## **19th March** h 4:35 pm

# Tire compound circularity through recycling components



### **Dr Fabio Bacchelli**

Head of technical management tyre, styrenics modification and SBR/BR compounding

A major target for increasing circularity in the tire industry is to find a technology for re-compounding ELT tires. The sustainability of new tire production and retreading can be enhanced not only through circular-attributed polymers from R-oil but also by introducing recycled rubber from both devulcanization and micronization. eSBR with microdispersed ELT powder is combined with devulcanized and fresh rubber to maximize the recycled component. Curing, properties and aging are investigated.

#### WHAT THE AUDIENCE WILL LEARN

- The circularity or rubber compounds
- Micronized rubber powder dispersion
- Compounding with devulcanized rubber

## 20<sup>th</sup> March h 2:50 pm

# New functionalized LiBR for enhanced tire compounds

### **Federico Grasso**

Technical manager - Tire

The development of new tire compounds is currently driven by enhanced performance, high fuel efficiency, durability and sustainability concepts. A new-generation fn-LiBR is introduced to provide optimal solutions for enhanced tire applications. Combinations of fn-LiBR with fn-SSBR or NR systems are discussed and results compared to reference Nd-BR. The eco-sustainability of elastomers can be ensured through the mass balance approach, by the adoption of ISCC Plus certified monomers.

#### WHAT THE AUDIENCE WILL LEARN

- Use of fn-LiBR in low-RR tires
- Bio-attributed polymers and mass balance approach
- Suitable polymer combinations for the improvement of tire performance
- Summer and all-season silica tread recipes