

Medical Device Sterilization Workshop; Continuing the Conversation

September 17, 2020

Attendees must register in advance at <https://indico.fnal.gov/e/continuingtheconversation>

All agenda items in Central Daylight Time

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| 9:40 A.M. | Meeting Opens |
| 9:45 A.M. | Free-form Q&A |
| 10:00 A.M. | Introduction and Welcome
<i>Mark Pasmore, Baxter International</i> |
| 10:10 A.M. | Physics of Radiation Sterilization - the Basics That You Need to Know
to Consider Your Sterilization Options
<i>Thomas Kroc, Fermilab</i> |
| 10:40 A.M. | Q&A Session |
| 10:50 A.M. | Update from Team Nablo - Measurements of Effects on Polymers
for All Three Radiation Modalities
<i>Mark Murphy, Pacific Northwest National Lab</i> |
| 11:20 A.M. | Q&A Session |
| 11:30 A.M. | Progress in Providing Guidance for the Industry - AAMI, ASTM, and Others
<i>John Williams, Medtronic</i> |
| 11:50 A.M. | Q&A Session |
| 12:00 P.M. | Acknowledgments and Next Steps |
| 12:05 P.M. | Free-form Q&A |
| 12:30 P.M. | Meeting Close |

Biographies

Debbie Cotton, Baxter Healthcare: Debbie Cotton is the Sterilization Category manager in Purchasing for Baxter. Prior to this role, Debbie spent 43 years in Sterility Assurance at Baxter, most notably as the radiation Subject Matter Expert, providing support to manufacturing sites, Product Development teams, Sustaining Products organization and Regulatory Affairs. In the Purchasing Organization, Debbie is responsible for managing supplier relationships, negotiating service agreements, developing the corporate strategy with respect to sterilization and balancing volume requirements with available capacity. Debbie has significant experience with medical devices, specializing in radiation sterilization as well as experience in ethylene oxide and moist heat. Debbie received her B.S. degree in Microbiology from the University of Illinois, Champaign-Urbana

Thomas K. Kroc, Fermilab: Thomas Kroc has been at Fermilab for over 37 years. Initially trained as an experimental high energy physicist, he moved on to accelerator physics. For 20 years he was part of the team providing cancer treatment through Fermilab's Neutron Therapy Facility. He was head of that facility for the final five years of its operation, ending in 2013. He then took his accelerator and medical application experience to Fermilab's Illinois Accelerator Research Center (IARC), looking to apply Fermilab's technology to various applications. In 2017, he was the primary author of "Accelerator-driven Medical Sterilization to Replace Co-60 Sources," which was conducted at the request of the National Nuclear Security Administration. Since then Thomas and IARC have continued to be involved in promoting and facilitating the application of accelerator-based sources of ionizing radiation for many applications, including sterilization.

Mark Murphy, Pacific Northwest National Laboratory: Mark Murphy has worked as a research scientist and manager at Pacific Northwest National Laboratory for over 30 years. He has expertise in a broad range of radiation dosimetry, radiation field metrology, and experimental design for irradiation studies. This dosimetry and radiation metrology work has covered a wide range of applications, including nuclear worker protection, radiation effects on materials and electronics, radiation therapy, radiation biology, and radiation processing. Mark currently is the lead PI for the NNSA/ORS Team Nablo project.

Mark Pasmore, Baxter Healthcare: Mark Pasmore is a Senior Manager supporting Renal and Acute business units of Baxter Healthcare. His responsibilities include Sterility Assurance as well as the in-use microbial control of Baxter Renal products. Mark started his career as a Research Professor and Lab Manager at Montana State University in the Department of Chemical Engineering and Center for Biofilm Engineering. He has also held positions as a Senior Engineer at STERIS Corporation and Vice President of Research and Development at TSO3. He is a member of the AAMI Renal Disease committee and the Parenteral Drug Association. He has multiple peer reviewed publications and involvement in producing technical report documents on biofilms, ultra pure dialysate, and disinfection. He has expertise in biofilms, microbial control, and vaporized hydrogen peroxide sterilization.

John A. Williams, Medtronic, Inc.: John A. Williams is the Sterility Assurance Director at Medtronic, Inc. and is responsible for supporting terminal sterilization across their Cardiac Rhythm and Heart Failure business. John also leads the Sterility Assurance Council for the Cardiac and Vascular Group of Medtronic. Prior to working for Medtronic, he was a Quality Director at Baxter Healthcare Corporation. John has 25 years of experience in the use of radiation for industrial applications, primarily for the sterilization of medical devices. He serves as the Vice Chairman of ASTM Committee E61 on Radiation Processing: Dosimetry and Applications and is the US Overall Advisor to ISO/TC85 WG3 on Radiation Dosimetry. John is also an active member of AAMI and PDA.