In 2011, the International Association of Professionals in Sugar & Integrated Technologies (IAPSIT) will once again consolidate its efforts to hold the 4th International Sugar Conference in India. IAPSIT set up in 2004 as a non-profit organization has been actively engaged in the holistic development of sugar and integrated industries in developing countries. Ever since its inception, IAPSIT has organized three international conferences, and five international and national workshops in China, India and Egypt. Our international conferences attended by over 300 experts from 28 developed and developing countries have been quite successful.

The global sugar market is going through a crisis period; recession and climatic disturbances have impacted all segments of the sugar industry. These unprecedented changes have greatly eroded the profitability and sustainability of the sugar industry in many developing countries. The gap between the world sugar production and consumption has exceeded 7 million tons due to a steep decline in production, especially in India and many developing nations which contribute to over 75 per cent of global sugar output. At this juncture, the task of organizing the 4th International Sugar Conference (IS-2011) in India seems to be challenging but we are determined to make this conference a successful and meaningful event. The IS-2011 will be an excellent opportunity for the sugar industry of developing nations to witness new researches and technological developments in sugar and the energy business. We are interested in showing the world that the developing sugar producing countries in spite of their complex socio-economic and political conditions are capable of generating new ways and solutions to be self-reliant in sugar & energy production. In the forthcoming conference on “Balancing sugar and energy production in developing countries: sustainable technologies and marketing strategies” leading researchers, technologists, managers and manufacturers will converge in India to share their experiences and technologies for the sustainable development of sugar and integrated industries.

The IAPSIT is playing a key role in profitable and sustainable development of the sugar and integrated industries in developing countries through sharing scientific knowledge and technological advancement. The organization of the 4th International Sugar Conference in India is another positive step in this direction and I hope that your presence, participation and intellectual contribution in IS-2011 will immensely benefit lesser privileged communities. We feel not only responsible but also enthusiastic about the coming event and hope that it will be remembered for years to come. On behalf of the IAPSIT Executive Committee, I would like to congratulate the organizers of the 27th ISSCT Congress in Mexico and wish all the participants a very happy stay in Veracruz. I take this opportunity to extend a cordial invitation to the global sugar fraternity to attend IS-2011 in India and become our partner in fostering the spirit of peace, prosperity and progress for all.

Looking forward to welcome you in India!

Yang-Rui Li
FOCUS

IAPSIT: PRESSING FORWARD

The International Symposium on Sustainable Sugarcane and Sugar Production Technology (IS-2004) held in Nanning from 29 November to 2 December, 2004 was one of the most successful events for the sugar industry of China. The symposium was attended by the sugar experts from 18 different countries. After the grand success of the IS-2004, sugarcane experts and eminent scientists on the International Advisory Board of IS-2004 decided to form a forum for comprehensive improvement of sugar industry of the developing countries. It was with the consent of the Board that this association came into existence, and its Secretariat was established at Nanning, P.R. China. Dr. Yang-Rui Li was unanimously nominated as the Founder President of IAPST. At a meeting held at Guangxi Academy of Agricultural Sciences on 22 November, 2005 the Executive Committee agreed to change the name of this Association to International Association of Professionals in Sugar and Integrated Technologies (IAPSIT) to take into account the current evolution of the industries associated with sugar crops.

Need to establish IAPSIT

The world sugar market is becoming increasingly complex and competitive, with the imposition of WTO regulations and formation of several economic blocks. These have affected sugar production, consumption and trade with inevitable consequences for the sugar industry in developing countries which are already plagued with low efficiency and a high cost of production. In order to build a strong and sustainable sugar industry, the production system needs to be re-engineered to obtain maximum efficiency. It was therefore thought that IAPSIT could play a catalytic role in providing stability and quality through mutual exchange of scientific knowledge and technological support to individual country’s sugar industries. This will help to sustain the sugar industry and create wealth and prosperity in developing countries, local communities and the people concerned. The IAPSIT is a non-profit scientific association of sugar crop scientists, technologists, managers, institutions and companies concerned with the holistic improvement of the sugar industry in the developing countries.

Vision

The vision of the IAPSIT is “holistic development of sugar and integrated industries in developing countries through exchanges of scientific knowledge and technology applications”.

Mission

The IAPSIT is committed to “profitable and sustainable development of the sugar and integrated industries in developing countries encompassing agricultural, industrial, environmental and socio-economic concerns through sharing of scientific knowledge and technological advancement”.

Executive Committee of IAPSIT

The IAPSIT- EC is studded with eminent scientists, professors, and managers from sugar research organizations and sugar industry. The EC members come from China, India, Brazil, Cuba, Vietnam, Thailand, Mauritius, USA, Australia, Kenya, Philippines and Italy.

IAPSIT activities

International Conferences

(a) International Symposium (IS-2004) on Sustainable Sugarcane and Sugar Production Technology, Nanning, P.R., China (29th November to 2nd December, 2004)

The International Symposium IS-2004 was organized in Nanning, China, attended by over 270 delegates from 20 different countries, representing USA, Brazil, India, Pakistan, Egypt, PNG, Fiji, China, Indonesia, Thailand, Colombia, Guatemala, Sweden, Australia, and Sri Lanka etc. In this conference 148 research papers were presented in 11 technical sessions. The participants were taken to the experimental fields of Guangxi Sugarcane Research Institute, Tropical Sugar Beet Demonstrations Centre of Syngenta and Nanning Sugar Factory.

(b) 2nd International Symposium (IS-2006) on Technologies to Improve Sugar Productivity in Developing Countries, Guilin, P.R.China (5 to 8 December, 2006)

The 2nd International Symposium (IS-2006) was held in the picturesque city of Guilin in Guangxi province, P.R.China. Nearly 250 representatives who made scientific contributions in IS-2006 came from 23 countries. A total of 186 papers were presented in IS-2006. In addition, 87 posters were also displayed in the poster session.

A visit to Liuxing Sugar Industry Co. Ltd in Liuzhou 160 km south of Guilin was also organized to acquaint the participants with the cane harvesting machinery and latest milling techniques being followed in China. A sugarcane harvesting machine designed and manufactured in China was also shown to the participants.

(c) 3rd International Sugar Conference (IS-2008) on Meeting the Challenges of Sugar Crops and Integrated Industries in Developing Countries; Sinai University and Sama Al-Arish Resort, Egypt, 11-14 September 2008

The 3rd International Conference IS-2008 was held at Sinai University, Al Arish (Egypt). The conference was jointly organized by IAPSIT and Sinai University. The IS-2008 conference was well attended and represented by over 300 delegates came from 23 developed and developing countries. The IS-2008 conference was organized under the auspices of H.E. Hosni Mubarak, President of Egypt.

The conference was inaugurated by Mr. Amin Abaza, Minister of Agriculture and Land Reclamation,Egypt. A total of 168 technical papers were presented in six sessions encompassing agrotechnology, biotechnology, sugar processing, value addition and marketing. A special session on Premier Sugar Crops Research Institutes & Sugar Associations of the World was quite interesting and informative for the participants.
**International & National Workshops**

(a) International Workshop on Drip Irrigation Applied in Sugarcane, Nanning, China, May 24 to 26, 2007

An International Workshop-cum-training Course on Drip Irrigation Applied in Sugarcane was organized in Nanning, P.R.China. This workshop was attended by 128 participants from Guangxi, Guangdong and Fujian provinces of China. This training course was sponsored by IAPSIT, and organized by Guangxi Academy of Agricultural Sciences (GXAAS), Guangxi Sugarcane Research Institute, Guangxi Ruijian Quansheng Agricultural Water-Saving Irrigation Technology Co. Ltd.

(b) International Workshop on Technologies for Sugar Crops Improvement at Beihai, P.R.China on December 7-8, 2007.

The International Workshop on Technologies for Sugar Crops Improvement and Special Meeting of IAPSIT for the International Conference IS-2008(Egypt) was organized at Beihai, P.R.China. It was attended by participants form China, USA, Egypt, India and Bangladesh. Prof. Yang-Rui Li apprised about the current scenario of global sugar production and projected the futuristic need of sugar industry.


Sugarasia 2008 exhibition and conference was organized by Nexgen India Ltd., in association with IAPSIT and Society for Sugar Research and Promotion at New Delhi, India. The conference was attended by over 200 delegates from sugar industry of India, and other neighboring countries.

Sugarasia 2008 provided a wonderful platform for exhibitors from across the globe to showcase their products. This exhibition on Sugar and downstream products attracted over 75 companies from India and abroad to showcase their products, technology, research and services to a highly focused and targeted audience of India and neighboring countries of Asian region. The exhibition mainly focused on Sugar, Distillery, Ethanol and Mechanized Cane Farming.

(d) Sugarasia Exhibition & Expo : July 2-4, 2009, New Delhi

Sugarasia 2009 Conference & Expo was held at New Delhi. The theme of Sugarasia was "Sugar: An Emerging Energy Commodity" and was represented by over 60 exhibitors and 1000 trade visitors. Mr. Jose Luiz Oliverio from Dedini, Brazil was the main speaker. Dr. Yang-Rui Li, President GXAAS was the chief guest and he gave away memento to the exhibitors.

(e) International Workshop on Declining Cane Sugar Production in Asian Countries 2008-09: Reasons and Remedies, Nanning, P.R. China, 7-10 December, 2009.

The International workshop was attended by over 130 participants from 10 countries. The workshop was inaugurated by Vice Governor of Guangxi Government. Dr. Jack Comstock, USDA/ARS Sugarcane Field Station, Canal Point, USA was the special speaker and briefed the audience about the economically important diseases of sugarcane.

All presentations in the workshop emphasized that research and technology transfer initiatives focused solely on the economic and environmental aspects of yield would not suffice to achieve the objectives of higher productivity through elimination of yield decline. Less tangible factors such as trust, communication and coordination between the farmers and service providers or other stakeholders are equally important and should not be ignored. These factors have a direct impact on agronomic practices at field level and have been demonstrated in a study in South Africa. The occurrence of numerous improper practices at field level such as lengthy harvest to crush delays, poorly controlled burning, improper weed and fertilizer management, could all be traced back to social and organizational constraints at the local community level rather than to lack of knowledge.

A special visit to sugarcane variety center and sugarcane museum of GXAAS was organized.
Glimpses of IAPSIT Activities

2nd International Symposium (IS-2006) on Technologies to Improve Sugar Productivity in Developing Countries, Guilin, P.R. China
Glimpses of IAPSIT Activities

3rd International Sugar Conference (IS-2008): Sinai University and Sama Al-Arish Resort, Egypt

Sugar Asia Expo & Conference - 2009, New Delhi, India
World sugar production 2009-10

According to the latest FAO forecasts, world sugar production is expected to be 159.6 million tonnes in 2009-10. The growth in production is attributed to generally favourable weather conditions and higher prices. The bulk of the expansion is expected to take place in the developing countries, where production is forecast to grow by 3.7 percent, as opposed to 1.8 percent in the developed countries. Despite a larger world production, this will not be enough to cover the expected global consumption in 2009-10, marking the second consecutive year of a shortfall. The deficit between production and consumption is predicted to hover around 3 million tonnes.

<table>
<thead>
<tr>
<th>World sugar production (million tonnes)</th>
<th>2008-09</th>
<th>2009-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia</td>
<td>51.6</td>
<td>54.6</td>
</tr>
<tr>
<td>Africa</td>
<td>10.8</td>
<td>11.2</td>
</tr>
<tr>
<td>Central America</td>
<td>11.8</td>
<td>12.6</td>
</tr>
<tr>
<td>South America</td>
<td>46.3</td>
<td>46.4</td>
</tr>
<tr>
<td>North America</td>
<td>7.1</td>
<td>7.6</td>
</tr>
<tr>
<td>Europe</td>
<td>22.3</td>
<td>22.3</td>
</tr>
<tr>
<td>Oceania</td>
<td>4.9</td>
<td>5.0</td>
</tr>
<tr>
<td><strong>World</strong></td>
<td><strong>154.7</strong></td>
<td><strong>159.7</strong></td>
</tr>
<tr>
<td>Developing countries</td>
<td>117.3</td>
<td>121.5</td>
</tr>
<tr>
<td>Developed countries</td>
<td>37.4</td>
<td>38.0</td>
</tr>
</tbody>
</table>

Source: FAO Estimates

World sugar consumption in 2009-10 is forecast to rise to 162.6 million tonnes, 1.1 percent more than in 2008-09, but 1.4 percentage points below the ten-year trend as relatively high sugar prices are expected to contain consumption growth. Sugar intake in the developing countries is set to expand only moderately to 113 million tonnes, accounting for 69 percent of global consumption. On average, per caput sugar availability in 2009-10 is estimated to remain around 23 kg per year, the same level as in the previous season. A return of positive economic growth in 2010 together with an easing of international sugar prices should lend some support to industrial sugar usage by the manufacturing and food preparation sectors, including the beverages industries, which is especially sensitive to variations in income.

Sugar fastest-growing industry the Ibis World report predicts

The IbisWorld report predicts the sugar industry will grow faster than the farming, oil and gas and construction industries. A combination of rising sugar prices and renewable energy options will grow faster than the farming, oil and gas and construction industries. A combination of rising sugar prices and renewable energy options will grow faster than the farming, oil and gas and construction industries. A combination of rising sugar prices and renewable energy options will grow faster than the farming, oil and gas and construction industries. A combination of rising sugar prices and renewable energy options will grow faster than the farming, oil and gas and construction industries.

India may become sugar exporter in 2010-11

India could export 1.0 million tonnes of sugar in 2010-11 according to Mr. Vinay Kumar, Managing Director of the National Federation of Cooperative Sugar Factories. India seems to be headed for a surplus in 2010-11 and could export 1 million tonnes of sugar in discharge of previous re-export obligations, Kumar said in a keynote address to the International Sugar Organization’s (ISO) international seminar. Indian sugar output is projected to rise to 26 million tonnes in 2010-11 from 16-17 million tonnes in 2009-10. Domestic demand in India is expected to rise to 24.5 million tonnes in 2010-11 from 23.5 million in 2009-10, he added.

Mitr Phol Sugar, Thailand investing in bioplastics

Bioplastics are in great demand amid global-warming concerns, and with a higher melting point, they have diverse applications, such as hot-fill bottles, microwaveable trays, temperature-resistant fibres, and electronics and automobile parts. The company is in talks with giant corporations like PTT, Siam Cement Group and foreign companies for joint investment. The technology is focusing on producing D-lactic enantiomer from syrups, which is required for bioplastics.

Cane waste to replace coal in coal-fired power plants

Brazilian and Italian entrepreneurs are planning to convert bagasse, a waste product from sugar cane, into pellets that can be burned as fuel in run-of-the-mill coal plant. By 2011, utilities around the world will likely be getting thousands of megawatts of power from sugar cane waste. The company, called Brazil Pellet has already successfully tested the technology in a pilot program.

Brazilian Pellet plans to begin production in the third quarter of 2010 in its first plant in São Paulo, home to more than half the production of Brazil’s sugar cane industry - the world’s largest. By 2015, Brazil Pellet plans to reach 520,000 tons a year of pellet production, an amount that would produce 2,420 GW of energy.

Fiji Sugar exports to surge $65m

Fiji sugar exports are expected to decrease by $65.5 million this year in comparison to last year. The Finance Ministry’s 2010 Budget supplement document revealed earnings would be around $182.7m compared to $248.2m last year. Production is expected to decrease from 2.3 million tonnes to 2.1m tonnes this year; the decrease in earnings also reflected the reduced European Union preferential prices.

Sugarcane disease orange rust reported from Brazil

The orange rust, caused by the fungus *Puccinia kuehnii* has reached Brazil in the past few months, contaminating sugarcane crops in the center and southern regions. It is expected to reach 11% of the sugarcane crop in São Paulo, the largest producing state in Brazil, with about 4 million cultivated hectares. CTC technicians estimate this disease can cause a 20% reduction in productivity, resulting in some US$ 300 millions loses a year in the country. The Brazilian Ministry of Agriculture estimates losses can go up to US$ 570 millions.

In 2000 the orange rust reached Australia, causing a 40-50% loss in the sugarcane crops. Between 2007 and 2009, the disease reached the USA, Costa Rica, Mexico, Guatemala and Nicaragua.

Brazilian sugarcane harvest up 5.24% despite unprecedented rains

Despite unseasonable rains that brought negative effects through most of 2009, the sugarcane harvest in South-Central Brazil reached 523.24 million tons in December, a 5.24% increase over the total for the same period a year before. In the second half of December alone, 10.31 million tons were crushed, up 54.85% over the same period in December of 2008.

Since the beginning of 2009-10 harvest, 43.31% of all processed cane in South-Central Brazil went to sugar production, and 56.69% to ethanol. Overall sugar production had reached 28.30 million tons by the end of November, 6.53% higher than the volume produced in the same period of the previous harvest. In the same period, total ethanol production reached 22.72 billion liters, 7.69% below the volume produced in the previous harvest.
PUBLICATIONS OF IAPSIT

1. **Sugar Tech** - An International Journal of Sugar Crops and related industries, Published quarterly by Springer.


BOOKS ON SUGARCANE AND SUGAR INDUSTRY


4. **Sugarcane Pathology Vol.I. Fungal Diseases**: G.P. Rao, A. Bergamin Filho, R.C. Magarey & L.J.C. Autrey, Science Publishers, Inc, USA Price US $86.00


Contact e-mail: gprao_gor@rediffmail.com, secretariiapts@gmail.com
Please add Packaging & Postal Charges of US $25 for each book.

IAPSIT : VISION IN ACTION CD

Special Electronic version CD containing Activities of IAPSIT and Proceedings of IS-2008:
- IAPSIT - Vision and Mission
- Publications of IAPSIT
- Books on Sugarcane and Sugar Industry
- International Sugar Conference IS-2004 & 2006 - Brief Report and Contents
- International Sugar Conference IS-2008 - Proceedings
- Sugar Tech Journal : Scope and Instruction to Authors

Price US $75 inclusive of postal charges.

Contact:
Dr. S. Solomon
E-mail: secretariiapts@gmail.com; dssolomonsushil1952@gmail.com
The International Association of Professionals in Sugar and Integrated Technologies (IAPSIT) is holding its 4th International Sugar Conference (IS-2011) in November, 2011 in India. The conference is likely to be attended by over 500 delegates from India and abroad. This conference on Balancing sugar and energy production in developing countries: sustainable technologies and marketing strategies will provide a unique opportunity for researchers, technologists, managers, manufacturers and policy makers from around the world to share their views and experiences for the profitable and sustainable growth of sugar industry. The IAPSIT extends a warm welcome to participants across all sectors of industry both from India and abroad to join the conference and share knowledge on various current topics of concern to the world sugar industry. The IS-2011 will unquestionably be a major event for all professionals involved in the sugar & integrated industries and will provide an unrivalled overview of all new happenings in the sugar sector. Several eminent speakers will be addressing the Conference. We cordially invite you to attend IS-2011 Conference not only to promote an exchange of knowledge and technologies but also to enjoy the Indian hospitality and cuisine.

Conference Themes
- New and emerging technologies to enhance sugar and energy production from sugar crops, experience from BMP in developed countries, mechanization of small farms;
- Conventional and biotechnological approaches in improving sugar crops and their diversified products, organic sugar;
- Carbon, energy and water footprints in sugar crops production, processing and value addition, resource & energy management in sugar industry, CDM;
- Sugar crops based integrated industries, optimal utilization of sugar crops value chain;
- Socio-economic initiatives to restructure cane development programs, logistics, marketing and infrastructural facilities in the sugar industry, MIS and training needs;
- Sugar-energy matrix in developing countries-challenges, barriers, trade opportunities, sustainability issues and prospects for sugar refining. WTO and national policies impacting sugar business in developing countries.

Format
Language: English will be official language of the IS-2011 Conference
Conference duration: 5 Days (28 November - 2 December, 2011) including visit to Sugar Mill Area and heritage sites
Please visit conference website: www.is2011.in

JOIN IAPSIT TODAY

Membership Options (for 3 years)
- Individual members (US$ 50)
- Association members (US$ 150)
- Institutional members (US$ 300)
Payment: In US$ only (Please add US$ 5.00 for out country cheque as bank collection charges)
Please enclose Cheque/Bank Draft in favour of GUANGXI SOCIETY OF SUGARCANE TECHNOLOGISTS, payable at NANNING, P.R. CHINA

Published by: Dr. Yang-Rui Li, President, IAPSIT, Guangxi Academy of Agricultural Sciences, 174 East Daxue Road, Nanning, 530007, P.R.China. Editor-in-Chief: Dr. G.P. Rao, India. Executive Editor: Dr. S. Solomon, India. Managing Editor: Mr. Qi-zhan Tang, China. Composed at: Panacea Computers, India. Printed at: Nanning, P.R. China.