

INTERNATIONAL AND NATIONAL ADVISORY COMMITTEE MEMBERS

- Dr. A. Jaythilak, Chairman, Rubber Board, India
- Prof. Katrina Cornish, OSU, USA
- Prof. D. T. Ray, UA', TUCSON, USA
- Prof. Diana Jasso Cantu, UAAAN, Saltillo, Mexico
- Mr. Mohinder Gupta, President, AIRIA, India
- Dr. P. Thavamani, Sabic, UAE
- Mr. R. Budharaja, ATMA, Delhi
- Mr. Raghupati Singhania, Chairman IRMRA
- Prof. A. K. Bhowmick, RTC, IIT Kgp
- Prof. Rintu Banerjee, AgFE, IIT Kgp
- Prof. K. N. Tiwari, AgFE, IIT Kgp
- Prof. V. K. Tiwari, AgFE, IIT Kgp
- Dr. A. K. Sikka, DDG, ICAR, New Delhi
- Dr. M. M. Roy, Director, CAZRI, Rajasthan
- Dr. Bhag Mal, APAARI, Bangkok, Thailand
- Mr. M. M. Patel, AIRIA, Mumbai
- Dr. D. K. Setua, DMSRDE, Kanpur
- Dr. Neeraj Sharma, TDB, DST, New Delhi
- Mr. V. K. Rathod, Reliance Ltd., India
- Dr. S. K. Bhatnagar, IRSL, India
- Prof. Sabu Thomas, MG, Kottayam, India
- James Jacob, RRII, Kottayam, India
- Dr. H. M. Behl, BTS Consultant, India
- Dr. V. V. Sademat, DOLR, World Bank, MRD, New Delhi
- Dr. Hiroshi Mouri, President, Bridgestone, America, Japan
- Les Christofere, Yulex Corporation, Arizona, USA
- Dr. Paul Sanchez, USDA-ARS, Arizona, USA
- Mike Fraley, PAN ARIDUS, CEO, Arizona, USA
- Dr. Paul Sanchez, USDA-ARS, Arizona, USA
- U. K. Banerjee, New Delhi
- K. C. Bansal, Director, NBPGR, New Delhi
- Prof. S K De, Kolkata
- John Powath, Kochi, India
- Dr. Raj Paroda, TAAS, New Delhi
- Manoj Saxena, Cooper Tyres, USA
- Dr. C. S. Rao, CRIDA, Hyderabad
- Dr. R. Panda, Kolkata
- Mr. P.K. Mohamed, Apollo Tyres, Chennai
- Mr. Tom Thomas, CEAT, Mumbai
- Dr. A. S. Deouri, BKT Mumbai
- Mr. S. K. Sarkar, Pulsar, Kolkata



Prof. Diana Jasso of UAAAN, Saltillo, Mexico handing over an uprooted Guayule shrub to Prof. G. B. Nando and Mr. Sawar Dhanania on 07.10.2014



Prof. G. B. Nando and Mr. Sawar Dhanania visiting the Guayule rubber plantation of USDA-ALD at Maricopa, Phoenix, USA [Photo taken by Dr. Paul Sanchez, Research Agronomist USDA on 09.10.2014]

(The list is incomplete)

LOCAL ORGANIZING COMMITTEE MEMBERS

- Prof. G. B. Nando, RTC
- Prof. D. Khastgir, RTC
- Prof. A. K. Bhowmick, RTC
- Prof. T. K. Chaki, RTC
- Prof. N. K. Singha, RTC
- Dr. S. Chattopadhyay, RTC
- Dr. K. Naskar, RTC
- Dr. N. C. Das, RTC
- Prof. Rintu Banerjee, AgFE
- Prof. V. K. Tiwari, AgFE
- Prof. K. N. Tiwari, AgFE
- Prof. S. C. Mohapatra, RDC
- Mr. Bireswar Bannerjee, Rubber Consultant
- Mr. P. Ghosh, Kolkata
- Dr. R. Panda, Kolkata
- Prof. S K De, Kolkata
- Mr. Sawar Dhanania, RTC
- Dr. Swati Neogi, Chem. Engg.
- Dr. Ahindra Nag, Chemistry
- Dr. Rabibrata Mukhopadhyay, Ch.E
- Prof. S. Banerjee, MSC
- Mr. Pradip Das, RTC
- Mr. J. Mitra, RTC
- Mr. Syed Mustaque, RTC
- Mr. B. Dutta, IRI, Kolkata
- Mr. R. Kejriwal, AIRIA, Kolkata

ALL CORRESPONDENCES SHALL BE ADDRESSED TO

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1st NATIONAL WORKSHOP (GNR - 2015)

On

GUAYULE NATURAL RUBBER-A SUSTAINABLE MATERIAL FOR THE RUBBER INDUSTRY IN THE 21ST CENTURY



10th And 11th April, 2015
At
IIT Kharagpur, India

Organized by



Rubber Technology Centre
Indian Institute of Technology, Kharagpur
Kharagpur-721302, India



Sponsored by
Department of Science and Technology,
Government of India, New Delhi.

ABOUT THE WORKSHOP

Guayule (why-oo-lee) as is pronounced is a woody shrub discovered more than 500 years ago in the rocky mountains of Mexico, in South America. Although it is native to Mexico, but it can also grow in arid and semi-arid regions in certain pockets all over the world. The natives of Mexico used to chew the raw bark because of its aroma smell (scent) to get a gummy experience (similar to chewing gum) and collect the same to get a rubbery mass. After almost 350 years it was known to contain natural rubber i.e. cis 1:4 polyisoprene. It is found to have properties very close to that of Hevea Natural Rubber. Since then, it has been considered as an additional source of Natural Rubber. During world war-II thousands of tons of Guayule rubber was produced by Mexico and consumed by USA for automobile tyres.

Again in recent times its popularity has been growing because of the following reasons; (i) The rubber latex derived from Guayule shrub contains less or no protein making it suitable for body contact and other biomedical applications. (ii) Resin to the extent of 5-7% possess antibacterial properties. (iii) The residual shrub (bagasse) can be used for the generation of bio-fuel and bio-energy. (iv) Residual mass can be used as a bio-manure and (v) It can be grown in arid and semi-arid regions.



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ABOUT THE RUBBER TECHNOLOGY CENTRE

Rubber Technology Centre (RTC) is a unique centre of excellence the first of its kind to be established in the country at IIT Kharagpur. It started its journey as a Rubber Technology Laboratory in the year 1955 under the auspices of the then Department of Applied Chemistry for development of technical man power and high quality research in the field of High polymer and Rubber Technology by the Ministry of Higher Education, Government of India. Later an independent Rubber Technology Centre was established in the year 1981 to cater to the need of the growing rubber industries and R&D organizations and Institutions in the country. The centre works hand in hand with the rubber industries in the country and abroad. The center focuses on process and product development and transfer of technology to various rubber industries in the tire and non-tire sectors through its pioneering research activity. The Centre is now well-equipped with different modern analytical instruments required for the basic and applied research in rubber and Polymer Science and Engineering. The state of the art research program of the Centre is focused on the development of new products, novel processing technology, polymer blends and alloys, advanced materials like nano-materials and nano-composites, novel block and graft copolymers, thermoplastic elastomers (TPE) and vulcanizates (TPV), smart materials, thermo-reversible self-healing materials, EMI shielding materials, conductive rubber composites, biomedical applications of polymers and so on.



ABOUT THE INSTITUTE

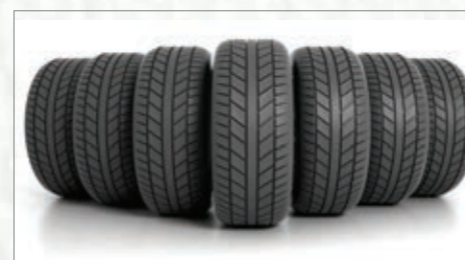
Indian Institute of Technology (IIT) Kharagpur, the first of its kind was established in the year 1951 near Kharagpur at the Hijli Detention Camp in the eastern part of India. Probably this is the only Institute in the world which started its journey from a prison house. This Institute is the largest and oldest among the family of 16 IITs established by the Government of India. It houses 19 Departments, 7 Centers of excellence and 8 Schools in a lush green and serene surrounding free from urban noise and pollution, representing the modern "Gurukul Ashram" of the developed India. The campus provides modern amenities to the residents like green parks, huge playgrounds, big auditoriums, students' hostels, residences for faculty and staff members, health care centre, cultural-cum-social and recreational zones for campus community and so on.



THE LIST OF INVITED SPEAKER IN THE WORKSHOP

1. Dr. Arup Chandra, Apollo Tyres, Chennai.
2. Dr. D. K. Setua, DMSRDE, Kanpur.
3. Dr. Neeraj Sharma, DST, New Delhi.
4. Dr. B. S. Phogat, NBPGR, ICAR, New Delhi.
5. Dr. H. M. Behl, Senior Consultant, Lucknow
6. Dr. M. M. Roy, CAZRI, Rajasthan.
7. Dr. O. P. Sidhu, NBRI, Lucknow.
8. Prof. Rintu Banerjee, AgFE, Bio-energy Research Centre, IIT Kgp
9. Prof. Anil K. Bhowmick, RTC, IIT Kgp

(The list is incomplete)



PARTICIPATION AND REGISTRATION

Participation to this workshop is only on invitation. However, researchers from Agriculture Engineering, Rural Technology, Bio-energy Technology, Rubber Technology, Rubber Industries, Chemical Engineering, Chemistry and Bio-technology are invited to participate.

There is no registration fee for the participants. But all the participants must register in advance for the workshop.

Location: Kharagpur is about 120 Kms away from Kolkata, well connected by Rail and Road. The nearest airport is N.S.C. Bose International Airport, Kolkata which is approx 145 kms away from IIT Kharagpur.

Venue and Date: The workshop shall be held at IIT Kharagpur on 10th and 11th April, 2015.

Accommodation: Accommodation to the invited speakers shall be provided at the Technology Guest House, IIT Kharagpur. Accommodation for other participants shall be provided on request at Technology Guest House on payment basis as per tariff given below:

AC Single occupancy : Rs. 800/- per night

AC Double occupancy : Rs. 1,200/- per night

- **Patron:** Prof. P.P. Chakroborty, Director, IIT Kgp
- **Chairman:** Prof. D. Khastgir, Head, RTC
- **Convener:** Prof. G. B. Nando, Professor, RTC
- **Co-convener:** Dr. S. Chattopadhyay, Assoc. Professor, RTC
Mr. S. Dhanania, Sr. Research Fellow (Sponsored), RTC
- **Treasurer:** Dr. K. Naskar, Assoc. Professor, RTC

SPONSORSHIP

- Technology Partners: Rs. 50,000/-
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- Full page Advertisement: Rs. 15,000/-

Cheque/ DD must be drawn in favour of CEP-STC, IIT Kharagpur and sent by Registered post to the convener Prof. G. B. Nando.

RTGS/ NEFT details:

- Bank Name: Syndicate Bank
- A/CName: CEP-STC, IIT Kharagpur
- Branch Name: SRIC, IIT Kharagpur-721302
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