



*A Passion for Safety*

# Understanding and Eliminating Electrostatic Hazards

**ONE DAY SEMINAR**

**14 March 2016— Chennai**

**18-March 2016— Chandigarh**



*“Gain awareness of key  
process safety issues on  
preventing industrial fires  
and explosions.”*





# Understanding and Eliminating Electrostatic Hazards

Electrostatic charging can occur when solids or liquids are in contact and move relative to other materials or by induction. This occurs in many industrial processes for example pneumatic conveying, pumping, dispensing operation, centrifuging, mixing, etc. All operations are susceptible to charge generation, however, if charges are allowed to accumulate and discharge, an electrostatic hazard may arise in the presence of a flammable atmosphere.

Electrostatic discharges can act as a source of ignition resulting in fire or explosion. Even electrostatic sparks that are far too small to be felt by people can ignite many industrial substances in the form of dust clouds, gases or vapours. The consequences of a fire or explosion can range from disruption of production to injury or fatality of personnel, loss of plant and damage to your brand reputation.

## Highlights of the Days Programme

- Fundamentals of Electrostatics
- Examples of Incidents and their Consequences
- Understanding Fires & Explosions
- Flammability Characteristics and the Safe Handling of Materials
- Charge Generation & Charge Accumulation
- Types of Electrostatic Discharges
- Measures to Eliminate Electrostatic Hazards



## Speakers: Vikas Nigam and Himanshu Chichra



Vikas Nigam is General Manager of Sigma-HSE India. He has a rich experience of 19+ years in Petrochemical, Pharmaceutical & Other industries. His work experience includes Process Safety Consulting, Production, Process Engineering and Projects (Green Field, Brown Field).



Himanshu Chichra is a professional process safety engineer, with a wide range of experience in the field of Process Safety and Risk Management. He has worked extensively as a process and operational hazards consultant for oil & gas, chemical, pharmaceutical and food industries. He has conducted many Training workshops on process safety subjects in India and overseas.

## Who Should Attend

This seminar represents an opportunity to gain awareness about electrostatic hazards and measures to eliminate / control the potential for static ignition. HSE Directors / Manager, Process and HSE Professionals, Plant Managers, Project Managers and Risk Assessors from Pharmaceutical, Manufacturing, Bulk and Fine Chemicals, Oil and Gas and other process industries would benefit from attending this seminar.







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## Registration

For enrolment to the training course, please complete and return the registration form together with the course fee.

- Course Fee is **8,000 INR (Eight thousand per participant) Service tax as applicable.** . A 10% discount is applicable for 3 or more delegates from the same company on the same registration.
- To encourage delegate participation and interaction we are limiting the number of bookings per course to 20 delegates. Registration is on first come first served basis.
- Cheque / DD in favour of **Sigma-HSE (India) Pvt. Ltd.** (payable at Delhi) can be submitted for the course registration fee. Payment can also be made via RTGS / NEFT.

Beneficiary's Name:	Sigma-HSE (India) Pvt. Ltd
Bank Name/Branch Name;	HSBC Bank, Barakhamba Road
Bank Account Number:	166302265002
Account Type (SB/CA/CC):	CURRENT ACCOUNT
Address	25, Barakhamba Road, New Delhi-110001
Branch IFSC Code ( Applicable only for RTGS Payments):	HSBC0110002
Swift Code	HSBCINBB
Service Tax Code	AAUCS3602FSD001

### Cancellations Policy:

Cancellations earlier than 5 working days prior to the event will be entitled to a full refund. Cancellations after that time will not be refunded although substitutions can be made at any time with prior written communication. Sigma-HSE reserves the right cancel the course due to exceptional circumstances outside of its control up to 5 working days prior to the course date. Delegates affected by any cancellation will be entitled to a complete refund or offered alternative dates for this course.

**To register for the above event, please contact our customer support team on  
+91 11 3044 6630 or +91 98 1045 6418**

**Limited seats are available for this course and will be allocated on a first come first served basis, so don't delay in calling or emailing us on [safety-india@sigma-hse.com](mailto:safety-india@sigma-hse.com) to reserve your place.**

*Call +91 11 3044 6630 or +91 98 1045 6418 to Reserve you Place*



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## REGISTRATION FORM

Please register me for the above course on:

<b>14 March—Chennai</b>	<input type="checkbox"/>	<i>Book 4 weeks prior to the event to claim your <b>10% early bird discount.</b></i>
<b>18 March—Chandigarh</b>	<input type="checkbox"/>	

Name: Dr / Mr / Mrs / Ms.	
Designation:	
Company:	
Address:	
Mobile:	Email:
	Date:
Enclosed herewith Cheque / DD / NEFT Receipt in favour of "Sigma-HSE (India) Pvt Ltd" for	
Rs.	Date:
	Drawn on

### Contact Details:

Sigma-HSE (India) Pvt Ltd

Ms Anuja Mishra / Ms Mamta Sharma

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safety-india@sigma-hse.com

### UPCOMING SEMINARS

**Preventing Fires and Explosions for  
Dust, Gas and Vapour**  
18 April 2016—Gujarat

**Understanding & Eliminating  
Electrostatic Hazards**  
16 May 2016— Hyderabad