

Celebrating our heritage: IEEE's role

Continued from page 1 thoughts over the years.

I wonder whether Professor Fleming had a similar feeling of participating in momentous events when he patented the thermionic valve, the forerunner of today's silicon chips? Fleming had enrolled at University College London at age sixteen, and worked his way to a First Class BSc. He later taught, undertook research and obtained a DSc degree on "Electricity, Treated Experimentally."

By 1881, at age 32, Fleming became Professor of Maths and Physics at Nottingham. He observed Marconi's wireless demonstrations in April 1898, and became an advisor and designer of apparatus used in 1901 for the first trans-Atlantic transmission of radio signals.

I would like to acknowledge my sources for this fascinating story, especially IEEE Fellow Hugh Griffiths, head of E&EE at UCL who originally proposed the IEEE Fleming Milestone. His excellent UCL program is available at <http://www.ee.ucl.ac.uk/Fleming>. The book "Exposing Electronics" edited by Bernard Finn (Harwood) has an excellent chapter by Sungook Hong on "J. A. Fleming's Route to the Valve".

To learn more, visit the IEEE History Center at <http://www.ieee.org>. You can read all about the Fleming Milestone here: http://www.ieee.org/organizations/history_center/fleming.html.

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Have you ever seen *anything* like it?

Germany's capital Berlin saw a unique sequence of international inter-society IEEE chapter activities recently.

The IEEE Region 8 IA IE PEL PE Inter-Society Chapter Workshop provided opportunities for intensive exchange and networking between IEEE sister societies; ie, IAS, PELS, IES and PES. This was the first time the respective German chapters were able to meet jointly.

The presence and presentations of chapter members and officers from the societies and several other Region 8 chapters also gave this inter-society event an international dimension. In this respect it is was a particular pleasure to celebrate the foundation of a Hungarian IAS chapter on the first day of workshop, supported by the joint IAS/

PELS/IES German chapter. It this way did not content with its current positive membership development - regarding increase of the number of members and a successful senior member program - but additionally served as some multiplier.

* IEEE and VDE, the Association for Electric, Electronics and Information Technologies, hosted the first part of the workshop in their Berlin headquarters:

Introductions of VDE and IEEE Germany section by the general manager and the chairman of the Information Technology Society respectively gave a valuable insight into the complementary organisation's activities and resources. This knowledge being widely spread between some 40 participants — comprising

many officials — was of particular value for triggering possible new cooperative projects.

Considering the aspect of networking, the social program — comprising a guided tour through the city with sightseeing as VIPs in the new-old parliament building German Reichstag and kind receptions by the industrial and scientific hosts — is worth mentioning. Within a sequence of three joint chapter meetings of the IEEE Joint IAS/PELS/IES German Chapter and the IEEE PES German Chapter these hosts offered an interdisciplinary technical program comprising in-depth presentations and company or lab tours, giving insights into their current industrial and scientific work:

Siemens AG's Power Transmission and Distribution, High Voltage Division presented state of the art and R&D activities regarding the use of power electronics in high voltage transmission systems; eg, HVDC and FACTS. The challenge of high voltage, high power switching is faced using dedicated thyristors as semiconductor

valves, taking into consideration functionality like device light triggering or indispensable converter, short circuit current limitation.

Alstom Power Conversion GmbH, General Drives,



IEEE IAS President 2000, Caio A. Ferreira (left), receives a medal of honor from Prof. Dr.-Ing. A. Schwab, IEEE Germany Section Chairman, during the Berlin chapter workshop hosted by VDE

gave an insight into drive systems in the Megawatt range, comprising power electronics (such as a multi level medium voltage converter) and machines such as a 5MW permanent magnet generator. The systems were designed for applications as different as offshore wind parks, pump storage plants and railway traction.



Senior members of IEEE IAS/PELS/IES German chapter after their honorable appointment

More historic achievements named IEEE Milestones

If there is one program from the IEEE History Center that is more closely geared to the IEEE's sections around the world than any other, it is the *Milestones in Electrical Engineering and Computing*.

To gain one of the coveted Milestones, a section proposes a local achievement of significance and prepares a carefully documented nomination. If the proposal is approved by the IEEE History Commit-

tee and IEEE Executive Committee, dedicates a bronze plaque recognizing the honor.

At its meeting in April this year, the ExCom approved four additional Milestones recommended by the History Committee. The new Milestones were proposed by four different sections in three regions:

- The Electronic Quartz Wristwatch, 1969 — IEEE Tokyo Section, Region10.

- The First Computers to Use Magnetic Disk Storage, 1956 — IEEE Santa Clara Section, Region 6.
- Alternating Current Electrification, 1886 — IEEE Berkshire Section, Region 1.
- Electric Fire Alarm System, 1852 — IEEE Boston Section, Region 1.

These latest Milestones bring the total number in the IEEE History Center's

program to 58. All four sections whose proposals have been accepted are planning dedication ceremonies later this year in Fall.

Visit the Milestones Web site to learn more about the program in general and also about these specific dedications as additional information becomes available:

http://www.ieee.org/organizations/history_center/milestones_program.html