

# THE RUBBER INTERNATIONAL

US\$ 15.-

A MONTHLY MAGAZINE ON NATURAL & SYNTHETIC RUBBER / PLASTICS / RELATED INDUSTRIES



## The More Rapid Growth Comes, the More Urgency to Recycle

**ANRPC warns of natural rubber shortfall**

**Silver nanowires embedded in elastomer create smart windows**



## COVER STORY

7 The More Rapid Growth Comes, the More Urgency to Recycle

## NR & SR ASSOCIATION

- 14 - ANRPC warns of natural rubber shortfall
- Antidumping duties slow China tire exports
- 15 - RMA projects record U.S. tire shipments in 2016

## ASEAN FOCUS

16 These are the world's most expensive cities

## SMART COMPANY

18 Titan begins operating Canadian tire recycling facility

## SCOOP

20 Thailand invites MRPMA to Rubber City for investment opportunities

## ON TOPIC

- 23 Silver nanowires embedded in elastomer create smart windows
- 24 Remarkable technologies to reduce protein in natural rubber announced

## SPECIAL ARTICLE

26 Boat made from recyclable thermoplastic composite

## ARTICLE

28 Rubber roads not quite shape up for prime time

## HIGH PERFORMANCE MATERIALS

30 Inedible plant waste and CO2 could replace PET in plastics

## INVESTMENT

32 Investment opportunities for the polyurethanes industry in Iran

## RESEARCH & DEVELOPMENT

39 Rubber Seals, Gaskets, Diaphragms and Miscellaneous Rubber Products (Part.2)

## PLASTIC TECHNOLOGY

43 ORNL researchers invent tougher plastic with 50 percent renewable content

## MARKET REPORT

46 Positive outlook for world rubber industry

## NEW PRODUCT INNOVATION

49 Sumitomo Adds 4 Tires to Falken Brand TBR Line

## REGIONAL PLASTICS INDUSTRY

50 Strengths of Vietnam's plastic industry

## POST SHOW

52 Bangkok Hosted 3<sup>rd</sup> Edition of GRTE 2016 - Global Rubber, Latex & Tire Expo 2016

## THE BIG PICTURE

63 Global Polyurethane Market Set for Growth

## TYRE REPORT

68 World tyre demand continues to inflate

## BRIGHT IDEAS & MORE

70 Rubber Mallet from hot glue

## MACHINES & TOOLS

72 Davis-Standard building all blow molder accumulator heads at Pawcatuck Facility

73 Mono is alive and bio is coming

74 NEW Saturn® G-4X refiner mill design for crumb rubber delivers higher processing, finer powder and savings in lubricant and energy consumption

## AFET RUBBER REVIEW

75 AFET Rubber Trade in March 2016

## 12 SOCIAL ACTIVITY

## 54 HOT NEWS

## 58 CLASSIFIEDS

## 64 TYRE & AUTO

## 76 STATISTICS

## 80 CALENDAR

## 81 SUBSCRIPTION FORM

## 82 ADVERTISING INDEX