



SMPTE 2016 Annual Technical Conference

Keynote and Technical Program Offer Familiar Look Back and Inspiring Look Ahead; Event Concludes with Star-Studded SMPTE Centennial Gala

By Aimée Ricca

The SMPTE 2016 Annual Technical Conference and Exhibition (SMPTE 2016), 25–27 October in Hollywood, California, drew nearly 2500 registered attendees for a landmark event featuring 72 expert presentations and more than 108 exhibitors spread across two exhibit halls. This year’s event culminated with the SMPTE Centennial Gala, a celebration of the Society’s 100th birthday.

“Attendance for SMPTE 2016 was higher than for last year’s event, with guests from around the world joining us in Hollywood for an exceptional technical program and historic Centennial Gala,” said Barbara Lange, SMPTE

executive director. “In fact, it was a fantastic week, offering everything from the latest creative and technical innovations to a beer garden, ’20s-themed honors and awards reception, and black-tie gala featuring great entertainment and honoring top motion-imaging innovators.”

The official start of SMPTE 2016 was preceded by the SMPTE 2016 Symposium on Monday, 24 October, titled “The Future of Storytelling and How to Save It.” The daylong event, chaired by Andrea Kalas, president of the Association of Moving Image Archivists (AMIA), featured a keynote by Daniel Teruggi, director of the Research and Experimentation Department at the National Audiovisual Institute in Paris and recipient of this year’s SMPTE Archival Technology Medal Award. Teruggi placed preservation of data in a historical context

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SMPTE 2016 Welcomes You!



and pointed out that preserving creative content, such as a piece of music, is about more than storing something away. “The general problem is not to conserve,” he said. “It is to be capable, after any period of time, to perform the piece of music again.” Teruggi’s suggestion that the preservation of content must be oriented toward restitution was a fundamental theme throughout the symposium.

Also on Monday, 24 October, a record number of attendees at the Women in Technology Luncheon were treated to a conversation with Victoria Alonso, executive producer and executive vice president of physical production for Marvel Studios. Joined by interviewer Kari Grubin, vice president of mastering for The Walt Disney Company, Alonso spoke of her experiences in the industry

and offered advice to other women working to succeed in the business. “Sometimes women need to learn to take each other and hold each other as we’re going up... There’s only so much you can do to break the glass ceiling if no one’s following you.”

The SMPTE Honors & Awards Ceremony set a glamorous tone for the week. The Roaring ’20s-themed event, hosted by SMPTE President-elect, Matthew S. Goldman and Sally-Ann D’Amato, SMPTE Director of Events and Governance Liaison, welcomed guests on the red carpet before moving on to recognize the elite group of individuals who earned accolades from the Society this year. The ceremony was followed by a poolside reception at the Loews Hollywood Hotel.

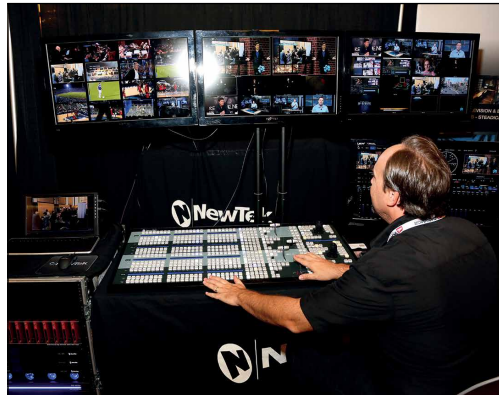
Exhibition Highlights



Spectra exhibitor demonstrates his wares.



Pat Griffis, Wes Simpson, and Steve Aloï.



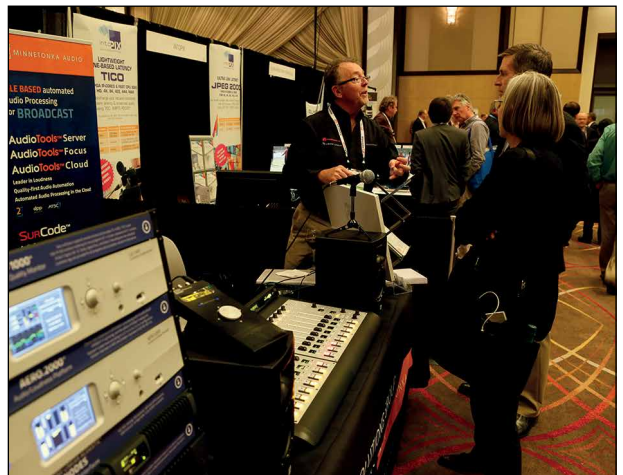
Newtek exhibitor demonstrates his wares.



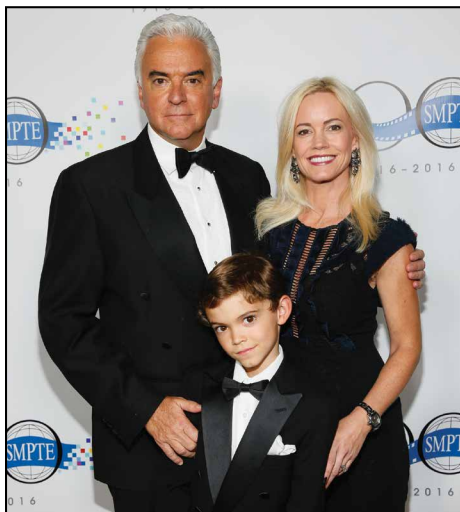
Aspera exhibitor, John King.



Riedel exhibitors Jake and Rick.



Gala Event Highlights



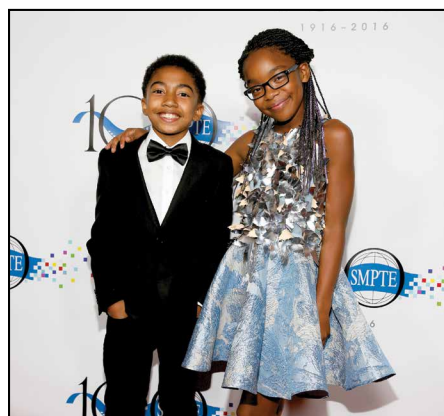
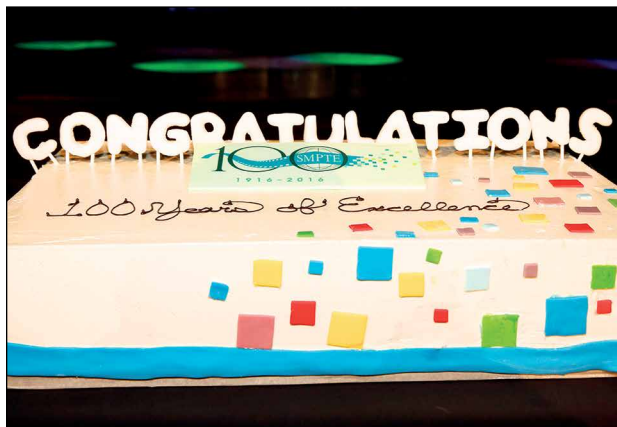
Gala Host, John O'Hurley with his wife Lisa Mesloh and son William Dylan O'Hurley.



SMPTE Executive Committee (L-R) Paul Stechly, Alan Lamshead, William Miller, Wendy Aylsworth, Robert Seidel, Patrick Griffis, Matthew Goldman, Barbara Lange, and Peter Wharton.



(L-R) Robert Seidel, Seth Hallen, James Cameron, Matthew Goldman, Wendy Aylsworth, and Douglas Trumbull.



"Blackish" actors Miles Brown (l) and Marsai Martin (r).

On Tuesday, 25 October filmmaker, innovator, and entrepreneur Douglas Trumbull joined SMPTE President Robert Seidel, vice president of engineering and advanced technology at CBS, to present the SMPTE 2016 opening keynote. With Trumbull addressing cinema and Seidel speaking to broadcast, the pair opened the conference with a rich look at the past, present, and future of media and entertainment technology, as well as supporting standards work. Each speaker presented archival video from pivotal points in imaging innovation, and many video clips clearly resonated with the SMPTE 2016 audience. Both Trumbull and Seidel emphasized the importance of immersion to the audience experience—a fundamental goal, noted Trumbull, for sweeping epics such as *Napoleon* (1927) and *Lawrence of Arabia* (1962); today's groundbreaking films, such as Ang Lee's *Billy Lynn's Long Halftime Walk*; and the virtual, augmented, and mixed reality experiences of tomorrow.

During SMPTE's annual Membership Meeting later that day, Lange discussed the Society's mission, vision, and current work, while also taking

Gala Event Highlights



James Cameron (l) received Honorary Membership in the Society and Douglas Trumbull (r) received the SMPTE Progress Medal.



Sally-Ann D'Amato performs at the Gala.



The event included dancers from Critical Mass Dance Company.



SMPTE staff attending the event included (L-R): Barbara Lange, Joel Welch, Max Ma, Mary Vinton, Alicia Rock, Mimi Rossi, Howard Lukk, Dianne Purrier, Mauricio Roldan, Roberta Gorman, Peter Symes, Ken Wendel, Aimée Ricca, and Sally-Ann D'Amato.

a look back at its rich history. Through stories, images, and some of the industry's earliest moving pictures, she provided a look at the remarkable life and work of C. Francis Jenkins, the prolific inventor and founder of the Society back in 1916. In reviewing the 100-year story of the Society itself, she reflected on some of the critical standards introduced by SMPTE with the largest number published in 2016; noted the current growth and the success of the Society across the globe; highlighted the Society's rich educational offerings and its partner, the Hollywood Professional Association (HPA); and thanked members for their tireless work across standards, membership, and education. Lange also announced that a new SMPTE Section in Poland as well as three new Student Chapters: George Mason University (Fairfax, VA), Media Arts Charter High School (Albuquerque, NM), and University of Surrey (U.K.). The new members of the SMPTE Board of Governors were introduced to the audience. The event was streamed live



Actor Billy Zane speaks to attendees at the Gala.

SMPTE Honors & Awards Ceremony



(L-R) SMPTE Past President Wendy Aylsworth, Lou Wolf Memorial Scholarship recipient Jyotsna Kadimi, and Executive Director Barbara Lange.



(L-R) Wendy Aylsworth and new SMPTE Fellows Peter Wharton, Masayuki Sugawara, Stephen Scheel, Joshua Pines, and Michelle Munson.



Greg Wolf (far left) and SMPTE Education Vice President Pat Griffis (far right) pose for a pic with SMPTE Louis F. Wolf Jr. Memorial Scholarship recipients (L-R) Anna Dining, Elizabeth DoVale, and Jyotsna Kadimi.

for members throughout the world to attend virtually and is archived for on-demand viewing as well.

Like the Society's centennial celebrations, the three-day conference program built on the theme of the past, present, and future. Sessions addressed the industry's continued embrace of ultra-high-definition and 4K/8K resolution, higher frame rates (HFR), high dynamic range (HDR), and wider color gamut (WCG) from perspectives ranging from aesthetics and psychovisual effects to workflow, monitoring, distribution, and display. Sessions on video compression described low-bandwidth usage for over-the-top

Internet delivery to mobile devices and mezzanine encoding for high-end, intra-, and inter-studio/facility applications.

Sessions on broadcast infrastructure discussed current and future use of coaxial cable and Serial Digital Interface (SDI), including its potential to deliver 100 Gigabit services and enable a seamless transition to Internet Protocol (IP). Moving into the cloud, further sessions focused on how broadcast media-processing capabilities can be migrated to an IP architecture and virtualized across a data center and cloud infrastructure. In discussing virtual reality (VR) workflows and content interchange, session presenters reviewed techniques for increasing the reliability and ensuring the quality of VR productions.

One of the most discussed presentations was delivered by Edward Grogan of the U.S. Department of Defense and titled "Detection of Video Modification." This provocative presentation provided attendees with a look at the scope and challenges that the U.S. Government faces from modified videos, a summary of some of the work now being performed to reduce the risk of undetected modification, a technical look at several of the methods used to detect forgeries, as well as fascinating examples of content modification.

A session titled, "Re-Inventing Entertainment Engineering: How to Blend the Experience of Yesterday with Millennials' Vision of Tomorrow" discussed how the entertainment

Women in Technology



(L-R) Kari Grubin, Laura Thommen, Barbara Lange, and Carolyn Giardina.



Nikki Broeckelmann from Broadcast Beat interviewing Victoria Alonzo.



(L-R) Jennifer Zeidan, Belinda Merritt, and Wendy Aylsworth.



Attendees from the Walt Disney Studios: (L-R) Maneeshka Katugaha, Shannon Wynne, Mariah Shields, Annie Huang, and Jessica Payes.

industry needs to attract and retain younger engineers to strengthen our ranks and our future and attract a large audience. Presenters spoke about the differences between the baby boomer generation, Generation X, and Millennials, who are vast in everything from work philosophy, to pace, to professional goals. Is the entertainment industry properly equipped to recruit, manage, mentor, and retain the new generation? The presenters, millennials themselves, working in entertainment engineering each give a brief presentation on their experiences, outlooks, and hopes for the future on what it means to be a millennial in entertainment engineering, followed by ample time for questions from the audience.

The Centennial Museum in the aptly named, Centennial Exhibit Hall, provided attendees with the opportunity to view some of Jenkins' own equipment and other artifacts—on loan from the Wayne County Historical Museum in Richmond, Virginia, with the assistance of Belden, Hugh Livingston at Sound Designs, and Aspera—from the early days of the motion-imaging industry. The Centennial Hall also included Interop demonstrations of the SMPTE ST 2059 standard, which uses IEEE 1588 Precision Time Protocol to provide time-aligned signal generation, thus providing synchronization of IP-based media equipment with conventional genlocked SDI equipment and AES 67.

The demos highlighted how the synchronization standard works between multiple manufacturers.

Held on Wednesday, 26 October, at the Egyptian Theatre in Hollywood, California, following the Oktoberfest Reception, was the second annual SMPTE-HPA Student Film Festival, which showcased submissions demonstrating creative uses of technology in storytelling. SMPTE and the HPA received over 250 submissions from more than 46 countries, and the 24 official selections shown during SMPTE 2016 represented Brazil, Canada, France, Hong Kong, Iran, Ireland, Israel, New Zealand, Slovakia, Turkey, the U.K., and the U.S.

The event was hosted by Howard Lukk, SMPTE director of engineering and standards, who is also a film director. The official selections at the Festival were screened in SMPTE-DCP format, courtesy of Sundog Media Toolkit. Five films earned awards in the following categories:

Best Creative Use of Entertainment Technology to Engage the Audience in the Story—Animated Short

- “The Graveyard Shift” by Lara Arikan of Ringling College of Art and Design (Sarasota, Florida, U.S.)

Best Creative Use of Entertainment Technology to Engage the Audience in the Story—Live-Action Short

- “Bug Killer” by Unggyu Choi of School of the Visual Arts (New York, U.S.)

Best Use of Mobile Device or Tablet to Convey a Story—Narrative Short

- “ISMS” by Jayden Gillespie of Canyon Crest Academy (San Diego, U.S.)

Best Use of Virtual Reality in Storytelling—Narrative Short

- “Rhapsody” by CHAN Ming Chun of Hong Kong Design Institute (Tiu Keng Wan, Hong Kong)

The Audience Choice Award was a three-way tie:

- “At the Game: An RIT Hockey Experience” by Anna Dining of Rochester Institute of Technology (Rochester, New York, U.S.)
- “Rhapsody” by CHAN Ming Chun of Hong Kong Design Institute (Tiu Keng Wan, Hong Kong)
- “Unmasked” by Christina Faraj and Alice Gavish of School of the Visual Arts (New York, U.S.)

VR selections were screened with viewers provided by Google and Unofficial Cardboard. The student filmmakers of the winning selections received awards as well as prizes courtesy of Avid, Blackmagic Design, and ICG Magazine, the publication of the International Cinematographer’s Guild. Filmmaker information and trailers are available at www.smppte.org/film-festival.

The SMPTE Centennial Gala took place on Friday, 28 October, following the conference and exhibition; James

Cameron and Douglas Trumbull received SMPTE’s top honors. SMPTE officially bestowed Honorary Membership, the Society’s highest honor, upon *Avatar* and *Titanic* director Cameron in recognition of his work advancing visual effects (VFX), motion capture, and stereoscopic 3D photography, as well as his experimentation in HFR.

Presented by Oscar-winning special effects cinematographer Richard Edlund, SMPTE honored Trumbull, who was responsible for the VFX in *2001: A Space Odyssey* and *Blade Runner*, with the Society’s most prestigious medal award, the Progress Medal. The award recognized Trumbull’s contributions to VFX, stereoscopic 3D, and HFR cinema, including his current work to enable stereoscopic 3D with his 120-frames-per-second Magi system.

Oscar Award winning VFX artist Joe Letteri presented the Honorary Membership award to Cameron. “To say this is an honor is a ridiculous understatement. This is kind of a pinch-me moment—a very emotional moment,” said Cameron, who went on to express the importance of engineering in the glamorous world of Hollywood. “To be here with a group of *engineers*, and to be acknowledged by engineers, is so much more meaningful to me truthfully, than all the glitz and glamor of the artistic side of Hollywood...because at heart, you guys are my peeps. I love engineering...Cameron stated. There would be no art in this highly technical art form of ours without engineers.” After noting new and emerging motion-imaging technologies, he concluded, “When you see how far we’ve come, it’s dazzling. It’s magic.”

Both Trumbull and Cameron received standing ovations. Nearly 500 SMPTE Members and guests turned out for the gala in black-tie attire and were entertained as the evening’s host, John O’Hurley, delivered a rousing SMPTE version of his “Razzle Dazzle” performance from the Broadway musical “Chicago.” Sally-Ann D’Amato was introduced by Marsai Martin of the ABC television “Black-ish” as “SMPTE Sally” and she performed an SMPTE-ized version of Cole Porter’s “You’re the Top.” The event also featured entertainment by Critical Mass Dance Company as well as presenters Billy Zane, who was the antagonist Cal Hockley in Cameron’s *Titanic*, Miles Brown of the ABC television series “Black-ish,” and O’Hurley’s son William Dylan.

Additional photos from the event are online at <https://www.flickr.com/photos/smppte/albums>. Videos, produced in partnership with Broadcast Beat, including a highlight reel from the gala that includes Cameron’s speech and the entire Annual General Membership Meeting, are available at <https://www.smppte.org/smppte-2016-videos>

