

I SPE - PLASTICS e-VOLUTION CONFERENCE

Bioengineering the New Human

Date: **05 Oct**

Time: **09:00 – 17:30h**

Where: **CC3 Room 3.14**

Description: Integrating Plastics Technology into Additive Manufacturing. The I SPE Plastics e-Volution Conference will offer an ideal platform to host technical discussions on how plastics processors and suppliers can offer solutions to the current additive manufacturing challenges and how 3D printing technology can enrich the manufacturing portfolio of companies. The call for presentations is currently open until June 30th.

Programme

09.00-9:30 Keynote Introduction

09.30-11:00 Medical Plastics Review

There are so many exciting new materials and processing techniques that, alone or in combination, will enable the healthcare industry to create innovative, next-generation products. They will allow more effective treatments and the promise of better patient outcomes. When a new medical device being developed has unique requirements, developers must consider what material will have the necessary physical, chemical and biological properties that will allow its use at the lowest possible cost. There are many thermoplastic and thermoset resins already certified for their use at medical applications. This block will cover the offer of current main players for the medical segment

11.00-11:30 Break for Refreshment & Networking

11.30-13:00 Processing Materials for Medical 3D Printing

The regulation and certification process for personalized medicine has been developing driven by the speed of new successful products that are found reliable to mitigate unsolved health issues. 3D printers as a mean of production must be certified for medical devices manufacturing as a part of the certification of new medical devices.

In this block, equipment manufacturers will show current certified equipment as well as the main certification considerations that should be included when designing new medical devices.

13.00-14:00 Lunch and Networking

14.00-15:30 Research Contracts for 3D Bioprinting

Academy and research institutions are the main drivers for the development of 3D bioprinting of cells, tissue for research and clinical validation of target molecules, cancer models, 3D



printing organs research, tissue engineering and other tools for regenerative medicine. In this block, leading research centers will present their current projects opened to find industrial partners for science and new medical products development.

15.30-16:00 Afternoon Refreshments**16.00-17:30 Clinical Success Cases for 3D Printing Implementation**

The combination of one or more of the newer, non-traditional polymers coupled with additive manufacturing methods opens new pathways for sophisticated medical devices. Several companies and technologies are offering clinical solutions based upon additive manufacturing & 3D Printing. Only a few 3D printing technologies based on polymers are being used for established clinical procedures and several kinds of clinical solutions rely upon them. In this block, real cases of successful clinical applications will be presented and discussed.

17.30 Summary of the day