AUDIO ENGINEERING SOCIETY

CALL for PAPERS

AES 27th CONFERENCE, 2005
Copenhagen, Denmark

2005

efficient audio power amplification

AES 27TH CONFERENCE
Copenhagen, Denmark

***Dates*: September 2–4, 2005 *Location*: Hillerød, Copenhagen, Denmark**
***Chair*: Jan Abildgaard Pedersen, E-mail: 27th_chair@aes.org**

Linear (Class A/AB/B) amplification has been the standard for power amplification for many decades. During the last ten years, interest in higher efficiency power amplification has increased, particularly in the audio industry. The major driving force has been the need to provide fresh opportunities in audio design with the advantages that higher efficiency potentially offers, for example higher power with increased power density, savings in energy and battery life, potential cost savings, and even potential performance improvement in audio reproduction.

The interest in this new field is global and includes all major industrial segments, such as consumer electronics, cars, professional, and mobile or portable audio fields. A paradigm shift seems to be on its way.

This conference will present an overview of the current state-of-the-art in a broad perspective and address many of the new scientific disciplines involved in this emerging field. Efficient audio power amplification is a synergistic mixing of complementary scientific fields such as power electronics, signal processing, DSP, advanced analog design, EMC, and more. The aim of the conference is thus to address a new, complex, and challenging era at an early stage.

The AES 27th Conference Committee invites submission of technical papers for presentation in Copenhagen. **By 2005 April 4**, **a full paper of 4 to 10 pages** should be submitted to the review committee of the AES 27th Conference. Paper submissions should follow the guidelines in *Information for Authors* at **http://www.aes.org/journal/con_infoauth.html** and be submitted online through the submission site at **http://www.aes.org/27th_authors**. You can visit this site for more information and complete instructions for using the site after **2005 January 5**.

The 27th Conference Review Committee, based on full paper submissions, will determine acceptance of papers and inform all authors before **2005 May 18** by E-mail. Following acceptance, appropriate revisions based on the comments of the reviewers will be allowed, but no substantial rewriting. Revised papers must be submitted by **2005 June 20**.

PROPOSED TOPICS FOR PAPERS

Efficient Power Amplifier Methods and Topologies
- Architectures
- Challenges in efficient power amplifier design
- Modulation methods—analog and digital
- Control systems design—analog and digital
- Power stage topologies and implementation (gate-drivers, power stage)
- Modeling and optimization

Integration Perspectives
- IC integration, design/simulation/verification/test
- Packaging
- Thermal management
- Protection, safety, and regulations
- EMI/EMC
- Ease of manufacturing

Audio Chain Integration
- Power supplies
- Transducers
- DSP

Measuring Methods and Evaluation
- Sound quality, listening tests
- Efficiency
- Audio measurements and test methods

Applications and Future Trends
- Marketing, sales, and general business
- Benefits/value propositions in different audio markets
- Mobile phones, hearing aids
- Hi-fi, car-fi, and PA
- Emerging technologies and applications
- Network audio power

SUBMISSION SCHEDULE

Please submit a full paper of 4 to 10 pages at **http://www.aes.org/27th_authors** no later than **2005 April 4**. If you have any questions, contact:

PAPERS COCHAIRS

Michael A. E. Andersen
Tech. Univ. of Denmark
Lyngby, Denmark

Thomas M. Frederiksen
TC Electronic A/S
Aarhus, Denmark

E-mail: 27th_papers@aes.org

Full paper deadline: 2005 April 4
Acceptance E-mailed: 2005 May 18
Revised paper deadline: 2005 June 20

Authors whose papers are accepted for presentation will receive additional instructions if the reviewers ask for modifications.