

EFCE Spotlight Talks

Working Party on Static electricity in industry

23 November

13:00 • 15:15
CET

Electrostatics in industry: risks, measurements and materials

Static Electricity is present in many industrial processes, very often unnoticed, until something happens surprisingly, normally a spark apparently coming from nowhere. In other occasions materials stick to each other and difficult their handling or processing. And, even more, in some applications like electronic components or circuits production there is no apparent evidence of its presence but many components are damaged and become unusable because of static voltages. Static Electricity is often misunderstood due to its complex nature. It is not easy to identify neither the generation process nor its dissipation or accumulation mechanisms. In this Webinar we will give some insights on four aspects of the Static Electricity in Industrial situations from electrostatic incidents in industry to measurement techniques and material's properties.



*There are never enough lessons learned from incidents in industry, many of them are not completely explained. **Dr. Simon Egan** will describe, analyze and draw conclusions from five electrostatic incidents in industry. The root causes, the physical process and its consequences will be shown. **Dr. Philippe Molinié** will present the basis of electrostatic measurements to make them comprehensible. Very often reading some hundreds Volts in an electrostatic meter requires an interpretation to fully understand the meaning of this magnitude. Some measurement setups in standards will be analyzed in order to explain their physical basis and meaning. **Dr. Jeremy Smallwood** will focus on some aspects of practical measurements often needed for ATEX atmosphere Zone areas. An overview of the IEC 60079-32-2 standard will be given. Finally, **Dr. Paul Holdstock** will describe the electrostatic properties of materials for personal protective equipment, its importance and applications. Again, measuring correctly electrostatic properties of materials in its final application situation is a real challenge. Development of new full garment test methods will be presented. This proposed measurement method can inspire solutions in other situations.*

PROGRAM

- 13:00 **Welcome and introduction**
Pedro Llovera-Segovia, Chair of WP Static Electricity in Industry
- 13:15 **Learning lessons from five electrostatic incidents**
Simon Egan, Solvay - France
- 13:45 **Understanding Electrostatic measurements: basic principles and standards**
Philippe Molinié, Centrale Supélect - France
- 14:15 **Practical measurements for working in ATEX Zones: application of IEC 60079-32-2**
Jeremy Smallwood, Electrostatic Solutions - UK
- 14:45 **Electrostatic properties of PPE and development of new full garment test methods**
Paul Holdstock, Holdstock Technical Services - UK
- 15:15 **Conclusions and closing**
Pedro Llovera-Segovia, Chair of WP Static Electricity in Industry

[Registration](#)

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