AES CONVENTION

Javits Convention Center New York, USA ≥ ≥ October 18–21, ≥01 ≥ 01

CONVENTION REPORT

Declared a rousing success by attendees, exhibitors, presenters and sponsors alike, the AES New York 2017 "Maximum Audio" Convention once again hosted the year's largest annual gathering of pro audio professionals, students, and enthusiasts at the Jacob Javits Center, from October 18th to 21st. Convention co-chairs Agnieszka Roginska and Paul Gallo, along with numerous convention organizers and volunteers, provided the programming and events spanning the four days of audio presen-

tations, discussion panels, and three-day gear exhibition.

Co-location at the Javits Center with the NAB New York show created an additional edge, bringing in an even more diverse attendee base to the premier professional audio education and networking event of the year. A steady stream of new products, events, and announcements from the convention is still resounding through the industry as convention exhibitors and sponsors report another highly successful AES convention experience.

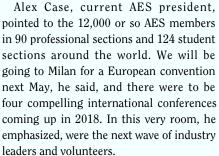




OPENING CEREMONY AND AWARDS

Opening the 143rd Convention, executive director Bob Moses spoke of how excited he was about the show because of the co-loca-

tion with NAB, which was exhibiting next door. There were synergies between the two organizations, he said, with twice as many people at the two shows overall. The AES would be doing the same thing next year too, returning to the Javits Center in 2018 as it celebrates its 70th Anniversary with the 145th AES International Convention, taking place October 17-20, 2018. Moses expressed fulsome gratitude to the many volunteers who had made the convention a success, in particular the remarkable convention committee—it was truly a labor of love, he said. Thanks were also offered to the sponsors and business community that had supported the event. The Society, he explained, was recording 100 hours of material from the convention to be made available through the member portal, so there were good reasons to joint the AES.



Convention cochair Paul Gallo explained that he and cochair Agnieszka Roginska had worked closely together to put on this event. Agnieszka had put on an amazing technical program together with the committees. NAB had been a good partner, he said, but emphasized that there was no business relationship between it and the AES convention. He particularly thanked Alex Case for leading the way in innovating aggressively in his time as president. Agnieszka Roginska then took the stage, thanking Gallo for his deep industry experience, kindness and good grace. There followed an amusing discussion about the many and various ways in which people had attempted to spell her name in recent months, and she finished by highlighting the various new things available in the program, as well as offering profuse thanks to the committee and headquarters staff.

In a short speech by Education Committee chair Kyle Snyder, a new prize in memory of Saul Walker was announced. In future the Student Design Competition would be



Bob Moses



Alex Case



Paul Gallo



Agnieszka Roginska



Kyle Snyder



Andres Mayo

AES AWARDS AT THE 143RD

GOLD MEDAL

MALCOLM OMAR HAWKSFORD in recognition of many decades of consistent and influential contributions to the audio industry and education

SILVER MEDAL

MARK DAVIS in recognition of several decades of outstanding achievements and developments in psychoacoustically informed audio engineering for cinema and home entertainment, including early-breakthrough analog signal processing, novel phased-array loudspeaker design, the dbx/MTS stereo television noise-reduction system, the AC-3 algorithm (basis for Dolby Digital cinema soundtracks), key elements of Dolby Atmos, plus dissemination of the understanding and application of audio technology innovations

VILLE PULKKI in recognition of exceptional contributions in the understanding and development of spatial audio techniques for audio production and reproduction

FELLOWSHIP AWARD

DANIEL MAPES-RIORDAN for significant contributions to DSP design and development of sound reinforcement products, and more than 20 years of activity as a reviewer and associate technical editor of the JAES

MANDY PARNELL in recognition of her tireless efforts to stimulate interest and enthusiasm for the craft of audio mastering among AES's student community, while also generously sharing her knowledge and professional expertise with the wider audio industry

CITATION AWARD

CLAIR KREPPS in acknowledgment of your participation in the formative days of the Audio Engineering Society and for service to the audio industry

BOARD OF GOVERNORS AWARD

LINDA GEDEMER in recognition of cochairing the 2016 International AES Conference on Audio for Augmented and Virtual Reality in Los Angeles, USA, September 30–October 1, 2016

ANDRES MAYO in recognition of cochairing the 2016 International AES Conference on Audio for Augmented and Virtual Reality in Los Angeles, USA, September 30–October 1, 2016

MICHAEL MACDONALD in recognition of cochairing the 137th AES Convention in Los Angeles, USA, October 9–12, 2014

MICHAEL MCDONALD in recognition of cochairing the 141st AES Convention in Los Angeles, USA, September 29-October 2, 2016

TIM RYAN for outstanding work in organizing and overseeing the Central Region AES Student Summit

VALERIE TYLER in recognition of cochairing the 141st AES Convention in Los Angeles, USA, September 29–October 2, 2016

named after Walker, he said, and API would be making the award for that competition.

Presenting an impressive line-up of awards, Andres Mayo, chair of the Awards Committee, announced those who had made outstanding achievements in the audio engineering field, or served the Society in an exceptional way. The most prestigious award presented in New York was the Gold Medal, given to Malcolm Hawksford in recognition of many decades of consistent and influential contributions to the audio industry and education. The second most prestigious award is the Silver Medal, and there were two deserving



Alex Case presents the Gold Medal Award to Malcolm Hawksford.



Charles Robinson receives the Silver Medal for Mark Davis.



The Silver Medal is presented to Ville Pulkki.



Dan Mapes-Riordan receives the Fellowship Award.



Mandy Parnell receives the Fellowship Award.



Clair Krepps receives his Citation Award.



Board of Governors Awards for Linda Gedemer and Andres Mayo









Board of Governors Awards were presented to, from left, Michael Macdonald (two awards), Tim Ryan, and Valerie Tyler.



Josh Reiss receives the Best 2016 Journal Paper Award from JAES Editor Bozena Kostek.



Todd Welti, Sean Olive, and Omid Khonsaripour received the Best Peer-Reviewed Paper Award from Areti Andreopoulou.



Sarah Smith receives the Student Paper Award from Braxton Boren.

143RD CONVENTION AWARDS PRESENTATION

recipients in this case. First Mark Davis, in recognition of several decades of outstanding achievements and developments in psychoacoustically informed audio engineering; and second Ville Pulkki, in recognition of exceptional contributions in the understanding and development of spatial audio techniques for audio production and reproduction. A full list of the awards presented at the 143rd Convention can be found in the side bar on the previous page.

KEYNOTE

How the audience may become "Fooled by Audio" and the audio technologies used to help create these illusions was the topic at hand for the keynote speech, given by Edgar Choueiri of Princeton University. "We could be at the cusp of a major change," said Choueiri, with VR/AR moving so fast, the potential for separate sound zones, super-accurate 3D imaging, navigable sound fields and even "audio teleportation." The VR 3D puzzle, he said, consisted of a number of elements. How to capture people's individual HRTFs quickly was one of them. If it could be done in ten minutes then we might be getting somewhere, he suggested. Possible technologies to be considered here include computing HRTFs from a 3D scan of the head and torso, as computed HRTFs can be more accurate than anechoic measurements. When it comes



An attentive crowd listens to Edgar Choueiri's keynote.



Edgar Choueiri gave an inspiring talk on being "Fooled by Audio."

to sound zones, we need to be aiming for at least 20 dB of inter-sweet-spot isolation he proposed, but we can only practically do 8–10 dB at present. "The future is closer than it may appear to be," he concluded.

EXHIBITION

Prominent pro audio brands expressed their satisfaction with this year's exhibition and

events. Among quotes from those taking stands it was possible to hear the following: "this year's AES convention in New York once again demonstrated that AES is an extremely important industry event, offering exhibitors, presenters and audio professionals a format to learn about new technologies, see the latest professional audio products and network with the leaders in the industry," stated Phil Cajka, Audio-Technica U.S. president and CEO; Jack Kelly, president of Group One said "I can see first-hand that the effort put in by the AES Board of Governors and the folks involved with the exhibition is definitely having a positive impact, and we look forward to being here again next year." Celino Ullegue of Shure enthused "this year's show was an excellent forum for show-casing our new premier Axient Digital wireless line. It gave Shure a great opportunity to discuss the current needs of wireless microphone users."

Among numerous product announcements, new technologies and demonstrations at the convention, Orban placed the spotlight on its new automotive audio technology, including loudness optimizers, bass and "holographic" imaging control. DPA gave a morning press conference to announce its CORE amplifiers for miniature microphones, aiming to expand the available dynamic range, while Genelec was keen to show off its upgraded 1032C nearfield monitors. There was a new nearfield reference monitor from PMC, the result6, with a redesigned Advanced Transmission Line (their proprietary bass loading system), and Dynaudio was showing off its new 9S and 18S subwoofers for studio monitors. Josephson Engineering announced the shipping of its C725 Tube/FET hybrid studio microphone, the result of more than five years of work with recording engineers. A novel new design of stereo microphone from Samar Audio Designs, the VL373, was said to offer a true-to-life stereo image by using two ribbons in very close proximity. In the realm of digital wireless mics, Sony was showing a preview of its



Experiencing virtual reality audio on the show floor with G'Audio.



Visitors swarmed the exhibition hall at the Javits Convention Center.

next generation DWX series that has very low latency of 1.2 ms and high-density multichannel operation, as well as supporting Dante networking. Lectrosonics added to the interest here by launching two new wideband digital hybrid wireless transmitters, which work across three standard frequency bands. Speaking of Dante, Focusrite unveiled a new addition to its RedNet series of Dante network interfaces, the X2P, featuring two mic preamps, stereo line out, a local input mixer and a headphone amplifier.

Dealing with the complexities of today's multichannel monitoring environments was Yamaha's launch of the MMP1 system, a solution that supports formats all the way from stereo to various immersive formats such as 22.2 and Dolby Atmos. The box also handles cue



Crowds gather for one of the popular PSE sessions on the show floor.

outputs and talkback, with control and status monitoring through an iPad app or computer application.

An interesting development from L-Acoustics and DiGiCo was the integration of L-ISA (Immersive Sound Art) source control, an object-based mixing system, into the mixer company's SD range of consoles. Calrec Audio emphasized its new Brio console, from its Bluefin2 family, designed to offer more faders for a given footprint than other broadcast consoles. This is partly achieved by having two layers of 36 faders, and a large HD touchscreen. Turning to studio signal processing, Eventide unveiled its latest rackmount processor, the H9000 Harmonizer that comes along with a controlling app and plug-in known as emote. The device seems to be much more than just a harmonizer, acting as a fully featured DAW interface and processing engine.

SHOW FLOOR EDUCATIONAL OPPORTUNITIES

An expanded offering of educational events was offered on the various stages in the exhibition area, including once again the Project Studio Expo (in association with Sound on Sound, and led by Glenn Lorbecki) on all three days, and the Live Sound Expo that took place on Friday. Also included in this year's line-up were a Thursday Broadway Sound Expo, highly appropriate for New York City, with sessions on theater sound design and operations; also a Broadcast Audio Expo on the Wednesday, and a "Software@AES" series on Wednesday with sessions from a number of major players. This program offered the opportunity for those not registered for the full technical program to benefit from a number of educational sessions, in between their visits to manufacturers' stands and the various special events at the convention.

AES and Mix with the Masters also teamed up on a special exhibition stand to offer a program of hands-on workshops by some of the top producers and mixers in the world. Sessions led by industry masters such as Eddie Kramer, Chris Lord Alge, Tony Maserati, Andrew Scheps and Tchad Blake, took visitors through their special tracks and how these masters have performed their magic.

MAKING TRACKS

Organizing the technical program schedule into topical tracks is the convention committee's way of helping visitors to find the sessions most relevant to their areas of interest. Here at the 143rd there was a track for each of a wide range of such topics, with Archiving and Restoration, Audio for Cinema, Broadcast and Streaming, Game Audio & VR, Networked Audio, Product Devel-



Listening attentively to one of the compelling PSE presentations.



Mixing with the Masters on a special show-floor stand.

opment, Recording and Production, Sound Reinforcement, Spatial Audio and Student/Careers.

The Archiving and Restoration Track featured its most varied events schedule ever, including in-depth looks at archiving the music of Star Wars and the remarkably prolific recordings of the Grateful Dead, media preservation techniques for the 21st century and much more. "Our recorded music heritage is an invaluable part of our history, and today's audio archivists are using the very latest resources to ensure that our rich sonic past will be available to future generations," said track chair Rebecca Feynberg. More than a dozen archiving and resto-



The Empire State building lit up in blue for the AES convention.

ration-related seminars took place during the four days.

Sound is just as important as image in creating a compelling movie, TV, or streaming video experience, and the convention's Audio for Cinema Track events went into the latest techniques for capturing and producing sound for film, broadcast and video. "Our AES New York 2017 Convention's Audio for Cinema Track featured a diverse range of experts who covered everything from nitty-gritty topics like how to best capture dialog in film and television, to the latest technologies for immersive audio and a seminar on the very future of cinema sound itself," said chair Nuno Fonseca.

"Each year we have a theme for the Product Development Track," said chair Scott Leslie. This year the theme was Disruptive Topics in Audio Product Development. The sessions covered areas where change is disrupting traditional thinking and approaches, with such topics as Modern Hybrid Audio Coding, Loudspeaker and Amplifier Power Ratings: Is it Time to Start Over? and Is the Anechoic Chamber Obsolete? As has become the standard for the Product Development Track, all sessions were workshops, where the session presenters led an interactive discussion.

This year the traditional Game Audio Track added Virtual Reality to reflect the growing importance of immersive sound and virtual reality audio. This year's series of events, put together by cochairs Steve Martz and Michael Kelly, incorporated the latest cutting-edge technologies and techniques used in some of today's most popular, and growing, forms of entertainment. "The frenetic pace of ongoing developments in Game Audio, VR, AR, and other related technologies provided the foundation for the VR and Game Audio track in the technical program at this year's AES New York Convention," said Martz.

As part of the Spatial Audio track, also chaired by Martz and Kelly, Immersive Audio Super Saturday featured a number of

listening sessions including binaural recordings, Ambeo 3D and 9.1 formats. The day was topped off by a session on recording techniques for capturing height, led by David Bowles, Paul Geluso, and Sungyoung Kim.

The Broadcast and Streaming Media sessions are always popular at conventions, and this year's collection was just as compelling

as always, led by David Bialik and Fred Willard. Among the highlights was a session hosted by John Lyons of Durst Broadcasting LLC, involving a short panel discussion and tour of the new broadcast facility of the One World Trade Center. The discussion included the origin of Durst involvement with the Port Authority on the project, the innovative technologies employed including green innovations and logistical innovations and the intricacies involved with developing and building a broadcast facility while still

building the property in which the facility sits.

The traditional paradigm of transmitting audio and video media content over pointto-point dedicated cabling is being supplanted by methods of moving media content over networks. The Networked Audio Track, supported by the AES Technical Committee on Networked Audio Systems, and chaired by Bob Lee, explored the latest developments in methods, protocols, and applications of all things networked audio. Fascinating sessions from Patrick Killaney included a discussion of whether AV or IT owns the audio network and "first steps with digital audio networks."

Sound reinforcement sessions, coordinated by Mac Kerr and Henry Cohen, proved to be a big draw, with some emphasis on managing the RF spectrum for wireless systems

in the light of a rapidly diminishing bandwidth available for audio systems. Sessions on corporate sound design and PA intelligibility gave an insight into how to improve speech reinforcement in different contexts, while TC chair Adam Hill's tutorial on live sound subwoofer systems gave a good overview on how to achieve desirable LF coverage. "There is little reason these days to accept undesirable low-frequency sound coverage in live sound reinforcement," Adam pointed out.

No AES convention would be complete without a major focus on recording and mastering, and chairs Jim Kaiser and Michael Romanowski had put together a remarkable set of sessions including a guide to the hot topic of high-quality vinyl release with Chris Mara, Dustin Blocker and Cameron Henry. Renowned engineers from the Recording Academy's Producers and Engineers Wing took to the stage to talk about high-resolution record production and why it matters, while a "Raw Tracks" session went into the process of recording the Bee Bees "Saturday Night Fever" with John Merchant, Albhy Galuten and Karl Richardson.





Leslie Ann Jones speaks about her life and career (top) and (above) receives a certificate of recognition for her Richard C. Heyser Memorial Lecture.



Members of the Recording Academy P&E Wing gather to discuss high resolution record production.

HEYSER LECTURE

During a packed special lecture in memory of Richard Heyser, staged by the Technical Council, Leslie Ann Jones gave a fascinating retrospective on how her life and career had been enriched by paying attention. Speaking for some 45 minutes, her talk ranged over her early days at ABC Recording Studios in LA, after which she moved to Northern California to work at the legendary Automatt

Studios with artists such as Herbie Hancock and Carlos Santana, and she started her film score mixing career with Apocalypse Now. After ten years at Capitol Records in Hollywood she moved north of San Francisco to George Lucas's Skywalker Sound where she continues to work on film scores and a range of other projects, including as producer. "Everyone is so good at their craft it makes us all want to do better," she said of Skywalker.

Leslie Ann's talk was received with enthusiastic applause after which she was awarded a certificate from the Technical Council commemorating her contribution to the lecture series.

WORKSHOPS AND TUTORIALS FOR ALL

In addition to the trackthemed events, Valerie Tyler and Jonathan Wyner assembled

a program of more general workshops and tutorials, including a fascinating symposium on working in the field of audio engineering with hearing loss and/or tinnitus. Chaired by Jon Boley, the panel looked in to listening strategies and supplemental technologies that might be helpful, as well as an audiological perspective on hearing loss. Scott Metcalfe and Andrea Pejrolo put on a live demonstration of using synthesis to create unique sounds, encouraging users to avoid using presets and get their creative energies working. On Saturday, Malcolm Dunn of Marshall Day Acoustics gave a useful tutorial on practical 3D acoustic measurements, looking at how 3D impulse response measurements can be used practically.



The 143rd convention committee gathers for a group photo with convention chairs Paul Gallo and Agnieszka Roginska (center).



David Bialik



Henry Cohen



Mac Kerr



Bob Lee



Nuno Fonseca



From left, Julia Caruso, Agnieszka Roginska, and Rebecca Feynberg



Steve Martz and Michael Kelly



Areti Andreopoulou and Braxton Boren



Michael Romanowski and Jim Kaiser



Valerie Tyler and Jonathan Wyner



Student volunteers with Matt Kulewicz and Deszette Henry

AES THANKS THE 143RD CONVENTION COMMITTEE

TECHNICAL PAPERS AND ENGINEERING BRIEFS

Papers cochairs Areti Andreopoulou and Braxton Boren had sifted through the large number of proposals for papers and engineering briefs submitted to this event to put together a rewarding program of sessions. Covering topics from signal processing, through audio education, to perception, transducers, recording, and applications, spatial audio and sound reinforcement, the papers sessions offered something for everyone. The latest research and development was comprehensively explored by those working in the newest fields, and we saw numerous contributions on the computation of head-related transfer functions, for example, probably driven by the push for advanced virtual reality. The assessment and measurement of headphones was also of considerable importance in a new paper from Sean Olive and his colleagues at Harman on the prediction of headphone preference, as well as one from Louis Fielder at Dolby on a perceptually-driven distortion metric for headphones.

Engineering briefs offer presenters a chance to present shorter



papers on recent work, perhaps more practical than that represented in research papers, or at an earlier stage in its development. The session on recording and production, for example, offered contributions on things like building a globally distributed recording studio, simultaneous capture of audio at multiple sample





rates, and the recording of music bands using a single microphone array with source separation. Poster sessions provided a chance for people to discuss their work directly with authors in the spacious foyer.

SPECIAL EVENTS

Special events are one of the most exciting parts of the program at AES conventions, and most valuably they are open to all registered attendees with Exhibits Plus badges. Put together by chair Paul Geluso, the line-up included three lunchtime keynotes as well as numerous other forums on topics such as DTV audio, mastering for the new paradigm, and audio for advanced video broadcasting. A live version of the popular Pensado's Place videos featured special guest Greg Wells, who has produced Katy Perry, Adele and One Republic.

Chaired by Leslie Gaston-Bird, the first African-American to serve on the AES Board of Governors, the new Diversity and Inclusion Committee hosted a Town Hall on the Wednesday to introduce the goals of the committee and invite comments from AES members. The goal of the committee is to promote a more demographically diverse and inclusive AES membership with broad representation from working audio professionals. AES President Alex Case stated "I think it likely we all agree on the general virtue of embracing diversity, and nurturing inclusion, and the value to our field that comes from an AES



Diversity Town Hall, chaired by Leslie Gaston-Bird



From left, Dave Pensado, Herb Trawik, and Greg Wells



Producing Across the Generations panel, chaired by Nick Sansano

made up of the broadest pool of empowered talent. There remains the need for discrete activities-multiple, smaller steps—to achieve that broad aim. This committee is the arm of the AES ready to lead the work that makes sure that, on our watch, where we



Bob McCarthy presents recipes for sound system optimization in lunchtime keynote.

can make a difference, we will foster diversity and inclusion for the benefit of the art, craft, and technology of audio."

Three lunchtime keynotes kicked off with Alex Case on how to "get louder without the fader," showing listeners how to make critical tracks easier to hear in a mix using panning, reverb, compression and other effects. Renowned sound reinforcement expert Bob McCarthy took the stage on Friday to present a his recipes for a great result with a "cookbook approach to system optimization"; and Emily Lazar offered a guide on how to avoid getting lost in the "lush landscape of infinite digital possibilities" while mixing in her talk "More Cowbell? Trusting Your Sonic Gut."

The recent 2011 organ built by Pascal Quoirin at the Church



Student Design Competition winners celebrate



Student Recording Competition winners with their prizes



Hunting for courses at the Education and Careers Fair.



Judges of Traditional Acoustic student recordings: David Bowles, Ulrike Schwarz, and Martha de Francisco

STUDENTS AND CAREERS
AT THE 143RD

of the Ascension in lower Manhattan was the scene for Graham Blyth's organ recital on the Thursday evening. The organ, the first French-built instrument ever to be installed in New York City, was modeled on the great French classical organs of old, and consisted of both a three manual mechanical action console and a four manual movable console with access to many more stops intended for the symphonic repertoire. Graham's program started with a "Bach half" consisting of the great E minor Prelude and Fugue, a trio, and the Fantasia and Fugue in G minor, followed by a "French half" consisting of the Grand Pièce Symphonique by César Franck.

STUDENT AND CAREER DEVELOPMENT

Alongside the regular student and career development events that have become features of this track, this time organized by Kyle Snyder, a number of more unusual career development offerings were placed on the menu. These included "This is a Mix, this is a Master," during which mastering engineers attempted to explain to novice engineers how not to attempt to emulate mastering practices in their studio mixes, as this limits what mastering engineers can then do. We also heard from a panel under the moderation of Paul Lehrman about teaching electronic musical instrument design, an exciting and growing field made possible by technology that is getting smaller, cheaper and more user friendly. A final session on Saturday led by Joe Carroll looked at career development for independent music creatives, with members of the Manhattan Producers Alliance.

TECHNICAL TOURS

Six technical tours had been planned by Bill Siegmund, for those with time to get out of the convention center and in to the surrounding area. The first of these, to the Rubin Museum of Art, where an exhibition "The World is Sound" included site-specific sound installations reflecting the art and culture of the Himalayas, including an immersive piece composed for the museum's spiral staircase. A tour of Berklee NYC's Power Station Studios took visitors to one of the city's iconic recording studios (formerly Avatar), recently purchased by Berklee for educational purposes. A longer distance trip to Princeton University enabled delegates to visit Edgar Choueiri's 3D Audio and Applied Acoustics (3D3A) lab, and on Friday a group went to NYU's studio facilities, including its AR/VR lab. Also on Friday the Harbor Picture Company's studios showed visitors the only Hollywood-sized theatrical mix stage in the city, equipped for IMAX 7.1 and Atmos. Finally a small group was able to go to Ralph Glasgal's Ambiophonics Institute, where it was possible to hear 2D, 3D and VR audio using the latest technology.

TECHNICAL COUNCIL AND STANDARDS MEETINGS

Comprised of expert committees overseeing audio disciplines such as Acoustics and Sound Reinforcement, Spatial Audio, and Audio for Cinema, the technical committees bring the world's top experts together to chart a course for the AES's work in each area. Many convention events and conferences are organized by TCs to stimulate activity and to educate the industry.

During the course of the convention nearly all of the TCs met and a number of new conferences are in the planning stages, including on archiving and restoration, spatial audio, virtual reality and music-induced hearing loss.

Under its new manager Richard Cabot, together with standards committee chair Bruce Olson, a full program of standards meetings was convened. The standards committee has recently implemented a scheme of "standards sustainers," which are companies that make a significant contribution to the AES standards operation. Rather than charge fees to take part in standards work, the Society has decided to solicit contributions from such sustainers, to enable the work to progress with broad participation, and the initiative has proved very successful, with over 40 companies signed up so far.

AES COMMITTEES

Conventions present an ideal opportunity for AES Board members to meet in the various committees that ensure the ongoing operation of the Society. During the Regions and Sections Forum, representatives of AES sections from around the world met with the Society's vice presidents to share examples of stimulating local events and membership initiatives. All of the other standing committees also met during the convention, including Education, Membership, Awards, and so forth. The Board of Governors met on the evening of the last day of the convention, during which the Society's future policy and direction was discussed.

BEHIND THE SCENES

Facilities chair Julia Caruso did a spectacular job of pulling together all of the resource

requirements for the technical program, along with the AV team hired for the event. Matt Kulewicz and Ernesto Valenzuela coordinated a team of volunteers who worked exceptionally hard to make sure everything was in order for the participants. The



Tony Schultz chairing the Regions and Sections Forum



Josh Reiss chairs a meeting of the Publications Policy Committee.



Francis Rumsey, with Michael Kelly (left) and Jürgen Herre (right) leads a meeting of the Technical Council.



Conference Policy Committee meeting: from left, Bob Moses, Bill Foster (committee chair), Richard Wollrich, and David Scheirman.

headquarters staff had gone beyond the call of duty to ensure that all the back-office work needed to facilitate a successful convention was done in time and to a high standard, and incoming AES Treasurer Richard Wollrich kept a close eye on the budget.



The AES Board of Governors, committee chairs, and officers, gather for a photograph prior to the board meeting at the end of the convention.

