Our Activities

- An Association with over 600 members from India and abroad working since last 68 years for the growth and development of Leather and its allied industries.

- Organize seminars, symposiums, workshops in order to share information, knowledge & latest development and interactions for the benefit of all concerned.

- Organize Human Resource Development programmes on regular basis.

- Publish for over 60 years, a technical monthly journal namely “Journal of Indian Leather Technologists’ Association” (JILTA), widely circulated throughout the World.

- Publish books for the benefit of the students at various levels of study, for the Research Scholar and the Industry.

- Work as interface between Industry and the Government.

- Assist Planning Commission, various Government Institutions, Ministry and autonomous bodies to formulate appropriate policies for the growth of the Industry.

- Assist small and tiny leather goods manufacturers in marketing their products by organizing LEXPOs in Kolkata and different parts of India.

Indian Leather Technologists’ Association

[A Member Society of International Union of Leather Technologists’ and Chemists Societies (IULTCS)]

‘Sanjoy Bhavan’, 3rdFloor, 44, Shanti Pally, Kolkata- 700 107, WB, India
Phone : 91-33-2441-3429 / 3459 Telefax : 91-33-2441-7320
E-mail : admin@ilttaonleather.org; mailto:iltta@rediffmail.com
Website : www.ilttaonleather.org
PIDITHANE
POLYURETHANE BINDERS

PIDITHANE A 350
- High Solids Polyurethane binder
- Good covering property
- Excellent emboss retention

PIDITHANE A 101
- Medium Hard in nature
- Very good polishability

PIDITHANE A 201
- Soft and Micro fine polyurethane binder
- Can be used as adhesion promoter binder

PIDITHANE 115SB
- Soft aromatic PU
- Very good adhesion promoter

PIDITHANE NIPU
- Non-Ionic Soft polyurethane binder
- Can be used as adhesion promoter binder
- Can be used in polishable coats along with protein binder

Pidilite Industries Ltd.
IP Division - Ramkrishna Mandir Road, Andheri (E), Mumbai 400 059, INDIA
T: +91-22-2835 7136 ● F: +91-22-2836 7165 ● E: leatherchem@pidilite.com ● www.pidiliteindustrialproducts.com
ACROLINE DYE SOLUTIONS

Metal Complex Dye Solutions for Leather Finishing

ACROLINE P SERIES
- High concentrated dyes, originally synthesized in liquid form.
- Excellent light fastness and resistance to spotting by water droplets.
- Free from:
  - Formaldehyde, Benzidine, PCP/TCP/OPP, NMP, APEO/OPEO, Pthalates, Restricted Azo Amines, Banned Solvents
- Available shades:
  - Black PR, Black PS, Orange PR, Yellow PG, Red Brown PR, Rubine PB, Cherry Red PG, Yellow PR, Light Brown PG, Royal Blue PR, Dark Brown PR, Brown PB

ACROLINE DP SERIES
- Dyes originally synthesized in liquid form.
- Excellent Light Fastness and resistance to spotting by water droplets.
- Free from:
  - Formaldehyde, Benzidine, PCP/TCP/OPP, NMP, APEO/OPEO, Pthalates, Restricted Azo Amines, Banned Solvents
- Available shades:
  - Black DPR, Black DPS, Orange DPR, Yellow PG Red Brown DPR, Rubine DPB, Yellow DPR, Cherry Red DPG, Light Brown DPG, Royal Blue DPR, Dark Brown DPR, Brown DPB

Pidilite Industries Ltd.
IP Division - Ramkrishna Mandir Road, Andheri (E), Mumbai 400 059 INDIA.
T: +91 22 2835 7136 • F: +91 22 2836 7165 • E: leatherschemepidilite.com • www.pidiliteindustrialproducts.com
Portfolio

Contents

Pidilite Corner ......................................... 03 - 04

Portfolio ............................................. 05 - 08

Editorial .................................................. 09 - 10

ILTA News .................................................. 11 - 18

Balmer Lawrie Corner .................................. 19 - 22

Article - “Effluent Water” by Mr. Dinker Bajpai ...................... 23 - 25

Obituary (Lt. Dharmomay Guha) ............. 26 - 26

STAHL Corner ......................................... 27 - 28

Commentary .............................................. 29 - 33

Students Corner ....................................... 34 - 34

ILPA Corner ............................................. 35 - 36

News Corner ............................................. 37 - 38

Down Memory Lane .................................... 39 - 45

Economic Corner ....................................... 46 - 48

Hony. Editor : Dr. Goutam Mukherjee
Communications to Editor through E-mail : admin@iltaonleather.org; mailtoilta@rediffmail.com
Cover Designed & Printed by : M/s TAS Associate
11, Priya Nath Dey Lane, Kolkata - 700 036
Published & Printed by : S. D. Set, on behalf of Indian Leather Technologists’ Association
Published from :
Regd. Office : ‘Sanjoy Bhavan’, 3rd Floor, 44, Shanti Pally, Kasba, Kolkata - 700 107
Printed at :
M/s TAS Associate
11, Priya Nath Dey Lane, Kolkata - 700 036
Subscription :
Annual Rs.(INR) 400.00
Foreign $ (USD) 45.00
Single Copy Rs.(INR) 50.00
Foreign $ (USD) 4.00
All other business communications should be sent to:
Indian Leather Technologists’ Association
‘Sanjoy Bhavan’, 3rd floor, 44, Shanti Pally
Kasba, Kolkata - 700 107, WB, India
Phone : 91-33-2441-3429/3459
Telefax: 91-33-2441-7320
E-mail : admin@iltaonleather.org; mailtoilta@rediffmail.com
Web site : www.iltaonleather.org

Opinions expressed by the authors of contributions published in the Journal are not necessarily those of the Association
Indian Leather Technologists’ Association is a premier organisation of its kind in India was established in 1950 by Late Prof. B.M.Das. It is a Member Society of International Union of Leather Technologists & Chemists Societies (IULTCS).

The Journal of Indian Leather Technologists’ Association (JILTA) is a monthly publication which encapsulates latest state of the art in processing technology of leather and its products, commerce and economics, research & development, news & views of the industry etc. It reaches to the Leather / Footwear Technologists and the decision makers all over the country and overseas.

**Advertisement Tariff**

**Full Page / per month**

- Black & White: Rs. 5,000.00/-
- Colour (full page): Rs. 10,000.00/-
- Colour Insert (One side): Rs. 5,000.00/-

(Provided by the Advertisers)

**Full Page / per anum**

- Front inside (2nd Cover): Rs. 96,000/-
- 3rd Cover: Rs. 84,000/-
- Back Cover: Rs. 1,20,000/-

**Mechanical Specification**

- Overall size: 27 cm X 21 cm
- Print area: 25 cm X 17 cm

Payment should be made by A/c. Payee Cheque to be drawn in favour of:

Indian Leather Technologists’ Association
and Payable at Kolkata

Send your enquiries to:

Indian Leather Technologists’ Association
‘SANJOY BHAVAN’
3rd floor, 44, Shanti Pally, Kasba, Kolkata – 700 107
Phone : 91-33-24413429/3459, Telefax : 91-33-24417320
E-mail : admin@iltanleather.org / mailtoilta@rediffmail.com
Website : www.iltanleather.org
## INDIAN LEATHER TECHNOLOGISTS’ ASSOCIATION
(Member Society of International Union of Leather Technologists and Chemists Societies)

### Executive Committee (2017-19)

<table>
<thead>
<tr>
<th>Central Committee</th>
<th>Regional Committees</th>
</tr>
</thead>
<tbody>
<tr>
<td>President</td>
<td>President</td>
</tr>
<tr>
<td>Vice-Presidents</td>
<td>Mr. N. R. Jaganathan</td>
</tr>
<tr>
<td>General Secretary</td>
<td>Mr. Jai Prakash Saraswat</td>
</tr>
<tr>
<td>Joint Secretaries</td>
<td>Mr. J. Kanagaraj</td>
</tr>
<tr>
<td>Treasurer</td>
<td>Mr. Dr. J. Raghava Rao</td>
</tr>
<tr>
<td>Committee Members</td>
<td>Dr. Subhendu Chakraborty</td>
</tr>
<tr>
<td></td>
<td>Dr. S. V. Srinivasan</td>
</tr>
<tr>
<td></td>
<td>Mr. S. Siddharthan</td>
</tr>
<tr>
<td></td>
<td>Mr. P. Thanikaivelan</td>
</tr>
<tr>
<td>Ex-Officio Member</td>
<td>Dr. Goutam Mukherjee</td>
</tr>
</tbody>
</table>

### Southern Region

- President : Mr. N. R. Jaganathan
- Vice-President : Dr. J. Raghava Rao
- Secretary : Dr. R. Mohan
- Treasurer : Dr. Swarna V Kanth
- Committee Members:
  - Dr. J. Kanagaraj
  - Dr. Subhendu Chakraborty
  - Dr. S. V. Srinivasan
  - Mr. S. Siddharthan
  - Mr. P. Thanikaivelan

### Northern / Western Region

- President : Mr. Jai Prakash Saraswat
- Vice-President : Mr. Kamal Sharma
- Secretary : Mr. Deepak Kr. Sharma
- Treasurer : Mr. Jaswinder Singh Saini
- Committee Members:
  - Mr. Rajvir Verma
  - Mr. Sudagar Lal
  - Mrs. Sunita Devi Parmer
  - Mr. Rajeev Mehta
  - Mr. Sunil Kumar

---

---
JOURNAL OF INDIAN LEATHER TECHNOLOGISTS’ ASSOCIATION (JILTA)

EDITORIAL BOARD OF JILTA

Chief Patron : Dr. T. Ramasami

Advisers : Prof. Dr. A. B. Mandal
Mrs. Antara Kumar
Dr. Bi Shi
Dr. B. N. Das
Dr. Buddhadeb Chattopadhyay
Dr. Campbell Page
Dr. Carlo Milone
Dr. Chandan Rajkhowa
Mr. E. Devender
Dr. Pisi
Dr. Roberto Vago
Dr. Samir Dasgupta
Prof. Swapan Kumar Basu
Mr. Suparno Moitra
Dr. Subha Ganguly
Dr. Tim Amos
Dr. Tapas Gupta

Peer Reviewing Committee : Prof. A. K. Mishra
Mr Abhijit Dutta
Mr. Animesh Chatterjee
Dr. B. Chandrasekharan
Mr. Diganta Ghosh
Dr. J. Raghava Rao
Mr. Jayanta Chaudhuri
Dr. N. K. Chandrababu
Mr. Prasanta Kumar Bhattacharyya
Dr. Subhendu Chakrabarti
Mr. Satya Narayan Maitra

Hony Editor : Dr. Goutam Mukherjee

Joint Editors : Dr. Sanjoy Chakraborty
Dr. Anjan Biswas
Recent Global Economic Output

The economic outlook was stable this month following last month’s downgrade. While the global economy has entered a soft patch this year, robust labour markets worldwide and supportive fiscal policies are expected to shore up economic growth. Moreover, the U.S. Federal Reserve’s decision to pause its tightening cycle will allow central banks to adopt more accommodative monetary policies. Nevertheless, risks to the global economic outlook are clearly skewed to the downside. Despite President Trump’s plan to delay additional tariffs on Chinese goods, trade tensions between China and the United States remain elevated. Furthermore, the U.S. administration has already threatened its trade partners that new tariffs, this time on cars, are on the table. Meanwhile, China’s economy continues to slow, adding downward pressure on global demand, while uncertainty surrounding Brexit shows no sign of abating. Focus Economics Consensus Forecast panellists expect the global economy to expand 3.0% in 2019, which is unchanged from last month’s estimate and below the 3.2% increase projected for 2018. The panel sees global economic growth inching down to 2.9% in 2020.

This month’s stable growth prospects for the global economy reflect unchanged growth prospects for the United Kingdom and the United States. Conversely, our analysts downgraded their view for Canada, the Eurozone and Japan. Among developing economies, growth prospects in Asia ex-Japan remained stable on hopes that China and the U.S. will be able to clinch a trade deal in the coming months and that policy stimulus will avoid an economic downturn in China. In Latin America, while economic dynamics are expected to improve in 2019, the slow pace of economic reforms in Brazil and widespread political risks are dragging on overall regional growth. Economic growth in Eastern Europe will slow due to headwinds in Turkey, subdued economic activity in Russia and moderating dynamics in the European Union—the region’s main trading partner. Despite bolder fiscal support in the Middle East and North Africa, economic growth will moderate in the region owing to OPEC+ oil production cuts. The economic recovery in Sub-Saharan Africa will continue this year, although macroeconomic imbalances and geopolitical risks will suppress growth at low levels.

The US economy decelerated slightly at the end of 2018, and momentum appears to remain on a downwards trajectory in Q1 2019. In December, the ISM manufacturing index posted its steepest monthly decline in a decade. Moreover, consumer confidence tanked in the month, retail sales unexpectedly contracted and existing home sales fell to an over three-year low. This suggests private consumption softened in Q4, which was likely compounded by a sharp fall in equity prices in December. Looking at Q1, falling consumer confidence in January indicates private spending will be modest, while a fall in industrial production in the month signals weakness in manufacturing. Meanwhile, recent trade talks reportedly yielded some concessions from China on intellectual property rights, market access and technology transfers, prompting President Trump to postpone new tariff action past the March 1 deadline.

Growth should slow this year due to multiple headwinds, notably fading fiscal stimulus and lower global growth, while additional rate hikes could also weigh on momentum. The trade war with China remains a key downside risk, while a large fiscal deficit and high levels of personal and corporate debt present added vulnerabilities. Focus Economics panellists see GDP expanding 2.4% in 2019, which is unchanged from last month’s estimate, and 1.7% in 2020.

Flash estimates revealed that the Eurozone economy remained stuck in a low gear in the fourth quarter. Growth was unchanged from Q3’s pace, which had marked the slowest expansion in over four years. While a detailed breakdown of the drivers is not yet available, soft domestic dynamics likely hobbled the economy amid a downturn in the industrial sector and deteriorating confidence. Available data for this year tells a similar story. Economic sentiment dropped to an over two-year low in January, and the manufacturing PMI fell into contractionary territory in February for the first time since June 2013. A high degree of uncertainty also continues to plague the growth environment. A confidential report by the U.S. Commerce Department released in February is expected to have cleared the way for President Donald Trump to levy tariffs on EU automobiles if a favourable trade agreement is not struck. Meanwhile, the Brexit deadline inches ever closer without a
clear plan for the UK’s exit. A soft end to 2018, weaker economic sentiment and ongoing problems in the manufacturing sector are dampening the outlook for the Eurozone this year. Sluggish global trade and geopolitical uncertainty are also seen dragging on growth in 2019, although a tight labour market and accommodative monetary policy should provide some relief. Focus Economics analysts expect growth of 1.4% in 2019, which is down 0.1 percentage points from last month’s forecast. In 2020, growth is seen stable at 1.4%.

The economy returned to growth in the fourth quarter following a short-lived contraction in Q3 when a series of natural disasters disrupted business and consumer activities. Domestic demand drove Q4’s recovery, while external demand remained relatively weak despite rebouncing. Available data for this year suggests that growth momentum remains frail. Global trade uncertainty, the economic slowdown in China and a downturn in the global tech cycle are weighing on the external sector. This, in turn, hurt manufacturing activities, as reflected by the manufacturing PMI which hit a nearly three-year low in February. Moreover, the lack of progress made in Prime Minister Shinzo Abe’s strategy to boost wages is gradually eroding consumer confidence, keeping private consumption subdued.

Economic growth will accelerate slightly this year. Frontloaded consumer spending ahead of the planned sales tax hike in October, coupled with solid investment—partially due to works related to the Tokyo 2020 Olympic Games and solid corporate earnings—will propel growth. However, risks are skewed to the downside, with rising trade protectionism and China’s slowdown leading the pack. Focus Economics panellists see the economy growing 0.9% in 2019, which is down 0.1 percentage points from last month’s forecast, and 0.6% in 2020.

Economic growth slid sharply in Q4 2018 according to recent figures. The deceleration was driven by a contraction in fixed investment, as firms curtailed spending amid elevated Brexit uncertainty. In contrast, private consumption growth was steady, likely supported by a firm labour market; in October-December employment figures and real wage growth were strong. Turning to the first quarter of 2019, signs are largely gloomy. In January, both the services and manufacturing PMIs dropped, with the services PMI hovering only just above the 50-threshold separating expansion from contraction. Although retail sales perked up somewhat, this was partly due to discounting by stores. On the political front, the government has yet to solve the Brexit impasse, and several Labour and Conservative MPs have defected. The lack of certainty will hamper GDP in Q1.

The economy is set to perform poorly in the first quarter as Brexit uncertainty hampers private investment. Looking further ahead, everything hinges on the outcome of Brexit; leaving the EU with a deal, or remaining in the EU, would likely unleash pent-up investment and boost consumer sentiment, while leaving with no deal could cause a serious economic shock. Focus Economics panellists expect GDP growth of 1.4% in 2019, unchanged from last month’s forecast, and 1.5% in 2020.

Global inflation fell from 2.6% in December to 2.4% in January, according to an estimate produced by Economists. Low oil prices in January compared to the same period in 2018, subdued demand pressures and relatively stable financial conditions are keeping inflationary pressures in check. Against this backdrop, the U.S. Federal Reserve decided to keep its federal funds rate unchanged at 2.25%–2.50%. Moreover, the Fed softened its tone and suggested a marked slowdown, if not a complete halt, to interest rate hikes in the year ahead. Similarly, the Bank of England (BoE) maintained its Bank Rate stable at 0.75% at the 6 February meeting. The BoE, however, slashed its growth forecasts for this year and next due to the significant uncertainty revolving around the outcome of the Brexit process.

Weakening global growth and relatively low energy prices are expected to keep price pressures at bay this year. Focus Economics panellists expect global inflation to be 2.8% in 2019, which is unchanged from last month’s forecast. The economists’ panel projects that global inflation will edge down to 2.7% in 2020.

Dr. Goutam Mukherjee
Hony. Editor, JILTA
First S. S. Dutta Memorial Lecture

The 5th Seminar (since 2014 on the occasion of IILF at Chennai) named as the 1st S. S. Dutta Memorial Lecture was organized by Indian Leather Technologists Association (ILTA) in collaboration with ‘CSIR-CLRI’, CLCTA & ILPA and also Indian Leather & Leather Age as media partners at the Hall-A of Convention Center in the Chennai Trade Center campus on Saturday the 2nd February’ 2019 during 34th India International Leather Fair (IILF - 2019).

Mr. Susanta Mallick, General Secretary commenced the programme by inviting the dignitaries present for garlanding the portrait of Late Prof. S. S. Dutta and then handed over the podium to Dr. Goutam Mukherjee for mastering the event.

Dignitaries who adorned the programme were as follows:

1. Mr. N. Safeeq Ahmed, Chairman, Indian Finished Leather Manufacturers & Exporters Association
2. Padmashree & Padmabhushan Dr. T. Ramasami, Former Secretary, Department of Science and Technology, Govt. of India.
3. Mr. Sothi Selvam, Director, Balmer Lawrie & Co. Ltd.
4. Dr. Peter Amann, CEO – TFL Group, Management, TFL Ledertechnik AG
5. Mr. Diganta Ghosh, Director, TFL Quinn India Pvt. Ltd.
6. Mr. Maduri Prasanna, Campus Manager, Stahl India (Pvt.) Ltd in lieu of Mr. Tuncay Deriner, Managing Director, Stahl India.
7. Mr. Tapan Nandy, President, ILPA Leather Goods Park.
8. Mr. Tatheer Zaidi, Senior Programme Manager, Solidaridad – Asia
9. Dr. B. Chandrasekaran, Director, CSIR – CLRI and the Speaker of the 1st S. S. Dutta Memorial Lecture
10. Dr. B. Chattopadhyay, Ex-Principal, GCEL, Kolkata & now Principal, MCKV Institute of Engineering, Howrah and Speaker of the Memorabilia Lecture.
11. Mr. S. Ranganathan, Editor & Publisher of Indian Leather Magazine, Chennai.

A good audience consisting of around 120 persons were present in the audience.

The event commenced with delivering of the Welcome address by Mr. N. R. J aganathan, the President, Southern Regional Committee of ILTA. He sincerely remembered the great soul of Late Prof. S. S. Dutta as a teacher of leather technology during his student hood. He also remembered few remarkable activities undertaken by ILTA in past, during Presidentship of Late Sanjoy Sen. He remarkably expressed his opinion that the span of ILTA activities should be spread over countrywide, especially at those places where leather clusters are more active. He welcomed all the dignitaries present who responded ILTA to join hands with the activity and interested to play active role in development of modern Leather Industry. He expressed hope that this way ILTA could be able to remain and develop more relevancies to the Industry.

All the Guests were then honoured with Swals and Mementoes followed by delivering of a few words by each of them.

Mr. N. Safeeq Ahmed, the Chief Guest of the programme, in his address offered thanks to ILTA for inviting him followed by offering his homage to Prof. S. S. Dutta. He elaborately explained the situation of current Indian leather industry including the status of export market. He also suggested certain things; ILTA can do for the industry. He suggested that ILTA should play more intensive role in coordination the R & D and Industry.

Dr. Ramasami in his address very emotionally recalled the attitude of Prof. S. S. Dutta towards his students. He also described his relation with Prof. S. S. Dutta as it was between ‘Guru Dronacharya’ and ‘Eklabya’. Like Mr. Jagannathan he also advised that ILTA should spread its network to the remote corners of the country and implement its activities, as mentioned in J ILTA, especially in the cities of Kanpur, Jalandhar, Agra etc.

Mr. Sothi Selvam, Dr. Peter Amann, Mr. Diganta Ghosh, Mr. Maduri Prasanna, Mr. Tapan Nandy, Mr. Tatheer Zaidi and Mr. Ranganathan also in their addresses expressed their heartiest gratitude to ILTA for inviting them to attend the programme and all of them assured continuous support to ILTA from their...
part to empower the activities of ILTA on the way of becoming a bridge between Academy – Industry partnership.

Thereafter, Prof. S. S. Dutta Memorial Medals presented to the following by Dr. T. Ramasami and Dr. B. Chandrasekaran respectively :-

a. Bhuvanesh S, Lokesh Kumar and Pradeep M, all from Anna University, for their most innovative project “Application of aloe-vera in Leather Processing”.

b. Aarthi Aj, Rajeshwari R, Vignesh R, all from Anna University, for their most innovative project “Chameleon effect in leather finishing”.

All the dignitaries then lead by Dr. T. Ramasami, joined hands to release the ‘IILF-2019 Special Issue’ of Journal of Indian Leather Technologists’ Association (J ILTA), February’ 2019.

Thereafter Dr. Buddhadeb Chattopadhyay came to the podium to deliver his emotional memorabilia lecture on Prof. S. S. Dutta titled “Humble contribution of Prof. S S Dutta towards the students of Leather Technology”. In his lecture he very relevantly mentioned that in these days when relationship between Teachers and Students are gradually declining, relationship between Prof. Dutta and his students was ideal Guru-Shishya Parampora. He also recalled the way of teaching of Prof. Dutta of presenting the hardest chemical theories in a simple way to his students. Some ex-students of Prof. Dutta in the audience also recalled the same with Dr. Chattopadhyay. On completion of his lecture Dr. Chatopadhyay was honoured with Swal & Memento by his guru Dr. T. Ramasami.

Mr. Susanta Mallick then announced the names of the three export houses who would be felicitated by ILTA for securing 1st, 2nd and 3rd places respectively as winner of Best Export Award 2017-18 for their overall export performance in the country as declared by Council for Leather Exports (CLE).

The names of the houses are as follows :

1st Place - M/s Farida Group, Chennai
2nd Place - M/s K. H. Exports (I) Pvt. Ltd., Chennai
3rd Place - M/s Tata International, Mumbai

Dr. B. Chandrasekaran then came to podium to deliver the 1st S. S. Dutta Memorial Lecture titled “Concepts to Practice: Journey of CSIR-CLRI through translational path”. He elaborately described the role of CSIR – CLRI in Indian as well as World Leather fraternity. He especially highlighted that now a days the R & D department of CLRI is highly acceptable to other countries of African continent and few others. He briefed the history and vision of CLRI in leather trade since its inception. He expressed his hope that other leather organizations would extend their hands to CLRI to spread its R & D outcomes with the Indian and foreign leather fraternity. On completion of his lecture Dr. Chandrasekaran was honoured with Swal & Memento by the General Secretary of ILTA, Mr. Susanta Mallick.

At last Mr. Mallick then concluded the event with offering of Vote of Thanks to the gathering, especially to the Southern Regional committee of ILTA for their all out support to make the event a grand success. He informed that ILTA would arrange a Health Camp for the Leather people at Kolkata within a short while. He expressed his heartfelt thanks to all the dignitaries present over there. He also offered his thanks to CSIR-CLRI, ILPA and CLCTA as the Co-organizers of the event and to Indian Leather and Leather Age as the media partner of the event. He concluded his speech with requesting all to have some tea & refreshment arranged outside the seminar hall.

8th Moni Banerjee Memorial Lecture

This will be held on Friday the 15th March, 2019 at Freya Design Studio, ILPA Leather Goods Park, Calcutta Leather Complex, Bantala.

Dr. V. Vijayabaskar, Vice President, Balmer Lawrie & Co. Ltd., Chennai has kindly consented to deliver the memorial lecture titled “Exploring New Chemistries for Clean Leather processing”.

Mr. Tatheer Zaidi, Sr. Programme Manager, Solidaridad – Asia, New Delhi has also kindly consented to deliver a lecture.

Individual invitation cards have been posted on 28.02.2019. Members/Guests wishing to avail transport arranged by ILTA from Parama Police Station to Freya Design Studio and back on 15th March are requested to inform ILTA Office (2441 3429 / 2441 3459) latest by 06.00 PM on Monday 11th March, 2019. It may not be possible to entertain such requests received after 11th March, 2019.

Transport will leave Parama Police Station at 01.00 PM sharp.
Health Camp

A letter ref. no. ILTA/General/58/2018-19/170 dated 19.02.2019 addressed to all ILTA Members with Kolkata PIN Code address has been posted on 19.02.2019 itself. The letter reads as follows:

Quote

A Health Camp is proposed to be organized by ILTA in collaboration with R. N. Tagore Hospital (Narayana Health) and Dum Dum Branch of Indian Medical Association.

The following tests will be carried out at the Health Camp:

- Blood Pressure
- Blood Group
- Blood Sugar
- ECG
- Haemoglobin
- Besides Cardiac consultation, Chest Test, recording height and weight.

The Health Camp is proposed to be held from 11.00 Hrs to 14.30 Hrs on Wednesday 17th April, 2019 at ILTA office.

If you are interested to participate in the camp, kindly inform ILTA office Tel. No. 2441 3429 / 2441 3459 latest by Friday 15th March, 2019 with your date of birth.

Unquote

Bereavement

With profound grief and a heavy heart we announce the sad demise of Mr. Dharmamoy Guha, a Life Member of our Association.

On January, 2019, we received an email from Late Guha’s daughter advising us of her father’s demise on 21st December, 2018.

May his soul rest in peace and may God give strength to the members of the bereaved family to bear the irreparable loss.
You are requested to :-

a) Kindly inform us your ‘E-Mail ID’, ‘Mobile No’, ‘Land Line No’, through E-Mail ID : admin@iltaonleather.org or over Telephone Nos. : 24413429 / 3459 / 7320. This will help us to communicate you directly without help of any outsiders like Postal Department / Courier etc.

b) Kindly mention your Membership No. (If any) against your each and every communication, so that we can locate you easily in our record.

(Susanta Mallick)
General Secretary

Executive Committee Members meet on every Thursday at 18-30 hrs. at ILTA Office. Members willing to participate are most welcome.
60th Annual General Meeting

Saturday, 29th September' 2018

Indian Leather Technologists' Association
Balmer Lawrie Corner

Green Chemicals for Eco Friendly Leather Process

- Eco-friendly Products
- Products comply with REACH norms
- High performance Fatliquors, Syntans & Beam House Chemicals
- State of the art Zero Liquid Discharge plant
- Member of Leather Working Group
Eco-friendly Products
- Products comply with REACH norms
- High performance Fatliquors, Syntans & Beam House Chemicals
- State of the art Zero Liquid Discharge plant
- Member of Leather Working Group

Technology Fuelled by Research
High performance fungitoxicants
Eco-friendly syntans
Beamhouse chemicals
Entering into Finishing chemicals
State of art ZLD (zero liquid discharge) at Manali Factory
Certified for ISO 9091, ISO 14091
Member of LWG - leather working group

Balmer Lawrie & Co. Ltd.
(A Government of India Enterprise)
Leather Chemicals Division
Manali, Chennai - 600068, India
Tannery industry process Tannery operations involve conversion of raw hides or skins into leather, a stable material, which can be used for manufacturing of large number of products. The tannery industry is a water and chemical intensive industry, wherein, a large number of complex chemical and mechanical processes are involved. These industries are one of the most polluting industries causing pollution in the environment. The Tannery Industry Operation is as follows: Process in tanning industry can be broadly classified as pre-tanning, tanning and post tanning process. Pre tanning is employed mainly for the removal of impurities from the raw materials. The impurities consist of mainly blood, hairs, etc., which has composition of protein. This process involves salt, lime and sulphides as process chemicals. Tanning process is used for altering the characteristics of skin. The effluents of tannery process contains chromium and vegetable or synthetic tanning. Post tanning processes include coloration and produce effluents containing residues of dyestuffs, and auxiliary chemicals. The final effluent coming out of a tannery unit is amalgam of raw materials and variety of process chemicals. As the main raw material of the tanning industry is a natural product, its soluble impurities are generally readily biodegradable and represent a large part of the BOD load in the effluent. The process chemicals employed are a variety of organic and inorganic materials affecting concentration of total solids, pH, COD. Of particular importance is the presence of significant quantities of sulphide and chromium (III).

Indian Scenario in India there have been some initiatives from government and international institutions to promote clean techniques. Most of the CETP operators in India are aware of some of the technologies mentioned as BAT, since they were also being applied in India. A wide spectrum of activities is found that promote cleaner production.

The activities include :

- Helping to import less environmentally damaging tanning material such as wattle extract, benefiting a large number of smaller tanners
- Adopting “zero liquid discharge” technology in tanneries regulated by the state of Tamil Nadu
- Guidance from the Central Leather Research Institutes (CLRI), Chennai and other technical bodies on the management of hazardous solid waste in secured landfills. A few organizations are involved in demonstration and training for adoption of new technologies in :
  - Effluent treatment
  - Waste minimization
  - Replacement of chemical dyes with natural dyes
  - Cleaner tanning techniques for raw skin as well as for the whole leather production process
  - Chrome recovery technology; use of less chrome orchrome less technologies; chrome recycling and reuse methods should be prioritized
  - Chilling preservation instead of salt treatment of hides

A few of the institutions have been involved in the development of ideas and the modification of new technology to the requirements of the leather industry.

Primary treatment Industrial wastewater, after the primary sedimentation tanks, sometime (when the organic load – COD – is very high) is introduced in the intermediate chemical treatment compartment where aluminium sulphate and poly-electrolyte solutions are dosed for flocculation and coagulation. The flocculated effluent enters into the circular tank for solids removal and then into biological treatment. Secondary treatment The biological process includes de-nitrification (first step) and biological oxidation and nitrification (second step). The Nitrate removal (de-nitrification) is performed into an anoxic

* Corresponding author E-mail : dinker1986@gmail.com / dinker.bajpai@in.bureauveritas.com
tank in which primary treated industrial effluent and urban waste waters are blended with the mixed aeration liquor and sludge of the biological phase continuously re-circulated. The mixing is provided by a series of submersible mixers. The oxygen for the biological oxidation (BOD/COD removal and Ammonia nitrification) is provided by air injection (blowers and membrane diffusers). For enhancing COD removal, Activated Carbon is dosed in the oxidation tank. The mixed liquor (effluent and biological sludge) enters the biological sedimentation tanks where settled sludge is continuously re-circulated to the denitrification tanks. The excess of sludge is periodically discharged and by-passed to the sludge treatment. The supernatant liquid of the biological clarifiers flows by gravity to the tertiary chemical treatment. The dosed chemicals are Fe-salts, Lime and Polyelectrolyte. The quantity of chemicals varies according with the characteristics (SS and COD) of the effluent from the biological treatment (see Note). Note: The typical COD and SS of the effluent from the biological sedimentation are 250-300 mg/L and SS 200-220 mg/L respectively. The tertiary treatment is therefore required for complying with the discharge standards.

**Effluent Guidelines** are national regulatory standards for wastewater discharged to surface waters and municipal sewage treatment plants. EPA issues these regulations for industrial categories, based on the performance of treatment and control technologies.

Effluent, in engineering, is the stream exiting a chemical reactor. Effluent is defined by the United States Environmental Protection Agency as “wastewater - treated or untreated - that flows out of a treatment plant, sewer, or industrial outfall. Generally refers to wastes discharged into surface waters”.

**What is meant by industrial effluent?**

Industrial wastewater treatment covers the mechanisms and processes used to treat wastewater that is produced as a by-product of industrial or commercial activities. After treatment, the treated industrial wastewater (or effluent) may be reused or released to a sanitary sewer or to surface water in the environment.

**What are the principal waste waters associated with mines and quarries?**

The principal waste waters associated with mines and quarries are slurries of rock particles in water. These arise from rainfall washing exposed surfaces and haul roads and also from rock washing and grading processes.

**What is the pH of wastewater?**

pH refers to the acidity of the effluent. Domestic wastewater before treatment typically has a pH of 6.5 to 8.5, but a final effluent of 7.0-7.2.

**What is meant by industrial waste?**

Industrial waste is the waste produced by industrial activity which includes any material that is rendered useless during a manufacturing process such as that of factories, industries, mills, and mining operations. It has existed since the start of the Industrial Revolution.

**How to deal with hydrogen sulphide gas (in tanneries and ETPs)**

Hydrogen supplied gas present in tanneries and effluent treatment plants (ETPs) has proven fatal to workers exposed to it many times.
It is therefore necessary that the owners and managers of tanneries and effluent treatment plants are fully aware of the dangers posed by this poisonous gas and take all preventive and precautionary measures to protect the workforce from exposure to this gas. In the event of accidental exposure of a worker, they should know how to deal with the situation.

Leather processing has as one of its important objectives, improvement of occupational safety and health practices in tanneries and effluent treatment plants. Under this objective, the project has been seeking to demonstrate in selected tanneries improvement practices for better occupational health and safety of the workers.

It is hoped that the industry representatives and other concerned with the occupational health and safety of workers in tanneries and effluent treatment plants will find this publication useful.
Obituary

Late Dharmamoy Guha, life member of the Indian Leather Technologists Association, passed away on the 21st of December 2018. He joined Bata as an apprentice when he was 16. He took evening classes and obtained a B.Sc. in General Chemistry from Scottish Church College, Kolkata. He was sent to Northampton University for further studies in Leather Chemistry by Bata. He was awarded the gold medal upon graduation in 1953.

In 1960 he started working abroad in Kinshasa, Democratic Republic of Congo. There he trained the first Congolese tanner in the country. He worked for 3 UN agencies, ILO, UNIDO and FAO. He had missions in 9 different countries (Djibouti, Ethiopia, Malawi, Niger, Rwanda, Senegal, Swaziland, Uganda & Zaire) in Africa. In Kigali, he published a method of vegetable tanning using cassia bark.

While working in Kabul, Afghanistan he wrote a handbook on rural tanning method for the tanners working in Charikar, an ILO project he developed. It helped the Afghan tanners to improve their methodology.

Mr D. M. Guha refurbished the tannery project in Monserrat, an island in the Caribbean. He developed the supply of rawhides from neighboring islands with the help of CARICOM so as to set up inter-island co-operation. Montserrat, having dependable freshwater, would tan the hides and thus manufacture finished leather goods.

After retiring from United Nations, he went on several short term missions for the CFTC (Commonwealth Fund for technical co-operation) and the World Bank. He came back to India in 1995.
We imagine high-quality shoe & leather care to be customizable to every customer’s demand

Leather is a fascinating product that needs regular care to reach and maintain its optimum condition. General use causes cracking, delamination and discoloration, all of which can be prevented by proper cleaning and protection. Stahl's range of Shoe & Leather Aftercare products brings out the best of your leather items and makes them more durable at the same time.

Enhanced resistance and easy cleaning
Whether it’s for automotive upholstery, footwear, garments, leather goods or upholstered furniture, our products are shielding leather by creating an invisible, breathable barrier that enhances stain resistance and easy cleaning.

The range includes products for cleaning, protecting, refinishing and repairing. We even have solutions to upgrade your leather product so that it fits the latest fashion trends.

There is no such thing as one size fits all, so all of our solutions are available in endless and customizable variations in order to meet all your requirements. Curious what our Shoe & Leather Aftercare solutions can do for your business? Please visit www.stahl.com or contact us at stahl.india@stahl.com.

If it can be imagined, it can be created.

www.stahl.com
I imagine high-quality upgraded leather for fashion and lifestyle items with a natural look and feel.

At Stahl, we love high-quality leather with a natural look and outstanding credentials. We want leather to be soft on the skin and both a pleasure to wear and to look at. To increase the availability of such leather we developed Stahl Easy-KAT: an easy-to-use, water-based leather upgrading product range for hides with small to medium grain defects.

Effective upgrading for high-quality leather

Easy-KAT enables tanners to widen their horizon by producing more leather that retains its luxurious appearance over time. Small imperfections in a hide, such as scratches and insect damage, are eliminated without affecting the suppleness, appearance or feel of the finished leather. The secret of

Easy-KAT is its natural affinity to anionic substrates and great sealing and levelling power, resulting in soft and flexible leather with all its natural aspects preserved. From high gloss to matt leather – anything is possible.

Easy-KAT is suitable for any type of crust. The finished leather is perfect for high-end fashion items, such as shoes, bags, garments, and jackets. Leather items tanned with Easy-KAT are the items consumers love to wear or carry. Curious what Easy-KAT can do for your business? Please visit www.stahl.com or contact us at stahl.india@stahl.com.

If it can be imagined, it can be created.

52nd Leather Research Industry Get Together (LERIG - 2019) was organized by CSIR - Central Leather Research Institute during 29 - 30th January’ 2019 at the Triple Helix Auditorium, CSIR-CLRI, Chennai

The 52nd LERIG focused on both ecological and environmental factors, while keeping the consumer benefit as paramount. Leather sector is innovating by way of developing new products, chemical systems and reducing energy consumption, while maximizing raw material to leather/product turnover. ‘Next-Gen Technology’ is the keyword for this whole system.

Hence, focusing on the technological development for the modern leather industries, the theme of LERIG – 2019 was rightly selected as “Next-Gen Technologies for Leather Sector: Approaches towards Industry 4.0”.

It was unfortunate this year also, to be witness of the fact that the memorial lectures during Inaugural session, to remember the Father of Indian Leather Industry, Prof. B. M. Das has been censored by the organizers.

Synopsis of the two day programme was as follows :-

Day 1 :
◆ Inaugural session
◆ Nayudamma Lecture

Day 2 :
◆ Technical Session - I
◆ Technical Session - II
◆ Technical Session - III
◆ Panel Discussion
◆ Valedictory Function
In his welcome address, Dr. B. Chandrasekaran, Director of CSIR-CLRI welcomed the gathering with a new hope for adopting the new sustainable next-gen technologies by the future leather industry.

Mr. P. R. Aqeel Ahmed, Chairman, CLE in his Presidential Address expressed his heartiest gratitude to the CSIR–CLRI for their routine event every year in order to upgrade the industry with the modern technologies.

As the Chief Guest Dr. Shekhar C. Mande, DG, CSIR elaborated the relativity of the theme of LERIG and its commercial implementation in future leather industries.

Dr. Rafeeqe Ahmed, President, AISTMA & Chairman of Farida Group and Mr. K. R. Vijayan, President, ISF were present as the Guests of Honour and shared their ideas and advises on the theme of 52nd LERIG.

Day – 1 : (Prof. Nayudamma Lecture)
Prof. Ashok Jhunjhunwala, IIT Madras then delivered the prestigious Y. Nayudamma Memorial Lecture titled “EVs in India : The Current State”, elaborating the requirement of Fuel efficiency in India and World and its ways of implementation.

After presenting mementoes to all the Guests and speakers, Vote of Thanks offered by Dr. Sanjeev Gupta, Chief Scientist, CHORD, CSIR-CLRI and the Convener of 52nd LERIG. The session then adjourned for the day with high tea.

**Day – 2 (Technical Session - I)**

Subject of the session was “Futuristic Manufacturing”. The session was chaired by Dr. B. Chandrasekaran, Director CSIR – CLRI and co-chaired by Mr. N. Shafieeq Ahmed, Chairman, IFLMEA.

Mr. Ashfaque Ahmed, Managing Director, Farida Group delivered his presentation titled “Industry 4.0 – Preparation for Substance”.

Mr. Raja Chidambaram, Director, URS Productivity delivered his presentation titled “Industry 4.0 – Impact on Leather Sector”.

Mr. Md. Sadiq, Chief Scientist, CSIR-CLRI delivered his presentation titled “Mass Personalization Production – Tiny until you turn it on”.

After Q & A session, followed by presenting mementoes to all the speakers and chairs, Dr. Chandrasekaran offered thanks to all the speakers and the audience and asked to join in a Tea Break.

**Day – 2 (Technical Session - II)**
Subject of the session was “Energy Management”. The session was chaired by Mr. Ato Wondu Legesse, UNIDO and co-chaired by Mr. K. R. Vijayan, President, ISF.

Prof. S. Iniyan, Professor, Institute for Energy Studies, Anna University, delivered his presentation titled “Indian Energy Scenario”.

Mr. Milind Chittawar, CEO, SEE-Tech Solutions, Nagpur, delivered his lecture titled “Energy Saving Opportunities in Leather Industry”.

Mr. Prasanna Kumar Maduri, Campus Manager, Stahl India delivered his presentation titled “Sustainability Initiatives in Leather Industry”.

Dr. R. C. Panda, Sr. Principal Scientist, CSIR-CLRI delivered his presentation titled “Role of Artificial Intelligence in Industry 4.0 – Application to Indian Leather Industry”.

After Q & A session, followed by presenting mementoes to all the speakers and chairs, Mr. Wondu Legesse offered thanks to all the speakers and the audience and asked to join in a Tea Break.

**Day – 2 (Technical Session - III)**

Subject of the session was “Water Management and Compliance”. The session was chaired by Dr. S. Sundaramoorthy, CMWSSB and Co-chaired by Dr. Sajiv Anand, Advisor, Solidaridad-Asia.

Mr. Jochen Rudolph, Technical Director, Asia Pacific, Lanxess, delivered his presentation titled “Novel Tanning Technology-Delimiting, Pickling, Basification free and Water Saving Technology”.

Mr. Silvana Storti, CEO, Europrogetti, Italy, delivered his presentation titled “Trending ZLD Technologies in Leather for future”.

Dr. P. Saravanan, Chief Scientist, CSIR – CLRI delivered his presentation titled “Beyond Compliance”.

After Q & A session, followed by presenting mementoes to all the speakers and chairs, Dr. Sundaramoorthy offered thanks to all the speakers and the audience and asked to join in a Tea Break.

**Day – 2 (Panel Discussion)**

The topic of the panel discussion was “Focus on Leather Sector for Future”. The panelists were as follow :-
1. Mr. R. Selvam, IAS, ED, CLE,
2. Mr. N. Shafeeq Ahmed, Chairman, IFLMEA,
3. Mr. K. R. Vijayan, President, ISF
4. Dr. S. Sundaramoorthy, CMWSSB
5. Mr. Ato Wondu Legesse, UNIDO
6. Mr. Ramjee Yogasundaram, MD, Ramjee Leathers
7. Dr. B. Chandrasekaran, Director CSIR – CLRI

Valedictory Function

The two day 52nd LERIG - 2019 programme came to conclusion with offering Vote of Thanks by Dr. Sanjeev Gupta, Chief Scientist, CHORD, CSIR-CLRI and the Convener of LERIG-2019 followed by National Anthem.
NON TRADITIONAL LEATHER USED IN THE FOOTWEAR INDUSTRIES
(PART - 4)

DEER SKIN LEATHER

We get Deerskin Leather from the skin of deer. Deerskin Leather was popularised by Native Americans and the American frontier culture. They generally used it for wide variety of products such as footwear, garments, luxury leather bags, gloving etc. Globally there are a large number of animals that can be describes as a part of deer family – officially Cervidae. They include the similar family member as the Muntjac (barking deer) and follow deer through to the larger elk (moose) and reindeer (caribou).

Farm production of deer for meat consumption has shown an increasing trend in recent years, leading to some improvement in quality & availability of their skin. Deer skin can be used to produce strong, flexible and soft leather. Deer skin can be made like special suede leather. The grain of the leather during processing removed by frizzling (scarpering with a special knife or machine) and tanned with fish oil. It is known as ‘Buckskin’.

Deerskin leather is not a mass produced material available for the leather industries, therefore it has exclusive use and luxury appeal. Due to this, Deerskin is popular among fashion houses and designers. For those looking for a cheaper version of Deerskin often use cowhide leather as a suitable alternative. This high-quality leather has a number of benefits. It is comparatively softer & durable material. It has a very good breathability. Another popular characteristic of Deerskin leather is that even when it gets wet and dries, its soft texture remains as it is. Deerskin leather is soft and supple, which makes it a favourite for clothing and shoes. Deerskin leather is also stretchable. Over time, this leather will conform to your body. Unlike leather made from cow hides, deerskin leather is also breathable, which means that the shoe made with deer skin will keeps your feet warm in winter & comfortable cool in summer. It keeps a good shape retention property like cow leather. Leather made from deer skin is also thin. In fact of all leathers made from deerskin leather is the thinnest.

Deerskin as unfinished leather it is very soft, but unfortunately not water or stain resistant. As such it is recommended using a protective product to protect this leather and ensure its longevity. You can also find Deerskin leather which is finished or micro pigmented. To maintain its condition, it is key to clean Deerskin leather regularly with a water-based product such as Sensitive Cleanse. It is not recommend undertaking any stain removal treatments on Deerskin leather.

Deerskin is not fragile or weak despite its soft texture and light weight. Leather made from deerskin is rated as the third strongest leather available. This means that clothing and other items made from deerskin leather will be durable and last a number of years if they are cared for properly.
INDIAN LEATHER PRODUCTS ASSOCIATION

The Indian Leather Products Association (ILPA), established in 1987, is a premiere representative body of manufacturer-exporters of superior quality leather and leather products with head office in Kolkata and a regional office in Chennai.

IMPORTANT ACTIVITIES OF ILPA:

- Brings together manufacturer & merchant exporters on a common platform.
- Stimulates growth & development of the industry as a whole.
- Promotes export of leather & leather products.
- Develops & maintains symbiotic liaison with international trade bodies & Chambers of Commerce.
- Organises trade delegations to international fairs & seminars.
- Organises various Seminars/workshops both the benefit of its members and industry.
- Promotes International Fairs and RBSMs like IILF Kolkata, ILPA Buyer Seller Summit.
- Organises the ILPA SHOW: Leather on the Ramp, one of the most prestigious and sought after Fashion event in Eastern India.
- Closely involved in setting up the Calcutta Leather Complex (CLC).
- Runs and manages the Freya Design Studio: a CLE award winning Design Studio both for leather goods and footwear.
- Runs and manages the ILPA INFRASTRUCTURE DEVELOPMENT FOUNDATION (IIDF) – a state of the art Common Facility Centre.
- Imparts Skill Development Training through ILPA Technical School.

Indian Leather Products Association
Plot no 1647, Zone 9, Calcutta Leather Complex, Karaidanga, West Bengal. Pin Code: 743502
Mobile: +91 7605855567 / +91 9007881474
E-Mail: mail@ilpaindia.org
Web: www.ilpaindia.org
Come and visit the world’s best leather goods sourcing platform in India

28th & 29th January 2019
in a centrally located world class luxury hotel – ITC Sonar.

Reasons to visit:
- 42 major leather goods companies displaying their latest & best quality International collections under one roof!
- This part of India is the world’s most competitively priced leather goods production hub!
- Golden chance to source premium best priced leather goods at one go!

Special Offers for Visitors:
- Facility to stay in the same hotel at discounted rate if confirmed before 30th September 2018
- Pick up & Drop facility from Airport
- Complimentary Language interpretation service
- Complimentary lunch & refreshments
- Option for factory visit of participant companies

Products on Display:
Ladies Hand Bags, & Purses, Men’s Bag & Wallets, Belts, Hand Gloves (Fashion & Industrial), Garments, Luggage & Hold ails, Portfolio, laptop bags, iPod Covers, small leather goods & Accessories

A highly focused B2B event featuring leather goods that brings together international Buyers & Sellers.

Indian Leather Products Association
www.ilpaindia.org

ILPA Corner

ILPA BUYER SELLER SUMMIT
KOLKATA
28th & 29th January 2019
BATA INDIA REGISTERS 51% GROWTH IN PROFIT IN DEC QTR

BATA INDIA posted a 51.35% year-on-year increase in its net profit to Rs.103.18 crore for the quarter ended December 2018, driven by higher revenues.

Net Sales grew 15.53% y-o-y to Rs.778.69 crore compared with Rs.674 crore in the corresponding quarter last fiscal. The company’s Ebitda margins rose 464 bps in Q3FY19 to 22.77% against 18.13% in Q3FY18. Consequently, the Ebitda (Earnings before interest, tax, depreciation and amortization) rose 45.14% to Rs.177.37 crore.

“Our strategy to use youth icons to pull in young buyers and push our key categories with refreshed collections has worked well and has yielded positive results,” Bata India chief executive officer Sandeep Kataria said.

The stock of Bata India on the BSE at its closing price of Rs.1,189 apiece on Tuesday was up 66.4% in the last one year and has outperformed the benchmark Sensex which has gained 5.4% during the period. The results were announced after market hours.

After the Q2FY19 results announcement, analysts at Axis Capital had said sales growth at 15% had been in line with estimates despite festival timing mismatch (shift to Q3). “The strong performance in Q2FY19 was driven by refreshed product offering (launch of new collections), increased focus on sub-brands, improving brand perception (use of digital platforms, higher advertising spend and association with celebrities for brand endorsements) and enhancing in-store experience to appeal to more fashion-conscious younger consumers,” analysts said. “Bata continues to make the right moves by focusing on expansion through franchisee, closing down unprofitable stores and renovating the old ones, launching new collections, increasing focus on sub-brands, improving brand perception and enhancing in-store experience to appeal to the more fashion conscious younger consumers,” they added.

(Financial Express – 13/02/2019)

AILING UP TANNERIES SHUT FOR KUMBH, START SHIFTING TO BENGAL

At least 12 tanneries in Kanpur have been allotted land by the West Bengal government to shift their operations to the state. The allotments were made during the Bengal Global Business Summit.

There are 400 tanneries in Kanpur and 40 in neighboring Unnao district. The UP government had issued a directive to shut these tanneries from December 15, 2018 to March 2019 to stop waste disposal in the Ganga during the Kumbh Mela at Prayagraj.

Around four months ago, 80 industrialists in Kanpur applied for land to the West Bengal government to shift their tanneries. Two weeks ago, 12 applications were approved and the applicants were told to collect the allotment letters on Friday, the second day of the Bengal Global Business Summit.

“The letters have been issued by the Micro, Small & Medium Enterprises and Textiles Department. The West Bengal government is giving us land at the rate of Rs.2,150/sq metre in Bantala area where Kolkata’s leather industry is situated,” Javed Iqbal, Regional Chairman, Council for Leather Export (Central Region, Kanpur), told The Indian Express.

“We have been told by the government during a meeting that allotment letters to other applicants would be sent directly to them soon after the approval,” Iqbal said.

Reached for comment, UP Health Minister Sidharth Nath Singh said : “It is up to the owners to decide where to set up their business. Wherever they go, they will have to follow guidelines of the National Green Tribunal and the Supreme Court.” He said the state government would not interfere.

UP Leather Industries Association spokesperson Ashraf Rizwan said : “The tannery owners had also requested the West Bengal government to build a common effluent treatment plant for them.”

“We chose to shift our tanneries to Bengal because Kolkata is a metropolitan city and has an international airport. To export goods from Kanpur, we pay around Rs. 50,000 per container for the journey to the seaport. In Kolkata, the sea is closer. Labour hands are also easily available there”, Rizwan said.

The tannery owners claimed that for the last two-and-half years, their business was getting hit. “We have been falsely accused of polluting the Ganga. The industry has always been under threat of orders to shut down the tanneries completely. Hence, we decided to shift to the other state,” said Ashraf, also a tannery owner in Kanpur.
UP Leather Industries Association Vice President Iftakhar said around one lakh people used to work in these tanneries and after the closure, daily-wage workers from other states have returned home.

*(Indian Express, – 09/02/2019)*

MEGA LEATHER PARK TO COME UP ON 100 ACRES IN VELLORE DISTRICT

The Council for Leather Exports is in talks with Government for Rs.350 crore project

In a major boost to the leather industry, a mega leather park is likely to come up in Vellore district. The Council for Leather Exports (CLE) is in talks with the State Government for providing a suitable piece of land in the district.

According to the CLE’s proposal, the leather park will come up on 100 acres of land and it will house hundreds of Micro Small and Medium Enterprises related to the leather sector. The park is expected to come up at a cost of Rs.350 crore. It will also have a laboratory testing centre and products designing centre.

“The park will give a much needed boost to the leather industry. The State contributes at least 40 per cent of the exports which are made from India in the leather sector and has lot of growth potential,” said Israr Ahmed, Regional Chairman (South), CLE.

“We are chalking out modalities of the project with the State Government and they are showing very positive response in the matter. The project is likely to start soon,” he added.

CLE officials claimed there are over 700 medium and small industries functioning in the State and the sector provides job to lakhs of people, at least 80 per cent of which are women. Major leather industries are located in Ambur, Ranipet, Vanniambadi, Pernambut and Chennai region. The industry produces products like shoes, accessories, bags, leather garments.

“The availability of quality raw materials, skilled labours and appropriate infrastructure is an added benefit for the State. The Indian leather and footwear industry is growing and we have been able to penetrate new markets like the US, Russia, Japan, Australia and Poland in recent years. The park will help us to increase exports from the country,” said P R Aqeel Ahmed, Chairman of CLE.

*(The Indian Express, – 04/02/2019)*

FOOTWEAR MAKER SKECHERS BUYS OUT FUTURE STAKE IN JV

American footwear maker Skechers USA Inc has bought out the minority share of Kishore Biyani-led Future Group in its joint venture in India, making it a wholly owned subsidiary. However, the company did not provide financial details of the deal. A PTI report quoted sources as saying Skechers paid close to Rs.600 crore to acquire the balance 49 per cent stake in Skechers India.

The company had entered India in 2012 taking the joint venture route.

“The company believes that combining the experienced team and Skechers’ proven sales and marketing capabilities will allow it to grow the brand and its presence in a faster, more efficient manner, ultimately meeting its fullest potential,” it said.

Michael Greenberg, Skechers President, said in a statement : “Skechers is still a relatively young brand in this country, having been in India for less than a decade; yet in the last five years, we have seen significant growth through our joint venture.”

*(The Business Line – 14/02/2019)*
**Urea-Formaldehyde Resins**

By S S DUTTA  
College of Leather Technology, Calcutta

Urea-formaldehyde resins come under the plastic group "Aminoplasts" which represent a large number of resins prepared from urea, thio-urea, melamine, aniline, benzene and toluene sulfonamides etc. by reacting them with formaldehyde.

All amino compounds cannot form mouldable thermostetting resins with formaldehyde unless the following two requirements are satisfied.

1) The compound must have at least two reactive primary amino groups and

2) Except for aromatic amines, the nitrogen of the amino group must be adjacent to a carbon atom which has a double bond so that tautomerism is possible.

Urea, melamine, aniline, guanidine, dicyandiamide and thiourea have satisfied these two requirements and so can form infusible resins with formaldehyde.

The formula of urea is

$$\begin{align*}
\text{H}_2\text{N} & - \text{C} - \text{NH}_2 \\
\text{O} & \\
\text{H}_2\text{N} & - \text{C} - \text{NH}_2
\end{align*}$$

and as a tanning agent (resin tannage).

On further condensation the lyotropic colloid is changed into a lyophobic (solvent hating) colloid which is not soluble in water and can be converted to moulding powders. If condensation of urea and formaldehyde is carried out in presence of butyl alcohol the resulting product is soluble in organic solvents and may be used in the preparation of lacquers.

Reactions in the initial stage of polymerization

The reaction between urea and formaldehyde is usually carried out in aqueous solution and the initial condensation product at low temperature is a lyophobic (solvent loving) colloid. Since the solvent in this instance is water, the colloid is water soluble and of value as an adhesive, as an impregnating agent.

<table>
<thead>
<tr>
<th>Urea used in gms.</th>
<th>Formaldehyde used in c.c. (37.4% pure)</th>
<th>Amount of catalyst, barium hydroxide</th>
<th>Temperature</th>
<th>Time in hrs.</th>
<th>Water in c.c.</th>
<th>Final product</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 gm.</td>
<td>13 c.c.</td>
<td>0.2 gm.</td>
<td>0°C</td>
<td>Immediate</td>
<td>10 c.c.</td>
<td>Mono-methylol urea.</td>
</tr>
<tr>
<td>10 gm.</td>
<td>26.7 c.c.</td>
<td>0.4 gm.</td>
<td>25-30°C</td>
<td>1/2 to 2 hr.</td>
<td>15-20 c.c.</td>
<td>Di-methylol urea.</td>
</tr>
</tbody>
</table>
Second stage of condensation

When the aqueous colloidal solutions of mono- or di-methylol ureas are further heated, the monomeric condensation with formation of a larger type of resin which also remain in solution in the colloidal state. The resins at this stage are believed to be linear. The condensation takes place through any one of the following ways:

1. The methylol ureas may react with further quantity of unreacted urea and form linear polymer.

\[
\begin{align*}
\text{NH}_2 & \quad \text{NH}_2 \\
\text{C}=\text{O} & \quad \text{C}=\text{O} \\
\text{NH}_2 \text{-CH}_2 \text{-OH} & \quad +\text{H}_2\text{O} \\
\text{NH}_2 \text{-CH}_2 \text{-NH} \text{-CO} \text{-NH}_2 & \\
\end{align*}
\]

Repeating this way, mono- and di-methylol urea can produce the following types of linear polymer.

\[
\begin{align*}
\text{NH}_2 & \quad \text{NH}_2 \\
\text{C}=\text{O} & \quad \text{C}=\text{O} \\
\text{NH}_2 \text{-CH}_2 \text{-NH} \text{-CO} \text{-NH}_2 & \\
\end{align*}
\]

Chain from mono-methylol urea.

\[
\begin{align*}
\text{NH}_2 & \quad \text{NH}_2 \\
\text{C}=\text{O} & \quad \text{C}=\text{O} \\
\text{NH}_2 \text{-CH}_2 \text{-NH} \text{-CO} \text{-NH}_2 & \\
\end{align*}
\]

Chain from di-methylol urea.
(2) The methylol ureas may condense among themselves.

\[
\text{NH}_2\stackrel{\text{C}=\text{O}}{\text{H}}-\text{N}-\text{CH}_2\text{OH} + \text{H}_2\text{N}\text{-CH}_2\text{-OH} \rightarrow \text{NH}_2\text{-N}-\text{CH}_2\text{-OH} + \text{H}_2\text{O}
\]

This way long chains can be formed from both mono and dimethylol ureas.

(3) Ether formation in the chain is also possible.

\[
\text{NH}_2\text{-C}=\text{O} \text{H}+\text{H}_2\text{N}\text{-CH}_2\text{-OH} \rightarrow \text{NH}_2\text{-N} \text{-CH}_2\text{-OH} + \text{H}_2\text{O}
\]

(4) Formation of azomethyne is also possible.

\[
3\text{C}=\text{O} \rightarrow \text{H}_2\text{N} \text{-C}=\text{N} \text{-CH}_2\text{-OH} + \text{H}_2\text{O}
\]

JOURNAL OF ILTA
Preparation of moulding mixture and curing reactions

The solution of resins produced after the second stage of reaction is filtered and dried (generally by spray drying method) and the powder obtained is mixed with fillers, lubricants, pigments and dye, stabilizers and curing agents which together represent 30 to 40% of the final mixture. The mass is thoroughly mixed and softened by heat and worked under heated rollers at controlled temperature. The mass is cooled and ground to get moulding powder. Pulps of cellulose, wood and cotton fibres etc. are used as filters, inorganic or organic acids, acid salts etc. are used as curing catalysts in practice.

The moulding mixture is melted by heat and pressure and fed into moulds which are then cured in furnace under controlled temperature for required period of time. It is believed that during curing cross linkages are formed between chains and thus the polymers are converted to thermosetting type of resins.

The mechanism of cross linkage formation is very complex and is not fully understood. There are different opinions about this mechanism. Some chemists believe that during curing both formaldehyde and water are split off due to further polymerization and that split formaldehyde perhaps form cross linkages. The formation of formaldehyde and water during condensation of di-methylol urea can be expressed by Goldschmidt reaction as follows:

\[
\begin{align*}
2 \text{H-N-CH}_2\text{OH} & \rightarrow \text{C}_2\text{H}_5\text{OH} + \text{CH}_2\text{O} + 2\text{H}_2\text{O} \\
\text{H-N-CH}_2\text{OH} & \rightarrow \text{C}_2\text{H}_5\text{OH} + \text{N-H} \\
\text{Goldschmidt's Compound.}
\end{align*}
\]

Similarly, formation of cross linkages with formaldehyde may be expressed with acetylation trimer also. But the formula is too complex to represent here.

Properties and Uses

Moulded urea plastics are tasteless, odourless and almost colourless. The natural colour of cellulose filled urea is translucent milky white, which can be converted to an opaque white mass by the addition of titanium oxide or other suitable pigments. The plastics are resistant to dilute alkali, solvents and oils, fats but are affected by strong alkalies, acids, etc. If not properly cured, the plastics show poor resistance to water and atmospheric moisture. Cracks may develop on such plastic articles in humid atmosphere. Well cured plastics are resistant to moisture and the glosses of plastic articles are not lost due to constant handling. This is due to high surface hardness of the plastics. These are also resistant to electric are. Considering all these, urea formaldehyde resins are used for making containers for cosmetics, bottle closures and similar articles. Light shades, reflectors, diffusers and other electrical goods and fittings are made out of this plastics. Bathroom fittings and fixtures are made from well cured ureas.

Urea-formaldehyde resins are widely used as adhesives, coating agents, impregnants for textile and paper, laminating agents etc. It can be used as resin tanning agents. Other aminoplasts also have uses as tanning agents. The resin systems are generally manufactured out of these aminoplasts.

EPOXY RESINS

The epoxy resins are recently (1947) produced poly-ethers but, they retain the name ‘epoxy’ on the basis of their starting material, epichlorohydrin, and the presence of epoxide groups (at the two ends of the chain) in the polymers before crosslinking.

Preparation

Though epoxy resins can be prepared by reacting epichlorohydrin with polyhydric phenols like catechol, pyrogallol, resorcinol, phloroglucinol etc. but in actual practice they are prepared by reacting epichlorohydrin with bisphenol-A, prepared from normal phenol.

Bisphenol-A is prepared by reacting normal phenol with acetone:

\[
\begin{align*}
\text{HO} & \begin{array}{c}
\text{O} \\
\text{C} \text{-} \text{H}_2 \text{C} \end{array} \\
\text{HO} & \begin{array}{c}
\text{O} \\
\text{C} \text{-} \text{H}_2 \text{C} \end{array} \\
\text{HO} & \begin{array}{c}
\text{O} \\
\text{C} \text{-} \text{H}_2 \text{C} \end{array}
\end{align*}
\]

Similarly epichlorohydrin is prepared from propylene.
Down Memory Lane

\[
\begin{align*}
\text{CH}_3 - \text{CH} - \text{CH}_3 + \text{Cl}_2 & \xrightarrow{400-600^\circ C} \text{CH}_2 - \text{CH} - \text{CH}_2 - \text{Cl} + \text{HOCl} \\
\text{CH}_3\text{Cl} - \text{CHOH} - \text{CH}_2\text{Cl} + \text{Ca(OH)}_2 & \rightarrow \text{CH}_3 - \text{CH} - \text{CH}_2\text{Cl} \\
\text{Epichlorohydrin}
\end{align*}
\]

During epoxy resin preparation excess epichlorohydrin is used to leave epoxide groups on each end of the polymer chain; otherwise, the two ends will terminate with active phenolic OH groups. Alkali acts as a catalyst.

Excess

\[
\begin{align*}
\text{CH}_3 - \text{CH} - \text{CH}_2\text{Cl} + \text{HO} - \text{C} - \text{O} - \text{OH} & \xrightarrow{\text{NaOH}} \text{Excess} \\
\text{CH}_3 - \text{CH} - \text{CH}_2\text{Cl} & \rightarrow \text{CH}_3 - \text{CH} - \text{CH}_2\text{Cl}
\end{align*}
\]

In epoxy resins all the phenolic hydroxyl groups are converted to ether linkages and so they do not discolor like phenoplasts due to quinone formation. Epoxy resins being polar, show exceptionally high degree of adhesive property. When the chain lengths of epoxy resins become sufficiently high, they become solid and insoluble in large number of solvents. The film produced is flexible and tough. The epoxide and hydroxyl groups (aforeshadowed by the epoxide groups at the two ends when the chains terminate with phenolic fraction) are the active groups present in epoxy resins. By reacting different compounds with these groups, large number of modified epoxy resins of varying properties are manufactured. When compounds of f=2 or more are reacted, cross linkages are formed between chains during curing and thus thermostetting epoxy resins result. The most common compounds which are reacted with epoxy resins for necessary modifications are the following:

1. Amines—Both aliphatic and aromatic of different functionalities.
2. Dibasic acid anhydrides.
3. Aminoplasts and phenoplasts with amine catalysts.
4. Liquid thiol resins with amines as catalysts.
5. Fatty acids and resin acids when the epoxy resins are to be used as coating compounds.

**Uses**

Pure epoxy resins have limited uses but modified products have wide applications. One of the main uses of modified resins is as a metal coating compound for home appliances, drums, cans, tankers to carry 75% water, later of pH 11, carbon disulfide etc. which are coated with modified epoxy resins. Epoxy resins are excellent adhesives for joining metals, ceramics, woods, cement castings, stones, glass, rubber etc. The bond strength is so high that it has replaced to an appreciable extent the welding, soldering, brazing and riveting in joining metals. These adhesives can be cured either at room temperature or at elevated temperature in short periods of time and only
at contact pressure. Of course, high temperature is developed during curing of epoxy resins, because the curing reactions are generally exothermic in nature.

Epoxy resins are also used for potting or impregnating electrical components like transformers, capacitors, coils and windings.

**ALKYD RESINS**

When di or polynuclear alcohols are heated with di- or poly basic acids, resinous reaction products result which are known as alkyd resins. The term ‘Alkyd’ was first used by Kienle to represent these resins as ‘alcohols-oil’ products. ‘Alk’—came from ‘Alc’—of alcohol and ‘yd’ came from ‘cid’ of acid.

When bi-functional alcohols react with di-functional acids, linear alkyd resins (thermoplastics) result, but when any one of the reactants becomes polyfunctional, the resultant polymer becomes space polymer (thermosetting), unless special precautions are taken during manufacture. By far the largest amount of alkyd resins produced is made from a combination of phthalic anhydride and glycerol. When these two materials are mixed and heated at 160°C temperature, a viscous liquid is formed. This liquid represents the following linear polymer.

\[
\begin{align*}
\text{O-C} & \quad \text{C-O-CH}_2 \quad \text{-CHOH-CH}_2 \quad \text{-O-C} \\
\text{O} & \quad \text{C-O-CH}_2 \quad \text{-CHOH-CH}_2 \\
\end{align*}
\]

The polymer remains linear till two-third acid has reacted and after that the entire viscous liquid suddenly forms a gel due to cross linkage formation, if heating is continued. On cooling this gel is converted to a hard, clear, glass-like, brittle, insoluble and infusible resin.

\[
\begin{align*}
\text{O-C} & \quad \text{C-O-CH}_2 \quad \text{CHC-HO-C} \\
\text{O} & \quad \text{C-O-CH}_2 \quad \text{CH-CH}_2 \\
\end{align*}
\]

Cross linked Polymer

Instead of phthalic anhydride many other acids like malic anhydride, fumaric acid, adipic aid etc. can also be used. Similarly glycerol can also be replaced by glycols and other bi- and poly functional alcohols. Mixed acids and/or mixed alcohols can also be used. Common esterification catalysts like sulphuric and hydrochloric acids are generally used. The reaction is carried out in presence of a current of inert gas like nitrogen which eliminates from the system the atmospheric oxygen (inhibitor) and removes the water vapour and other by-products formed to quicken the polymerization reaction. Stirrer for agitation and necessary cooling arrangements should be provided to the reaction Kettle.

These types of pure alkyd resin have practically no industrial uses because they are insoluble, infusible and brittle. But modified alkyd resins have tremendous demands in different industries like coating industry, adhesive industry etc.

MAY 1984
Modified Alkyd Resins

Alkyd resins can be modified by reacting with different suitable chemicals, but mostly it is done by reacting with different fatty acids and drying oils like linseed oil, tung oil, fish oil, castor oil etc.

There are three general methods of processing modified alkyd resins: (1) the fatty acid process (2) the monoglyceride process and (3) the solvent process.

Fatty acid process

In this method, the glycerine, phthalic anhydride and fatty acid are placed in a reactor and heated to 205–232°C until the required acid value and viscosity are obtained.

Monoglyceride process

In this process 2 moles of glycerine is heated with 1 mole of oil upto 232°C when monoglyceride is produced.

\[
\begin{align*}
\text{CH}_3\text{--OOCR} & \quad \text{CH}_2\text{OH} \\
\text{CH} & \quad \text{OOCR} + 2 \text{CHOH} \rightarrow \\
\text{CH}_3\text{--OCR} & \quad \text{CH}_2\text{OH} \\
\text{CH}_2\text{--C} & \quad \text{R} \\
3 \text{CHOH} & \\
\text{CH}_2\text{OH} & \\
\text{Monoglyceride}
\end{align*}
\]

To this monoglyceride required quantity of phthalic anhydride is added and heating continued up to the proper end-point.

Solvent process

The mixture of glycerine, phthalic anhydride and fatty acid is dissolved in 10% suitable water-immiscible solvent and heating continued as usual to get the final product. This solvent promotes better control by reducing the viscosity and provides good means of water removal by azeotropic distillation.

During modification the fatty acid reacts with the free hydroxyl groups of the alkyd resins and thus modify the polymer. The progress of the reaction may be followed by measuring the unreacted acid groups, the water given off, and the viscosity. The reaction must be stopped at a point short of gelation, but the molecular weight must be sufficiently high to form a good film.

The final cross-linking of the film depends on further polymerization of the alkyd at the gel point in the case of baked finishes. In air-drying coatings, the final cross-linking is due to reaction at the double bond of the drying oil fatty acid portion of the alkyd with oxygen. When alkyd is modified with styrene, the resultant product is quick drying and the dried product shows good hardness but poor solvent resistance.

Use

Modified alkyd resins are extensively used in paints, varnishes and lacquers to improve the gloss and bonding of the products towards different surfaces. They are used as binders for glass wool, wood dust and many other similar materials. They have uses in ceramic, textile, leather, paper, plywood and many other industries.
ANALYZING GDP DATA: INDIA’S ECONOMY IS NO LONGER ONE OF THE COOL KIDS

When Reserve Bank of India officials reviewed the global economy at February’s meeting, they ticked off a list of major emerging markets that had struggled: China, Russia, Brazil and South Africa all got a must-do-better grade.

Disappointing numbers released Thursday mean policy makers can add one closer to home: India itself. Gross domestic product rose 6.6 per cent in the final three months of last year, down from 7 per cent in the third quarter and 8 percent in the period before that.

It’s not the figure per se; the miss versus economists’ estimates was insignificant. It’s that India should be doing better with the avowedly pro-business government wrapping up a five-year term. (No ruling party, anywhere, wants a slowdown heading into an election.)

The downdraft will likely last through midyear. At that point, lower interest rates will start to kick in and the expansion can pick up a bit. The Reserve Bank cut borrowing costs in a surprise move at that Feb. 5-7 meeting. It’s clear from the minutes, released last week, that the Monetary Policy Committee was on to something.

That’s generally what you expect to happen, given lags between policy decisions and effects on the ground. But it’s worth taking a step back and asking: Is this performance the kind of thing that propels a country to superpower status?

Not only is growth slowing, but like other emerging – and fully emerged – markets, inflation is basically nowhere. Nowhere, and receding. That opens up space for central banks, for sure.

You also have to ask whether these places have lost some of the key qualities that used to define emerging markets: high growth, relative to the West, and high inflation. They are looking more normal, or at least less abnormal.

China, the Asian country with which India is most commonly compared, is also in the growth doldrums at the moment. That torpor comes within the long-term context of GDP growth slowing from the double-digit years of the aughts. China’s expansion touched 15 per cent in 2007. India hasn’t come anywhere close.

Not those gangbuster economies are always good. China’s economy has its flaws. Much of the reason the country hasn’t gone open-slather in monetary easing has been a wariness to build up too much debt. The People’s Bank of China is still trying to deal with the aftermath of previous stimulus efforts.

When it comes to the institutional framework, there are obviously massive differences between India and China. Any leader in India must contend with parliament, the courts and state governments. Also known as democracy. That limits how quickly stuff can get done. It can also save politicians from serious mistakes. China has competing interests and constituencies as well, but it’s not the same sport, let alone ballpark.

So where does this leave India right now? More interest-rate cuts and fiscal priming ahead of national elections in the next few months. It’s not hard to see a rate reduction before the next scheduled RBI meeting in April. In that sense, the data is moving in the committee’s favour.

(Business Standard – 28/02/2019)

GROWTH SLIPS: SLOWDOWN IN FARM, MANUFACTURING PUSH INDIA’S GDP GROWTH DOWN TO 6.6%
Economic Corner

The upward revision in nominal GDP for FY19 to Rs 190.54 lakh crore in the second advance estimate from Rs 188.41 lakh crore announced in the first advance estimate would contain FY19 fiscal deficit at 3.3% of GDP, the original target, against the revised estimate of 3.4%, if other budget numbers hold good.

Gross value added grew just 6.3% in the third quarter, against 6.8% in the previous quarter. With manufacturing, agriculture and small services faltering and government spending slowing, India’s gross domestic product (GDP) grew at a five-quarter low rate of 6.6% in the September-December period (Q3) of the current fiscal, official data revealed on Thursday.

The Central Statistics Office (CSO) also revised down the growth rates for Q1 (from 8.2% to 8%) and Q2 (from 7.1% to 7%) and also that for the full fiscal year to 7% — a five-year trough — from 7.2% in the first advance estimate released in January.

While the fall in growth rates, given a loss of momentum observed since Q2, including in the high-frequency data available for post-Q3 period (eight core infrastructure industries growth declined to a 19-month low at 1.8% in January and services PMI fell for the second straight month), economists predicted the growth to be more anaemic in Q4 at 6.1-6.4%, with a recovery to be expected in Q1 next year or thereafter.

The upward revision in nominal GDP for FY19 to Rs 190.54 lakh crore in the second advance estimate from Rs 188.41 lakh crore announced in the first advance estimate would contain FY19 fiscal deficit at 3.3% of GDP, the original target, against the revised estimate of 3.4%, if other budget numbers hold good.

Along with the change in growth rates, the CSO also undertook significant revisions of the relative strengths of the various components of the economy. For instance, while the annual growth in private consumption expenditure was earlier stated to have slowed from 8.6% in Q1 to 7% in Q2, as per Thursday’s data, this largest pillar of the economy expanded from 6.9% in Q1 to 9.8% in Q2 and then slowed to 8.4% in Q3. Also, fixed investment, which was assumed to have picked up and grown at 12.5% in Q2 from 10% in the previous quarter, is now seen to have slowed from Q4 last year (14.4%) to Q2 (10.2%) before recording a mild recovery in Q3 (10.6%).

Gross value added grew just 6.3% in the third quarter, against 6.8% in the previous quarter. However, growth in financial services accelerated for a third straight quarter, from just 5% in Q4FY18 to 7.3% in the December quarter. Net exports continue to remain a drag on the GDP, although its impact has eased a tad in the third quarter. A pick-up is visible in the construction sector. In the near term, a moderate boost to consumption due to the Rs 20,000 crore income-support scheme for farmers and some direct (IT reliefs announced in Budget) and indirect tax (GST cuts for housing) reliefs is seen to be a positive for growth along with the 0.25% cut in the repo rate by the RBI in the policy review earlier this month. Also, the fact that capacity utilisation in many firms has reached the 80% threshold where they typically start fresh investments also bodes well for the economy.

A slowing of overall government spending (Centre’s capex in April-January this year was down 13% from a year ago; farm loan waivers may hit the state’s ability to keep capex at budgeted levels; PSUs’ ability to prop up investment demand has got reduced too) is however a potential dampener.

Aurodeep Nandi, India economist at Nomura, said the lower growth rate essentially shows the cyclical slowdown entrenching itself. “Going ahead we do expect further moderation on tighter financial conditions, weaker global demand and political uncertainty.”

(Workers Express – 01/03/2019)

PAN LINK TO BANK ACCOUNTS MUST FOR TAX REFUNDS

The I-T Department said the bank account could be either savings, current, cash or overdraft.

HIGHLIGHTS

✦ So far, the department issued tax refunds either in bank accounts or through account payee cheques
✦ It said those who have not linked their PAN with their bank account should provide it to their home bank branch
The Income-Tax (I-T) Department will only issue electronic refunds directly into taxpayers’ bank accounts from March 1.

The Income-Tax (I-T) Department will only issue electronic refunds directly into taxpayers’ bank accounts from March 1 and they should link PAN with their accounts, according to an official communication.

“Link your PAN (permanent account number) with your bank account to get your refund directly, swiftly and securely,” the department said in a public advisory issued. The I-T Department said the bank account could be either savings, current, cash or overdraft.

So far, the department issued tax refunds either in bank accounts or through account payee cheques, depending on the category of taxpayers.

It said those who have not linked their PAN with their bank account should provide it to their home bank branch and also validate this over the e-filing website of the I-T Department.

Economic Times – 18/02/2019

GST KITTY FALLS IN FEB’ 19

The fiscal deficit during the April-Jan period touched Rs 7.7 lakh cr or 12.5 % of the original budgeted target for the current financial year.

The govt has lowered the GST collection target for the current fiscal to Rs 11.47 lakh crore in the revised estimates from Rs 13.71 lakh crore budgeted initially. For 2019-20, the target is Rs 13.71 lakh crore. The number of sales returns or GSTR-3B filed for the month of January up to February. The Goods and Services Tax collection fell below the Rs 1-lakh-crore-mark to Rs 97,247 crore in February, which has raised concerns about the government meeting its revised fiscal deficit target of 3.4 per cent of GDP for the current fiscal.

“The total gross GST revenue collected in February 2019 is Rs 97,247 crore, of which central GST is Rs 17,626 crore, state GST (SGST) is Rs 24,192 crore, integrated GST (IGST) is Rs 46,953 crore and cess is Rs 8,476 crore,” the finance ministry said. The GST collection had touched Rs 1.02 lakh crore in the previous month.

“The marginal drop in the February GST collections compared with January could be on account of the full-month effects of the earlier rate reductions. Since the collections for the year are significantly behind target, the government would now hope that the expansion of the tax base, which has been facilitated by having reasonable rates, would improve collections in the next fiscal,” said M.S. Mani, partner at Deloitte India.

Abhishek Jain, tax partner, EY, said: “While GST collections are in line with the average collection in this financial year, it has witnessed a slight dip vis-a-vis the previous month, which could possibly be due to the impact of rate rationalization from January.”

The Goods and Services Tax (GST) collections in the current fiscal till February totalled Rs 10.70 lakh crore. The government has lowered the GST collection target for the current fiscal to Rs 11.47 lakh crore in the revised estimates from Rs 13.71 lakh crore budgeted initially. For 2019-20, the target is Rs 13.71 lakh crore. The number of sales returns or GSTR-3B filed for the month of January up to February 28, 2019 is 73.48 lakh.

The fiscal deficit or the gap between the government’s expenditure and revenue, during the April-January period touched Rs 7.7 lakh crore or 121.5 per cent of the original budgeted target for the current financial year. Officials said the government was trying to contain the runaway budget deficit by speeding up divestment and trying to mop up tax collections.

(The Telegraph – 01/03/2019)
### ILTA PUBLICATION

**Now available**

<table>
<thead>
<tr>
<th>Title of the Book</th>
<th>Author</th>
<th>Price per copy*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatise on Fatliquors and Fatliquoring of Leather</td>
<td>Dr. Samir Dasgupta</td>
<td>₹ 1500.00 / $ 60.00</td>
</tr>
<tr>
<td>Comprehensive Footwear Technology</td>
<td>Mr. Somenath Ganguly</td>
<td>₹ 500.00 / $ 50.00</td>
</tr>
<tr>
<td>An Introduction to the Principles of Leather Manufacture</td>
<td>Prof. S. S. Dutta</td>
<td>₹ 800.00 / $ 50.00</td>
</tr>
<tr>
<td>Analytical Chemistry of Leather Manufacture</td>
<td>Mr. P. K. Sarkar</td>
<td>₹ 300.00 / $ 10.00</td>
</tr>
<tr>
<td>Synthetic Tanning Agents</td>
<td>Dr. Samir Dasgupta</td>
<td>₹ 900.00 / $ 30.00</td>
</tr>
<tr>
<td>Hand-Book of Tanning</td>
<td>Prof. B. M. Das</td>
<td>₹ 750.00 / $ 25.00</td>
</tr>
</tbody>
</table>

*Packing and forwarding charge extra*

Send your enquiries to:

**Indian Leather Technologists' Association**

*Sanjoy Bhavan*, 3rd Floor, 44, Shanti Pally, Kolkata - 700 107, WB, India
Phone : 91-33-2441-3429 / 3459 Telefax : 91-33-2441-7320
E-mail : admin@iltaonleather.org; mailto:ita@rediffmail.com
Website : www.iltaonleather.org
The Indian Leather Technologists' Association (ILTA) was founded by Late Prof. B. M. Das, the originator of Cow Skinway, IVory and Sifter of Indian Leather Science on 14th August 1952. The primary objectives of the Indian Leather Technologists' Association which continue to Diamond Jubilee year 2020 are:

- To bring all concerned with the slaughter of the leather industry on a common platform.
- To arrange seminars, symposiums, workshops, in order to create interest in, knowledge and latest development in the industry as well as to encourage the younger generation to play a key role in the industry.
- To publish monthly journal as a supplement to those above objectives. The monthly journal of ILTA is known as Indian Journal of Leather Technologists' Association and is the most widely circulated technical journal concerning leather industry.
- To publish books for the benefit of students and to contribute to the research activities.
- To help industrialists and end users, MNCs
- To assist Planning Commissions, various Government Institutions, Ministry and autonomous bodies in formulating approaches and practices acceptable to the leather industry.
- To organise practical training and workshops for end users and teachers, and also to conduct exhibitions for technology.
- To take up any socio-economic activity ILTA has donated Rs 1 lac to Central Bank of India towards relief of earthquake victims in Nepal on 14th Sept., 2015

INTERNATIONAL & NATIONAL SEMINARS:

- ILTA arranges seminars and symposiums in collaboration with academicians, laboratories, research institutions, etc., for the benefit of all concerned.
- The seminars are conducted in Morning and evening sessions.
- The events include seminars on various topics, including but not limited to leather manufacturing, technology, research, and development.

PUBLICATION:

- ILTA has published various technical books, journals, and periodicals related to the leather industry.

AWARDS OF EXCELLENCE:

- ILTA awards include awards for outstanding contributions to the leather industry, given to both individuals and organizations.

MEMBERS:

The Association's members consist of professionals and scientists from the leather industry, including researchers, academics, and practitioners.

ESTABLISHMENTS:

In order to strengthen its activities, ILTA has established a new center (ILTA New Delhi) in 2013, which has been instrumental in fostering the growth of the leather industry in the region. The center regularly conducts workshops, seminars, and training programs to equip individuals with the necessary skills and knowledge to succeed in the leather industry.