Honorary Membership *in the Society recognizes individuals who have performed eminent service in the advancement of engineering in motion pictures, television, or in the allied arts and sciences. Such contributions shall represent substantially a lifetime's work inasmuch as Honorary Membership shall be the supreme accolade of the Society.*

This year, SMPTE honors three recipients.

Photo Not Available

Honorary membership is conferred upon **Christopher J. Cookson** in recognition of his pioneering efforts to advance technology in the production and distribution of television and motion pictures. He espoused advancements in high-definition and ultrahigh-definition and played key roles in the successful industry development and standardization of digital video discs (DVD), digital cinema, and digital mezzanine files for automated distribution delivery. Cookson holds numerous patents in the fields of optical discs and film restoration.

Photo Not Available

Honorary membership is conferred upon **Peter Jackson** in recognition of outstanding technical contributions to the advancement of engineering in motion pictures and the allied arts and sciences. Jackson led his technology company, WETA Digital, in the development of groundbreaking digital effects for the *Lord of the Rings* trilogy, including a software system to generate intelligent crowds for battle scenes and advanced motion-capture techniques. *The Hobbit* trilogy included the first motion pictures to be captured and exhibited in 3D at 48 frames per second, resulting in significant advances in equipment and production. Jackson's continuous pursuit of improved storytelling through new technologies has earned him global acclaim.

Photo Not Available

David Sarnoff (posthumously) In recognition of his visionary leadership in the advancement and implementation of color television and other communication technologies. His realization that radio signals could be "broadcast" to many, rather than just a few, revolutionized mass communication beginning with radio and progressing to television. Sarnoff established a highly productive and successful research and development lab to fuel new communications technologies. His innovation support at the RCA Laboratories in Princeton, New Jersey, led to the establishment of the U.S. color TV standard in 1953, which became the basis for monochrome-compatible color TV systems worldwide.

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The ***SMPTE Progress Medal*** *honors the individuals by recognizing outstanding technical contributions to the progress of engineering phases of the motion picture, television, or motion imaging industries. The Progress Medal may be awarded annually, and it should be awarded for an invention or for research or development, which, in the opinion of the Committee, has resulted in a significant advancement in the development of motion picture, television, or motion imaging technology. In considering an award to an individual, continued technical contributions over a period of years should be weighed as an important factor.*

Wendy Aylsworth receives this year's award in recognition of her long career, during which she helped shape how media content is distributed to homes and to movie theaters around the world. Throughout the years of the great media transition from analog to digital, Aylsworth has been an inspiration and beacon for media technology and strategy, inspiring her coworkers both nationally and internationally, and always willing to help and encourage others.

Girish Balakrishnan is also a recipient of this year's Progress Medal in recognition of his long-term commitment and unwavering pursuit of virtual production capabilities, which has resulted in significant advancement in the field and influenced how feature films and television shows are produced today. Balakrishnan is a technological pioneer who is ushering in a new era of film production.

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*The **Natalie M. and Herbert T. Kalmus Medal,** honors the recipient by recognizing outstanding contributions that reflect a commitment to the highest standards of quality and innovation in motion picture post-production and distribution services.*

Harald Brendel receives this year's award for the design and implementation of the color management system used in the ARRI Alexa family of cameras, including the underlying Log-C capture encoding, the ARRI Wide Gamut color space specification, and the creation of the K1S1 filmic viewing transforms. These were instrumental in assisting cinematographers and post-production facilities transition from film to digital image acquisition, providing confidence on set and reliable outcomes in post-production. Brendel was a key contributor to the development of ARRISCAN film scanner and the AMPAS Academy Color Encoding System (ACES) during his long tenure as an image scientist for ARRI.

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*The **David Sarnoff Medal, sponsored by SRI International,** honors the recipient by recognizing outstanding contributions to the development of new techniques or equipment, which have contributed to the improvement of the engineering phases of television technology, including large-venue presentations.*

Youngkwan Lim receives the award for his significant contributions to developing ATSC 3.0 as chair of the TG3-S33: Specialist Group on Management and Protocols and chair of MPEG Systems Working Group and Specialist Groups. Lim's expertise is embedded in next-generation broadcasting technologies like Interactive Services, Metadata, Streaming and Delivery, Synchronization, Watermarking, Mobile TV (T-DMB), and 3D-TV. Lim holds multiple patents related to the broadcast industry. He has authored numerous papers on complex subjects to enlighten and educate while also contributing to organizations such as SMPTE, ATSC, MPEG, and IEEE.

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*The **Excellence in Education Medal, sponsored by William C. Miller and Ellen Sontag-Miller,** honors the recipient by recognizing outstanding contributions to new or unique educational programs that teach the technologies of motion pictures, television, or other imaging sciences including emerging media technology. The award shall recognize an individual who advances the educational process at any level through innovative and inspirational methods.*

Huw Davies is this year's recipient, in recognition of his near-decade-long work at the forefront of apprenticeship development for motion picture engineering/technologists in the United Kingdom. This form of education has proven to be very successful at enabling people to enter the field of broadcast engineering, including some who might not have considered it otherwise. Creating an apprenticeship can be a challenging process that involves many parties, including educational institutions and employers. Innovators like Huw Davies help to keep media technology education relevant and inclusive.

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*The **Workflow Systems Medal, sponsored by Leon D. Silverman,** honors the recipient by recognizing outstanding contributions related to the development and integration of workflows, such as integrated processes, end-to-end systems, or industry ecosystem innovations that enhance creativity, collaboration, efficiency, or novel approaches to the production, post-production, or distribution process.*

Moxion receives this award in recognition of their innovative and quality approach to creative, collaborative workflows. Moxion pioneered the concept of "Immediates," the ability to instantly view the result of work on set, which revolutionized the "dailies" process. Moxion's ability to deliver near-real-time access to production footage enables creative and technical teams to make faster and more informed decisions, troubleshoot issues, and easily bring remote collaborators into the production process. This capability was vital during the 2020 global pandemic. Moxion's foresight and commitment to efficiency, quality, and the creative process have raised the bar for these critical workflows.

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*The **Digital Processing Medal** honors the recipient by recognizing significant technical achievements related to the development of digital processing of content for motion picture, television, games, or other related media.*

Nick Wells receives the award in recognition of his long career at the BBC developing solutions requiring deep knowledge of digital signal processing. Wells' early career focused on differential pulse-code modulation (DPCM)-based video compression. He devised a novel technique for sub-Nyquist sampling of PAL and National Television Systems Committee (NTSC) TV signals, which resulted in minimal loss thanks to clever "comb filtering." Later, he led the development of SMPTE standards for lossless re-coding of MPEG-2 signals. That work led to his appointment as chair of the Pro-MPEG Forum, which helped develop the MXF format, now widely used for file-based delivery of television programs and movies.

*The **Camera Origination and Imaging Medal** honors the recipient by recognizing significant technical achievements related to invention or advances in imaging technology including sensors, imaging processing electronics, and the overall embodiment and application of image capture devices.*

The 2021 Camera Origination and Imaging Medal Award is posthumously conferred to **Robert A. Dischert**, in recognition of his many inventions that significantly advanced the state of the art in broadcast quality cameras. While most his 89 patents were for camera technology, his work spanned the entire spectrum of broadcast studio equipment.

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*The **James A. Lindner Archival Technology Medal, sponsored by James A. Lindner**, honors the recipient by recognizing significant technical advancements or contributions related to the invention or development of technology, techniques, workflows, or infrastructure for the long-term storage, archive, or preservation of media content essence.*

Linda Tadic receives this year's award in recognition of her leadership, research, and work in the field of digital asset management, audiovisual and digital preservation, copyright, metadata, and the environmental impact of digital preservation.

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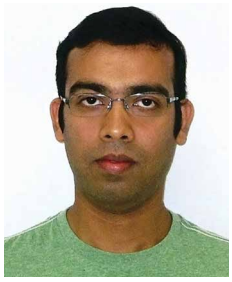
*One **Journal Award** is presented to the author(s) of the most outstanding paper originally published in the Journal of the Society during the preceding calendar year. In addition, up to two **Journal Certificates** may be presented to the author(s) of the paper(s) receiving the next highest score as detailed in subparagraph (c). Papers published in the Journal are eligible only if any previous publication was by the Society.*

The SMPTE Journal Award is presented to **Anustup Choudhury, Jaclyn Pytlarz**, and **Scott Daly** for the paper "HDR and WCG Image Quality Assessment Using Color Difference Metrics," published in the October 2020 Issue of the *SMPTE Motion Imaging Journal*.



Anustup Choudhury received PhD and MS degrees in computer science from the University of Southern California (USC), Los Angeles, CA. Currently, he is a staff researcher with the Applied Vision Science Group at Dolby Laboratories. His research interests include image/video analysis and processing, pattern recognition, computer vision, computational photography, and machine learning. His work has been published in the proceedings of various reputed conferences and journals and some of them have received special recognition. He has more than a dozen issued U.S. patents.

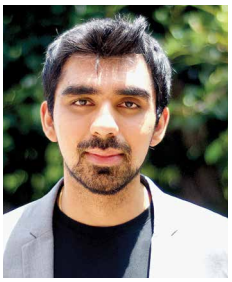
Jaclyn Pytlarz is a staff researcher at Dolby Laboratories, Sunnyvale, CA, where she has worked inside Dolby's Applied Vision Science Group since 2014. Her research includes vision science surrounding color mapping and display management algorithms for high dynamic range and wide-color-gamut displays. She holds a BS degree in motion picture science from Rochester Institute of Technology and an MS degree in computational and mathematical engineering from Stanford University. She has previously been awarded the IET Best Young Professional Award and the TVNewsCheck Technology Woman to Watch Award and is currently serving on the Education Advisory Committee for SMPTE.

Scott Daly received a BS in electrical engineering from North Carolina State University and an MS in bioengineering from the University of Utah in 1984, with a thesis on temporal information processing of cones which is still being cited. He then worked at Kodak on image compression, image fidelity models, medical imaging and image watermarking, and was a co-architect of grayscale display function (GSDF) as used in the DICOM medical standard. The Visible Differences Predictor, was also developed while at Kodak. He won a team Emmy award in 1990 for a video transceiver used in the coverage of Tiananmen Square. He then worked at Sharp Labs in Camas, Washington, where he was a research fellow and leader of their Center for Displayed Appearance. He developed visual models for digital video and displays, with publications on spatiotemporal, motion imagery, and color. For this work, he received the Otto Schade award from Society for Information Display. He then joined Dolby Laboratories to focus on overall fundamental perceptual issues, high dynamic range, virtual reality, auditory-visual interactions and technology to preserve artistic intent. He is currently a member of ACM, IEEE, SMPTE, and SID. He recently completed the 100-patent dash in just under 30 years.

The Journal Certificate of Merit is awarded to **Michael D. Smith, Michael Zink,** and **Aansh Malik** for the paper "Tested Perceptual Difference Between UHD-1/4 K and UHD-2/8K," published in the July 2020 issue of the *SMPTE Motion Imaging Journal.*

Michael D. Smith has been working as a digital imaging and intellectual property consultant since 2003. He is currently coeditor of the *High-Throughput JPEG 2000* image compression standard. In 2018, he received a screen credit for his work on *Mary Poppins Returns*, which was related to the color science involved in integrating a traditional 2D animation workflow with a modern ACES production pipeline. From 2013 to 2015, he was co-chair of Blu-ray Disc Association's UHD-TF Video Subgroup which defined the video-related requirements for the UHD Blu-ray disc format. Smith's work on more than 35 intellectual property matters related to infringement and validity of patents has resulted in payments of approximately $1.7 billion. He was the editor of the book *"3D Cinema and Television Technology: The First 100 Years,"* published by SMPTE in 2011. He received BS and MS degrees in electrical engineering from the University of California Los Angeles (UCLA) in 2001 and 2004, respectively.

Michael Zink is the vice president of technology at Warner Bros. (WB), Burbank, CA, where he is responsible for exploring emerging technologies to enhance WB's capabilities for production, post-production, and distribution. This includes assessing new technologies and assisting with the setup and integration of digital workflows. He also participates in a number of standards associations such as the Consumer Technology Association (CTA), Digital Cinema Initiatives (DCI), and SMPTE, among others and also serves as the chairman for the Ultrahigh Definition Alliance (UHDA). Prior to joining WB, in 2014, he worked at Technicolor, London, U.K., and Los Angeles, CA, for more than ten years, most recently as the vice president of technology strategy, where he was responsible for launching the production efforts around various new optical disc formats. Additionally, he was responsible for the promotion and adoption of Technicolor technology solutions within industry groups. Earlier in his career, he worked for several media production facilities in Germany.



Aansh Malik is an artificial intelligence (AI) engineer in the Emerging and Creative Technologies Group at WarnerMedia. His work focuses on leveraging advancements in AI to enable more interactive storytelling, facilitate experiences in immersive mediums such as augmented reality/virtual reality (AR/VR), as well as augmenting current workflows in the media production lifecycle. His projects are a confluence of fields including conversational AI, computer vision, recurrent neural networks for audio processing, among others. He received a BS degree in electrical engineering with a specialization in machine learning from University of Southern California (UCSD).

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*The **Presidential Proclamation** recognizes individuals of established and outstanding status and reputation in the motion picture and television industries worldwide. This year's recipients are:*

Anne Jacobsen for her visionary leadership in establishing the Media Cluster in Bergen, Norway, as a cradle of innovation and global knowledge hub for media technology. The Norwegian Media Cluster is a world leader in augmented reality, graphics, artificial intelligence, virtual studios, broadcast, and IP- based video, robotics, and workflow and visual storytelling tools.

Photo Not Available

Ava DuVernay for the creation and launch of Array Crew, an equal opportunity platform with the mission to support professionals from underrepresented populations in the film and television industries.

Franklin Leonard for his founding of the Black List, the company committed to shining a light on extraordinary screenwriting through its annual survey of best unproduced screenplays, web portal connecting writers and industry professionals, community and educational resources including screenwriting labs, bog, live script readings, and industry partnerships.

Photo Not Available

Jayshree Ullal for her leadership as CEO of one of the fastest growing cloud networking companies, which enables global video content creation and consumption. Her courageous leadership with a culture of innovation and teamwork has led Arista to great heights, with a dedicated strategy and commitment to execute on it

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Kohji Mitani for his long tenure as head of Japan Broadcasting Corp. (NHK's) research and development department. In this role, he led the implementation of 8K and UHDTV and defined and implemented the Science and Technology Research Laboratories (STRL) research vision for converging AI-Data, IP and cloud, accessibility, and immersive media.

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*The **Excellence in Standards Award** recognizes individuals or companies that have been actively involved in advancing the Society's standards activities and processes.*

Pierre Anthony Lemieux receives this year's award in recognition of his long-standing participation and leadership in the Standards Community, focusing on his ability to balance detail and process. Lemieux's contributions include Technology Committee chair and significant work on the Standards Community's Administrative Practices. His technical expertise has aided in restructuring SMPTE's Metadata Registers, the transition to the Knowledge Network, and modernization of working practices. The Interoperable Master Format (IMF) and subtitling are among Lemieux's notable contributions. His external activities have ensured that SMPTE is visible in organizations like the World Wide Web Consortium and the IMF User Group.

Standards Commendations are also awarded to the following:

Photo Not Available

Hideki Ohtaka—In recognition of his long career contributing to SMPTE standards and liaising with other global standards bodies.

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Thomas Heritage—In recognition of his work on SMPTE's online metadata register infrastructure.

John Mailhot—In recognition of his tireless work resolving comments and editing the ST 2110 document suite.

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*The **Citation for Outstanding Service to the Society**, recognizes individuals for dedicated service to the Society over a sustained period of time. Particular emphasis is placed on service performed at the Section level, including, but not limited to, services performed at Section meetings, special Section meetings, and national conferences. This year, the award is conferred to the following.*

Tony Meerakker—Toronto Section—In recognition of his leadership and tireless contributions to the Toronto Section. Meerakker oversees the monthly Section meetings, ensuring that they are professionally produced and of great value to the members. He is always looking for new ways to encourage and engage students. He is a perfectionist who never hesitates to lend a helping hand. He strives for continuous improvement while keeping the big picture in mind.

François Bourdua—Montreal/ Quebec Section—In recognition of his outstanding service as the Secretary/Treasurer for the Montreal Section. François Bourdua led the charge to formalize the Canadian operations and ensure taxation compliance. He has been involved in planning many local Section events and conferences and promoting the value of SMPTE on the local and Societal level with the membership chair. François Bourdua does an outstanding job of advocating for the members of the Montreal Section and collaborating with his Section colleagues in Toronto. He has worked tirelessly over the years to ensure that the Section and its members benefit from the best available information and networking opportunities.

Daniel Guévin—Montreal/Quebec Section—In recognition of his outstanding service in his years as chair of the Montreal Section. The Montreal Section has grown its membership and provided educational opportunities for its members under his leadership, including its yearly Bootcamp, which he helps plan and Emcees. He is committed to serving Section members and assisting the Section in developing young industry professionals by providing scholarships to local students. His dedication to the members, attention to detail, and willingness to innovate have benefited both the Section and SMPTE.

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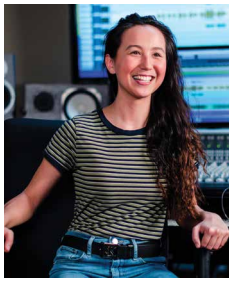
*The **Louis F. Wolf Jr. Memorial Scholarship** is designed to assist students in furthering their undergraduate or graduate studies in motion pictures and television, with an emphasis on technology.*

The 2021 scholarship will be awarded to **Monica Brighton**. She graduated from RTA's Media Production Program at Ryerson University, Toronto, ON, Canada, specializing in video and sound production with a minor in music and culture. She is currently the television host of Backyard Beats, an educational music series that in 2021 was awarded an international Kidscreen Award, Youth Media Alliance Award, and received a Canadian Screen Award nomination. She is also the host and producer of "That TVOkids Show" on TVOkids. She recently presented her academic work to the Toronto Audio Engineering Society at the next-generation virtual event. In the showcase, she demonstrated the advantages of adopting a multi-digital-audio-workstation workflow as opposed to a single DAW workflow when creating sonic explorations that venture beyond the world of stereo and into fully immersive spatial audio experiences. In the deconstruction of her original orchestral score, each instrument is placed above, below, forward, and behind the listener in a 3D ambisonic sphere of sound that responds to the movement and actions of the listener.



*The **Student Paper Award** recognizes the outstanding paper prepared and submitted by a Student Member. The paper receiving the Student Paper Award will be published in the SMPTE Motion Imaging Journal.*

Aaron Demolder receives this year's award for his paper "Towards the Standardization of High-Quality Computer-Generated Holography Media Production Workflow."

Demolder is a digital media engineering doctorate (EngD) candidate at the Engineering and Physical Sciences Research Council (EPSRC) funded Centre for Digital Entertainment (CDE), Bournemouth University, U.K. He is currently completing his EngD while embedded within VividQ Ltd in Cambridge, U.K., with a focus of better incorporating emerging technology into art driven pipelines. Demolder has a degree in computer visualisation & animation BA (Hons) from the National Centre for Computer Animation. His work at VividQ balances between experimenting with content for the new generation of display technology and driving improvement of the Holographic generation system that enables it.