



World Materials Forum, June 29-30, 2017

# Crowdsourcing Material Solutions To Enhance New Mobility

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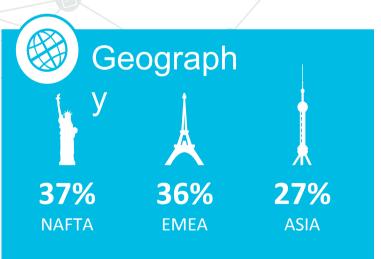


# World's largest online network of mat. engineers









# Materials innovation is not only in Products





Using online networks: faster innovation + boosted success rate

#### **Material Suppliers**

- Find new applications
- Find co-development partners
- Launch new products

- ..

Agile R&D
Open Innovation
Crowdsourcing



- Scout new technos
- Select right materials
- Partner with new suppliers

-



## **New Technologies looking for Applications**





Strategic marketing services, incl. crowdsourcing, to find application



Publication + Crowdsourcing on SpecialChem Online Network

Material Concepts







Applications and co-dev partners found within future vehicles

Self-repairing scratches vehicle interior surfaces (door panel, dashboard...)

Self-repairing paints

Self-repairing tyres



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#### Car engineers looking for new solutions



"Seeking A Curved Display To Be Bonded To Glass Or Plastics For Automotive Interior Applications"



A dozen of proposals received

Ready-to-use technologies

Publication + Crowdsourcing

Request For 
Proposal 
Online Network





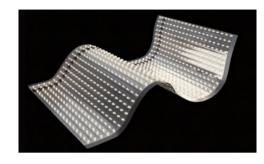
Emerging technologies

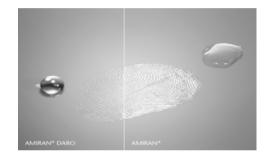
# Mobility technologies: scouting missions ran





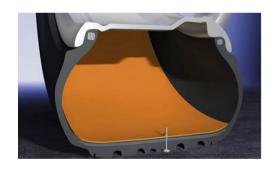
"Seeking Optical Coating To Guide Light in Transparent Polymer"





"Seeking Anti-fingerprint Technology to Improve Appearance of Screens"

> "Seeking Self-sealing and Puncture-proof Solution for Passenger Tyres"





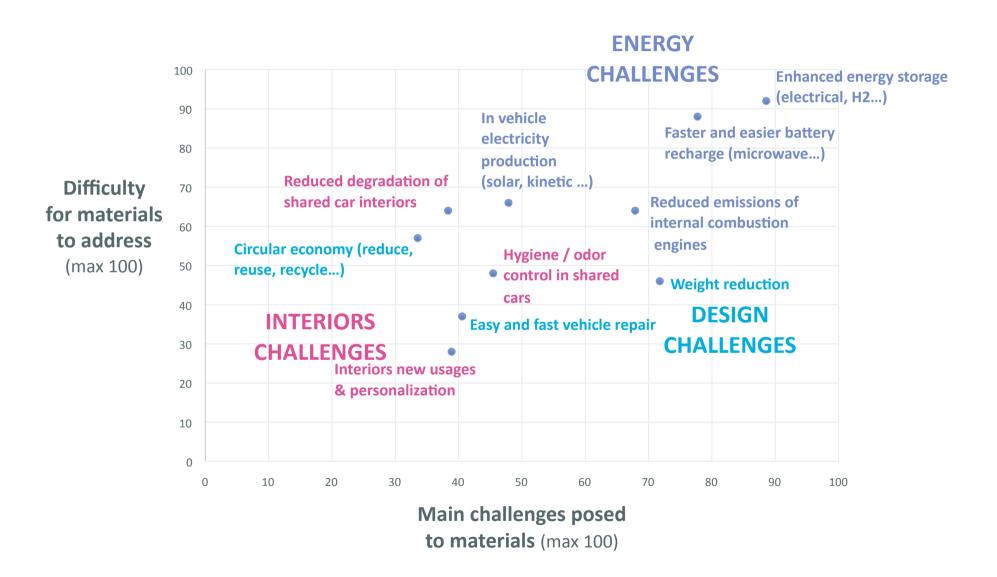
"Seeking Scratch Resistant Technology for Talc Filled Polyolefins"

# New mobility: top challenges for materials





We asked our community of materials engineers

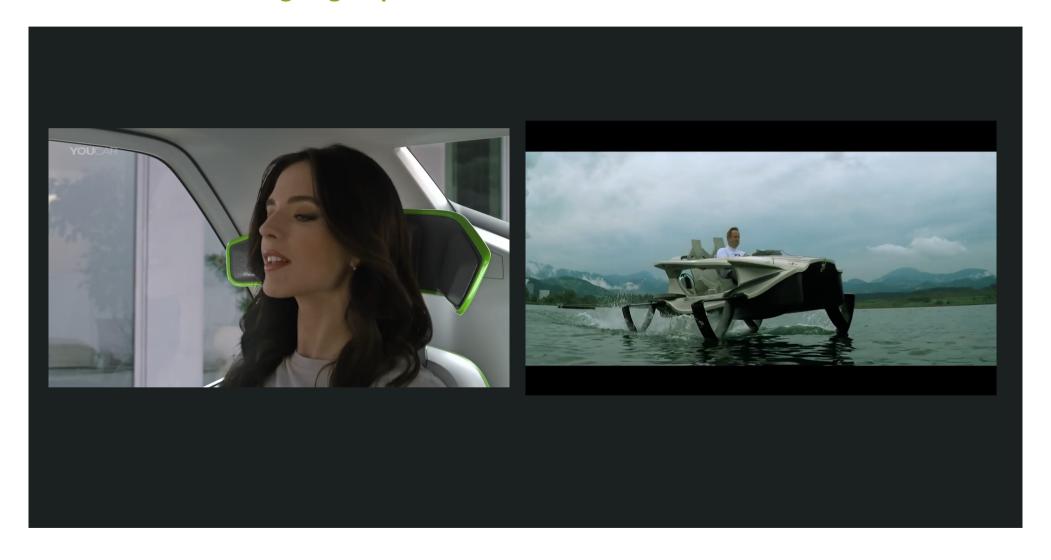


#### >20?0: "out of the box" + out of the road





What about using virgin spaces like air and rivers?



# Clear mobility trends, unclear materials outcome





Autonomous driving

- Electrification
- Buying mobility and sharing vs owning



- Less Pollution
- Less Accidents
- Less traffic congestion



• Lighter cars

- Battery heavier than ICE
- Reduced safety margins
- Growing car production
- Circularity: re-use, reduce, recycle
- Higher usage intensity
- More renewable materials
- ....

• Cars with specific usages

#### Overall reduction of material consumption?

On avg per car? Overall in industry? **UNCLEAR** 

#### **Material innovations** are badly needed

Higher value per kg of materials **CLEAR**