

# SWISS SECTION NEWSLETTER

79th Issue

#### INFORMATION ON NEXT MEETING

# HIGH QUALITY STUDIO MONITORING LOUDSPEAKERS

Thursday 17<sup>th</sup> of January 2002, 17h15 at Strauss Elektroakustik GmbH, Güterstrasse 8, 3008 Bern

SPEAKERS: Dr. Gottfried Behler, Institute for Technical Acoustics, RWTH Aachen,

Germany

Jürgen Strauss, Strauss Elektroakustik GmbH, Bern, Switzerland

ORGANIZER: Markus Erne, Scopein Research, Aarau LANGUAGE: German

The first meeting of the AES Swiss Section will highlight some new technologies, involved in the design of high quality studio monitor loudspeakers and will put a strong focus on providing experience in listening to high quality studio monitors in a corresponding listening environment.

Dr. G. Behler will start with the presentation on "Digital monitor loudspeakers" and emphasize on the advantage of using digital filters in the loudspeaker design. Digital filters not only allow to compensate the overall frequency response accurately and provide narrow transition bandwidths between adjacent bands, but they offer the advantage to optimize the impulse response of the overall monitoring system.

The adaptation of the monitoring situation to different room configurations will be discussed as well as the limitations of these technologies. The new products of Klein&Hummel, the O500 with internal DSP-controller and the O300D with external controller will be presented and participants will get a chance to listen to these systems under professional listening conditions.

An apéro, served during break will give the audience a first chance to gather for first discussions.

Mr. Jürgen Strauss will then present some insights to the midfield-Studio monitor SEMF-2. These monitors have been chosen among many other competitors by more than 40 sound engineers at Sony Music Studios in Tokyo as being the ultimate choice for being equipped in the 12 mastering facilities at Sony Music Studios in Tokyo.

Mr. Strauss will not only provide some information on the loudspeaker itself but will additionally include the aspects of studio design and the optimization of the monitoring system. Hewill strongly focus on listening demonstrations which allow a comparison between Super Audio CD (SACD) and DVD-Audio.

Mr. Strauss will not only provide some information This generated a set of unique requirements for acoustical treatment of the rooms. Apart from on-air studios, separate production studios for electronic music and multimedia content were also designed and integrated.

#### **Biographical Notes**

**Dr. Ing. Gottfried K. Behler** received a masters and PhD-degree at the "Institut für Technische Akusitk" at Aachen before he joined from 1989 until 1991, the loudspeaker manufacturer "Klein&Hummel" where he served as director of engineering. Since 1992, Dr. Behler has become an "Akademis-cher Rat" at the Institute of Technical Acoustics in Aachen and his main research interests are in:

Simulation of loudspeaker systems, Thermal problems in loudspeakers, modeling of horn-loudspeaker systems, dummy-head systems and binaural audio systems. Among Dr. Behler's private interests are: Recording of classical music, recording Jazz-Music and of course the development of new loudspeaker systems.

Mr. Jürgen Strauss was born 1965 and he has a background as a technician in physics at Landy& Gyr in Zug. From 1986 until 1988, he worked as a consultant in acoustics at Tonstudio Pawel before in 1989 joining Piega AG, a company, active in loudspeaker design. After having worked for the Swiss PTT for the planning of radio transmission systems, Mr. Strauss decided to become independent in 1993. Since that time, Mr. Strauss constantly is involved in the design of high quality loudspeaker systems and he puts a strong focus on the integration of room acoustics into loudspeaker design.

After the meeting, participants and guests have the option of gathering for a joint dinner at Pizzeria "Davide".

#### REPORT ON PREVIOUS MEETING

### "VIRUS" - A RADIO BROADCASTING FACILITY FOR THE MULTIMEDIA AGE

Thursday 25th of October 2001, 17h15 at SR DRS Studio Basel

SPEAKERS: François Mürner, SR-DRS3

Lucius Müller, SR-DRS VIRUS

Wolfgang Voigt, SR-DRS

Martin Lachmann, Applied Acoustics for Media

REPORTER: Martin Lachmann, Applied Acoustics for Media

Some 25 AES members and associates gathered together on Ocotober 25<sup>th</sup> 2001 on site at the Basle studio of Swiss Radio DRS for a visit to the "VIRUS" radio station. The head of the station Mr. Francois Muerner gave a warm welcome to the participants in the futuristic surroundings of the "VIRUS" entrance hall. Mr. Muerner explained the backgrounds and concepts of the VIRUS programme which is targeted towards an jounger audience up to about 25 years. He also pointed at the problems his station is facing, mainly the fact that VIRUS still has no FM-distribution (despite the initials of the head of the station...) and can terefore only be received via cablenetworks, satellite or via the internet. Being a legendary radio man (for DRS3) in the past, Mr. Muerner managed to start a lively discussion with much laughter going on.

After this introduction Mr. Muerner guided the group through all the rooms of the VIRUS site.

VIRUS is a "self contained" radio facility within the larger Basle studio site and was built in the shell of a building which formerly housed a large music recording studio. The participants could get an impression how VIRUS "sounds" in the on-air studios and later in the so called "layout"-studio where all trailers and music features are produced. Resident sound designer Mr. Lucius Müller presented the technical infrastructure in his controlroom and gave a few examples how he is approaching the "coorporate-sound-design" work for VIRUS. The creative use of all kinds of "audio-defects" like distortion, limited-frequency-response etc. raised some eyebrows among the visitors and fueled the old discussion about the "right-sound" until late in the evening.

After a nice apéo which was sponsored by the "Radiogenossenschaft Basel" and Swiss Radio DRS, Mr. Ernst Neukomm, himself a AES member an former employee at SR DRS, introduced the second part of the evening and guided the group to the "Medienraum" where the short "paper session" did take place.

Mr. Wolfgang Voigt started with a presentation about the Audio- and IT-infrastructure behind VIRUS.

As a project manager, Mr. Voigt was involved with the design of this fully digital system which is behind VIRUS. Except for two DJ-turntables all audio within VIRUS is handeled in the digital domain. All studios and editiorial workplaces are networked together and also the distribution and contribution to the outside world is via digital-lines, for example a 500Mbit connection to the other SR DRS main studio sites at Bern and Zurich.

In the second part of the session Mr. Martin Lachmann gave a overview on building the VIRUS studios from an acousticians viewpoint. With a series of photographs and drawings the "history" of building the studio complex was presented. Special acoustical problems and their solutions, like dealing with the enormous glass windows in the studios, were highlighted and discussed.

After an evening full of true multimedial information some AES members gathered together for a fine Italian dinner at the nearby Restaurant Krone.

## Travel Instructions of how to go to Strauss Elektroakustik GmbH:

By car: Please consult the map which attached to this inviation.

By train: Please leave the train-station in direction "Bahnhofplatz" where you can board the **Bus Nr.** 11 up to the terminal station "Güterbahnhof" and then walk (a few minutes) to Güterstrasse 8.