Renaissance Mumbai Convention Centre Hotel
Mumbai, India
Monday, January 21, 2013

__________________________________________

Rubber Day India

Opening Speech
“High-Tech Rubber for Mobility
and Emerging Trends”

Dr. Rainier van Roessel
Member of the Board of Management
LANXESS AG

(Please check against delivery)
Good morning. And welcome to LANXESS’ Rubber Day India.

Many years ago, one of this country’s founding fathers, Prime Minister Nehru, said that “time is not measured by the passing of years but by what one does … and what one achieves.”

I agree completely. But as a businessman, I am compelled to think about achievements largely in terms of numbers – gross revenue, net income, rates of growth.

In many parts of the world, 2012 was not a great success when we measure its achievements in this way. The global economy experienced a cyclical slowdown, and the business headlines were full of negative sentiments.

But even though India’s GDP growth slowed somewhat – falling below 6 percent – it is still more than double the world average.

Indeed, India is outperforming the rest of world on multiple fronts.

Steel consumption here grew by 6.9 percent in 2012 and is expected to grow by 9.4 percent in 2013.

Revenue from India’s pharmaceutical sector leapt incredibly by more than 20 percent in the past year.

And those of us in the chemical sector remain keenly aware of the many good reasons to continue investing heavily in this country.

No sector in India justifies that confidence more than the transportation sector.

In 2000, India was the 15th largest manufacturer of automobiles in the world.

Today it is the sixth largest.
With the passing of just 12 years … that is a tremendous achievement.

And the sector will continue to grow rapidly.

Currently, less than 1 percent of Indians own a car, compared with a regional average of more than 16 percent.

That leaves room for significant growth.

India's Automotive Mission Plan foresees that by 2016, the automotive sector will account for more than 10 percent of India’s GDP and employ 25 million more people than it did in 2006.

The latest figures confirm that the country is on track to meet these targets.

But rapid growth comes with major technical challenges. These are the challenges that we will discuss today.

For the transportation sector as we know it is not sustainable.

In India alone, millions of people have joined the middle class in the last 10 years. They have earned the opportunity to buy cars, to travel, to be more mobile.

That is progress … but our planet cannot sustain endless increases in emissions and fuel consumption.

So, we must find ways to enable greater mobility with less resource consumption.

In so doing, it will be possible to provide millions more people in India with transportation options that are safer, faster and less expensive.

The rubber industry will play a pivotal role in meeting this challenge.
Rubber is central to our heritage at LANXESS. In fact, synthetic rubber was invented in the laboratories of our predecessor company 104 years ago.

Today we are the world leader in synthetic rubber.

We continue developing new applications and opening new markets for this versatile material.

And as a leading specialty chemicals company, LANXESS has been working closely with our customers to develop the technologies that enable “Green Tires”.

These are tires that reduce rolling resistance without sacrificing safety or durability.

This is just one field in which we are delivering value to our customers … providing premium products, world-class technical expertise and German technological innovation.

We are entirely committed to growing with our partners here in India … which is why we are holding this conference.

Two global megatrends that will continue to drive growth in India are the rapid increase in mobility … and accelerating urbanization.

Rubber is vital to both of these megatrends.

And in today’s four panels, we will discuss how the rubber industry can help ensure that India meets the challenges posed by these megatrends.

As you will hear in the first panel, the future of mobility is closely tied to developments in synthetic rubber.
The first efforts to synthesize rubber more than a century ago were motivated by the need for an alternative way to produce car tires.

Natural rubber was expensive and the supply chain was unreliable, so chemists around the world looked for possible replacements.

Automotive applications still dominate our industry today. Tires alone account for roughly half of all rubber consumption globally.

Developments in synthetic rubber have delivered numerous advances in transport technology, and they will continue to do so in the future.

At LANXESS, we manufacture grades of rubber and rubber chemicals that are driving developments in the technology of mobility.

For example, Buna CB is a type of polybutadiene rubber that improves abrasion resistance in tires and reduces heat buildup. That means less energy is wasted … and the tires themselves last longer.

From our Rhein Chemie subsidiary, Rhenogran is a line of polymer-bound additives that improve manufacturing processes for rubber auto parts … and result in better products.

We are particularly known for our premium halobutyl, which makes the inner liners of tubeless tires airtight.

Without this product, radial tires – and high-performance “Green Tires” – are not possible. And only a few companies in the world are capable of producing it.

Our second panel will address innovation in rubber for a greener tomorrow.

LANXESS believes that environmental conservation is vitally important.
Studies show that 20 to 30 percent of an automobile’s fuel consumption and 24 percent of its CO₂ emissions are related to tires.

New technologies make it possible to reduce those numbers dramatically.

A tire’s efficiency depends on its design and the materials used to manufacture it. The science behind the rubber molecules that make up a tire is just as important as the engineering behind the tread designs and sidewall construction.

With modern polymer chemistry, it is now possible to expand the “magic triangle” of tire design.

The magic triangle is the old rule of thumb that it is impossible to improve any of the three major performance characteristics of tires – durability, rolling resistance or traction – without diminishing the other two.

But with modern materials like neodymium-catalyzed polybutadiene rubber, all three characteristics can be improved simultaneously, without any sacrifice in performance.

In India, “Green Tires” represent a leapfrog technology. Drivers are transitioning directly from old tube tires to high-performance radials, without ever using conventional radials.

Inefficient tube tires are still commonplace here – especially on commercial vehicles.

Tires for trucks, buses and other large vehicles represent nearly 60 percent of sales revenue in the Indian market. But it is estimated that no more than 15 percent of these are radial tires.

This is changing quickly. Demand for radials is growing rapidly as the highway network improves, as new safety requirements are
implemented, and as manufacturers expand their capacity to produce radials here.

Policymakers will have a significant impact on how quickly this transition takes place.

In Europe and other parts of the world, new tire-labeling rules are hastening the adoption of “Green Tires.”

Ultimately, we hope that other large markets, like India and the United States, will similarly embrace the benefits of tire labeling.

In today’s third panel, we will hear about technological trends in other rubber components used in automobiles.

Automotive design has advanced significantly in recent years – and the improvements go well beyond tire designs.

Today’s cars feature smaller, more efficient engines – operating at higher temperatures.

Thus tougher, more heat-resistant rubber is needed for the gaskets and seals that go into modern engines and transmissions.

Our industry has responded with new grades of hydrogenated nitrile rubber.

Next-generation elastomers like LANXESS’ Therban are characterized by a highly saturated molecular structure that resists extreme temperatures and aggressive lubricants.

In one interesting application, Therban is found in the toothed belts of Volkswagen’s remarkably efficient turbocharged direct injection diesel engines.
New grades of rubber are also being developed to stand up to the challenges posed by biofuels and other drivetrain technologies, like fuel cells.

Varieties of Therban have been engineered for use with biofuels, which typically cause rapid degradation in many types of conventional rubber.

Thanks to their extremely low residual double bond content, we can provide engine designers with hydrogenated nitrile rubbers that are as robust as fluororubbers, but with the added benefit of superior dynamic load resistance.

Fuel cell engines present challenges of their own, partly due to their high operating temperatures. For these applications, chemists have created special-purpose varieties of rubber – like Nanoprene – which work well in fuel cell membranes at temperatures well over 150 degrees Celsius.

So there is no shortage of evidence that rubber technology is evolving hand-in-hand with engine technology, and we will be hearing more today about what this means to growth in mobility, both in India and around the globe.

Our last panel will address the critical issue of what our industry can do to enhance safety in the Indian transportation sector.

As everyone is aware, India has some of the worst vehicle accident rates in the world. The current situation is unacceptable.

While this problem has many sources, better technology is one of the solutions.

And safer tires represent an important part of that equation.
In 2010, LANXESS commissioned a road safety study to assess the impact of safer tires. A key finding was that high-performance tires can reduce braking distance by 50 percent.

The result is that 5 percent of all accidents could be avoided by installing better tires on vehicles.

The safest tires manufactured today rely on rubber formulations like high-performance neodymium polybutadiene and solution styrene-butadiene.

And the rubber industry keeps finding new ways to improve the safety of tires beyond what has already been achieved.

For instance, innovations involving nanogels and silica fillers have led to tires with better road grip … shorter braking distances … lower likelihood of skidding … increased durability … and higher fuel efficiency.

Several new uses for bromobutyl rubber in tire treads are also notable. LANXESS researchers have found that this variety of halobutyl can enhance tire traction and safety performance.

The latest, high-performance radial tires are ideal for the smaller cars currently being sold in India by the millions.

This last panel will also discuss India's ambitious plans to improve the national highway system, and to develop legislation addressing road safety.

Of course, not every advance in mobility and urbanization involves rubber technology.

But … without advanced rubber technology, it would be dramatically more difficult, or even impossible, for manufacturers to meet the demand for safer and more efficient vehicles and buildings.
LANXESS is proud to be among the foremost chemical companies working to meet that demand.

In Jhagadia, Gujarat, our state-of-the-art plant for rubber chemicals illustrates our commitment to India’s rapidly growing rubber industry.

Our Rubber Technical Center in Mumbai is dedicated to helping our customers find the best ways to meet their distinct needs.

And in Singapore, we are now building the largest butyl rubber production facility in Asia. When complete, one of its primary missions will be serving the Indian market.

At LANXESS, our goal is to provide manufacturers with the materials essential to producing high-performance tires, efficient motor vehicles, and other products that require premium grades of synthetic rubber.

We will do our part to ensure that India meets the goals of the Automotive Mission Plan for 2016.

Time is indeed measured by one’s achievements.

And I am sure that all of us here today are eager to use our time together fruitfully.

Thank you.

Forward-Looking Statements.
This news release may contain forward-looking statements based on current assumptions and forecasts made by LANXESS AG management. Various known and unknown risks, uncertainties and other factors could lead to material differences between the actual future results, financial situation, development or performance of the company and the estimates given here. The company assumes no liability whatsoever to update these forward-looking statements or to conform them to future events or developments.