

EFCE SpotLight Talks

Working Party on
Static Electricity
in Industry

31 May
2023

09:00 • 11:00

CEST

STATIC ELECTRICITY IN INDUSTRY: FLEXIBLE INTERMEDIATE BULK CONTAINERS, COMFORT AND SMART MATERIALS



Static Electricity is mainly a mystery in many industrial processes. Its effects may be dangerous, unpleasant or useful. In this Webinar we will travel from risks to applications of static electricity. Electrostatics risks are of several kinds in industry. We will focus on risk coming from handling of powders or materials in flexible intermediate bulk containers (FIBC). This is a very common situation in the process industry and standards and some precautions have to be taken into account to avoid accidents. Dr. Paul Holdstock will give a talk about FIBC, safety measures and standards. There exist many solutions to rule out accidents from any process. Then, in a less severe scale far from accidents, we can find unpleasant situations related to comfort. We are talking about electrostatic discharges that do not represent a threat to safety or health but a permanent discomfort in houses or offices. Dr. Pedro Llovera-Segovia will make a presentation about this relatively new concept of Electrostatic Comfort in houses or offices. Finally, to finish with a positive view on electrostatics, Dr. Gustavo Ortega-Braña will present a piezoelectric material based on the accumulation of electrostatic charges. With the methods presented by Dr. Gustavo Ortega-Braña, it will be possible to convert a polypropylene film, a non piezoelectric material, into a flexible, light and cheap piezoelectric material.

PROGRAM

- 09:00 **Welcome and introduction**
Dr. Pedro Llovera-Segovia – Chair Wprking Party on Static Electricity in Industry
Prof. Jarka Glassey, EFCE Executive Vice-President
- 09:10 **FIBC, standards and rules for a safe handling of materials**
Paul Holdstock, Holdstock Technical Services, Manchester - United Kingdom
- 09:40 **Electrostatics comfort in buildings and offices**
Dr. Pedro Llovera-Segovia, Energy Techn. Institute, Polytechnic Univ. of Valencia - Spain
- 10:10 **Piezoelectric materials obtained from polypropylene foams**
Dr. Gustavo Ortega-Braña, Aplicaciones Tecnológicas SA, Valencia - Spain
- 10:40 **Discussion and conclusion**
Dr. Pedro Llovera-Segovia - Chair WP on Static Electricity in Industry

[Registration](#)

free of charge but mandatory

Contact: martine.poux@toulouse-inp.fr
pedro.llovera@ite.es