The first ISSCT Entomology Workshop was held under the auspices of the American Society of Sugar Cane Technologists, and with help from USDA, at the Agricultural Services Center of the University of Florida Institute of Food and Agricultural Sciences, West Palm Beach, Florida, USA on 11–15 March 1991.

Nine countries were represented: Brazil, Columbia, Costa Rica, France (Guadeloupe), Jamaica, Mauritius, South Africa, USA and Venezuela, while additional presentations were received from Australia, Indonesia and Réunion. A total of 24 entomologists or people interested in pest control attended the sessions, plus the five speakers on new technologies.

The Chairman of the Workshop, Dr. Omelio Sosa Jr., welcomed participants on behalf of the ISSCT Florida Division of which he is the President. Dr. John Dunckelman, Director of Agricultural Research of Florida Sugar Cane League, also welcomed them.

Introductory presentations followed by lively discussions were devoted to four main topics: sugarcane stem and shoot borers, sugarcane soil pests, sucking insects and new technologies in pest control. For the last topic, three speakers from California, one from Florida and one from Australia introduced discussions on entomogenous nematodes (BIOSYS), Bacillus thuringiensis (MYCOGEN), insect monitoring systems and pheromones (TRECE), fungi as microbial control agents of agricultural importance.
pests (IFAS, University of Florida) and controlled release pesticides (INCITEC). A full report on the discussions on all topics will be given elsewhere.

An interesting field trip occupied one day. Visits were made to the Research Departments of the US Sugar Corporation at Clewiston and the Everglades Research and Education Center, University of Florida, Belle Glade, where participants observed Solenopsis sp. the 'fire ant' and Paratrechina fulva the 'crazy ant', good predators in Florida sugarcane fields. Huge flocks of the African egret (Bubulcus ibis) were another good example of biological control, and showed the importance of this predator on insects in sugarcane fields. After a wonderful lunch hosted by the Florida Sugar Cane League at the Sugarcane Growers Cooperative of Florida, Belle Grade, the work of the USDA Sugarcane Field Station, Canal Point, was inspected.

The workshop was very successful, thanks to the organizer Dr. Sosa and the hosts, and participants hoped that further ISSCT Entomology Workshops would be held.

FACTORY ENGINEERING SECTION

REPORT ON THE FIRST ISSCT FACTORY WORKSHOP
DURBAN, SOUTH AFRICA, JUNE 1991

The first ISSCT Factory Workshop, "Factory performance monitoring as an aid to increasing productivity", was held at the Sugar Milling Research Institute in Durban, South Africa. Most of the overseas delegates arrived in time to attend the South African Sugar Technologists Association (SASTA) Congress in the week prior to the workshop, and 17 delegates enjoyed the intervening weekend in a Zululand game reserve.

There were 15 countries represented, with 38 delegates coming from outside South Africa and another 36 local delegates. Countries represented were: Australia, Brazil, Cuba, Egypt, England, Germany, Guadeloupe, Mauritius, Pakistan, Philippines, Réunion, South Africa, Swaziland, USA and Zimbabwe. An opportunity to meet other delegates and South African sugar people was provided by a barbecue/dinner attended by more than 80 people on the evening preceding the discussions.

The three days of workshop discussions were opened by Mr. Robin Renton, Chairman of the Board of Control of the Sugar Milling Research Institute, who welcomed delegates and expressed the hope that there would be mutual benefit through interchange of ideas. He emphasized the fact that procedures adopted in one country were not necessarily appropriate to other countries because of the different conditions and requirements of various sugar industries.

The Workshop Chairman, Dr. Brian Purchase, explained that the Factory Commission had not held such a workshop previously, so it was appropriate to choose a broad
topic for which the host country could provide experienced discussion leaders. Discussion on each topic was initiated by a short presentation by the Leader followed by open discussion in which all delegates were encouraged to participate. There was always plenty of discussion.

The topics discussed were cane transport; crushing delay and cane quality; cane preparation; cane milling and diffusion; clarification; filtration; evaporation; steam generation and energy conservation; pan boiling; crystallization; molasses exhaustion; sugar balances and sugar destruction; color balances and color removal; pollution control; and interfactory performance comparisons. Notes on the presentations and discussions will be published elsewhere.

Visits were also made by all delegates to Noodsberg and Felixton Factories and the Sugar Terminals. Hulett Refineries, the Industrial Training Center and the South African Sugar Association's Experiment Station were visited by some.

The workshop was a success, thanks to Chairman Brian Purchase, the Board and staff of SMRI, and the organizations which hosted various functions. It achieved the objective of facilitating informal interaction for the mutual benefit of all participants. Many new and good relationships were established between technologists from all over the world. Further such workshops should be encouraged in the Factory Commission.

ENERGY SECTION

REPORT ON FIRST ISSCT ENERGY WORKSHOP
BERLIN, GERMANY, 6 - 11 OCTOBER 1991

The first Energy Workshop "Rationalization of energy management in cane sugar factories" was held at the Berlin Sugar Institute, Germany from 6 - 11 October 1991. It was organized under the auspices of the ISSCT Regional Group, Federal Republic of Germany, whose Board and members were amongst the lecturers and presenters.

This was the first ISSCT Workshop to be held in Europe, and was attended by 42 delegates from 17 countries: Australia, Brazil, Chile, Cuba, Egypt, England, Germany, India, Indonesia, Jamaica, Mauritius, Pakistan, Réunion, South Africa, Thailand, Trinidad and USA.

The program was opened by Paulo Nogueri Jr. as ISSCT Product Commissioner, and Professor Werner Mauch, Director of the Berlin Sugar Institute, who welcomed the delegates. During the first three days, the following subjects were presented:

- Basic concepts of energy economy in modern beet-sugar factories (H. Wunsch, IPRO, Germany)
Possibilities and practical results of continuous pan boiling (D. Bosse, BMA Germany)
Evaporation station: modern types and connections (P. Tobe, Wiedemann KG, Germany)
Regenerative heat exchange by plate heat exchangers (K. Mosich, GEA Adlborn, Germany)
Condensers for pan and evaporator vapors-modern designs (U. Hochberg, GEA Wiegand, Germany)
Steam and power generation in the sugar factory (L. Wenzel, IPRO, Germany)
Aspects of energy consumption in centrifugation (P. Franzen, Krupp Buckau, Germany)
Power cogeneration in Reunion Island (M. Rivière, Quartier-Francais, Reunion)
Optimization of bagasse combustion-modern bagasse furnaces (N. Magasiner, Thermal Energy System, South Africa)
Potential for energy savings during production of ethanol (F. Zarpelón, Engefaz, Brazil)

Fruitful and intensive discussion followed each of the topics, with a final Panel Discussion on Workshop results, with P. Nóguera Jr., Brazil, C.M. de Armas, Cuba, W. Mauch, Germany and P. Avram, Germany.

The following two days were spent in Lower Saxony, where an exhibition and a presentation of energy-efficient sugar machinery was held and the two beet sugar factories, Schlanden (6,500 tons beet per day) and Uelzen (15,500 tons beet per day), were visited.

Social activities included a sightseeing tour through the reunited city of Berlin and a typical Berlin buffet at the Berlin Sugar Institute. These gave the delegates the opportunity to renew old or establish new relationships in an informal and relaxed atmosphere. Overall, the Workshop was a big success and demonstrated how energy efficient modern beet factories were, and modern sugarcane factories could become.