

Half-way between two EPE-Conferences



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It is a widely accepted opinion within the power electronics community that the 4th EPE conference in Florence in September 1991 was a full success. With pleasure I remember the impressive historical city, contacts with several fellow specialists, excellent social arrangements and last but not least many interesting presentations.

In the meantime probably most conference participants have digested the voluminous conference proceedings. Having done this myself, to me some trends seem of particular significance. Interest is focused almost totally on PWM voltage source inverters. IGBT technology is well established in 2-level application, the first 3-level inverters were presented. Several papers reported on soft-commutating circuits for low-power applications. Concerning control, advances in microelectronics made it possible to practically implement Kalman filter based state variable observers for magnetic flux, motor speed and position. The delay inherent to any digital realization is more and more compensated by using predictive approaches.

Recently the call for papers for the next EPE conference in Brighton in September 1993 was mailed. I am looking forward to learning from future contributions how the above mentioned trends will develop and which new trends might evolve. From my point of view areas of intensified effort could be the introduction of MOS controlled thyristors and of intelligent IGBT power modules. Application of those fast-switching power semiconductors require a general solution to the EMC problem. In this respect, the introduction of soft commutation in high power inverters is of special interest. Regarding control fuzzy strategies definitely represent a wide field of activity when applied to power electronics and drives. Surely in the next conference the topic of harmonic elimination will again be represented with a number of papers.

It is my hope for Brighton to again meet the power electronics community and discuss new trends of our profession. For the time being EPE Journal constitutes an excellent forum for inter-conference discussion.