
Address					
Fax					
Email					
Enclosed Bank Draft Nodateddrawn onfor Rs/ favouring of "The Fertiliser Association of India", payable at New Delhi as contribution for registration of the above delegate (s) @ $\stackrel{?}{\sim}$ 29,500/- plus 18% GST per participant on double occupancy and $\stackrel{?}{\sim}$ 40,000/- plus 18% GST per participant on single occupancy.					
The payment can also be made by online transfer. Details are given in brochure. Please provide details of online transfer via email.					

**Sponsoring Authority**