

# Explore DuPont Innovation Center, Meyrin

November 8, 2018

INSEAD alumni visited DuPont's Innovation Center in Meyrin to hear about the company's innovation strategy, the activity it drives, and the markets it serves. Attendees came from diverse industries and age groups: from Generation Z to baby boomers. The diversity of professional backgrounds and interests led to a lively discussion during the presentation by Dr. Simone Arizzi, DuPont Switzerland Country Leader, Technology & Innovation Director EMEA, and Alessandra Bonvini, DuPont Geneva Innovation Center Leader.



"There were many challenging questions & inspiring discussions in the group, which reflects the broad impact of materials innovation. It is relevant to the future of many industries, businesses, and our lives. Participants were encouraged to share their experience and express

their curiosity, key traits of our alumni events," commented Ingrida Elijosiute, IEP'07, Geneva Chapter Committee Member and event organiser (photo center).

Since the mega-merger with Dow Chemical two years ago, a significant amount of effort has been devoted to portfolio optimization. The decision was made to create three independent publicly-traded companies over the next year, each with clearly defined competences and markets. Corteva is a carving out of the seeds and crop protection business. Dow is materials solutions provider for packaging, infrastructure and consumer care industries. And DuPont is the specialty products, technology-based materials, ingredients, and solutions company. Its products range from high performance plastics and highly innovative materials to electronics and personal protection materials, serving a wide variety of markets.

Read on for more about the day's discoveries....

## The New DuPont

The new DuPont is more than a new logo. The business is the result of a complex postmerger portfolio optimization process, as well as a set of values and aspirations that define the business. It is more open to collaboration than ever, 'to empower the world with the essential innovations to thrive'. It is leveraging the deep operational and manufacturing excellence of Dow and DuPont and combining it with both companies' competencies in specialty products.

An example serves to make all that a little more concrete. By addressing a challenge like how to bring materials together in products that traditionally don't work together from a chemistry standpoint, DuPont developed adhesives originally created by Dow. These products are now used in automotive markets. And are being designed into new BMW, Tesla, and Ford cars.



Figure 1 Dr. Simone M.P. Arizzi, DuPont Switzerland Country Leader and Technology & Innovation Director EMEA (r) with Alessandra Bonvini, DuPont Geneva Innovation Center Leader (I)

## **Collaboration Strategy**

DuPont's collaborative culture manifests itself in its ten innovation centers. Innovation is done *with* customers not for customers. The collaborators work towards the best business model and transfer of technology to customers and partners.

The centers have the latest digital software and hardware supporting teams that are engaged in Design Thinking. Teams can be put together for innovation commercialization projects, tailor-made for each customer, drawing from qualified resources within the company. Collaborations include engineering, manufacturing, and materials solutions.

DuPont's innovation centers are applied R&D organizations, gathering ideas, spotting opportunities, engaged in sourcing, and filtering strategically to focus on the best ideas that meet commercial and corporate values. The teams execute on an innovation strategy, influenced by markets and technologies, to solve challenging problems and create growth opportunities for DuPont's customers and partners.

#### Megatrends are Disrupting Traditional Markets Sustainability Connectivity & Healthy Living & and Safety Active Lifestyles Mobility Market Drivers Digital Electronics Biotechnology cceleratio Advancements onvergence Technology Drivers Specialty Products Division Innovation

## Drivers of Innovation

Markets are changing as megatrends disrupt traditional markets. Some of those trends are sustainability, mobility, urbanization and healthy lifestyles. Technology is also driving change, and it is doing it more quickly than ever. Multiple value-chains are affected by new electronics convergence, biotech and digital technologies. While the process of technology-driven disruption is the same as in the past, the speed of change is faster. This makes using traditional "good practice" innovation strategy tools, like market forecasting, future scenarios, and roadmaps, more challenging.

Fortunately, that same rate of change applies to new technologies created by DuPont. Products that were originally created for specialty markets can now be transferred more quickly and applied to new mass markets. For example, the materials used in portable or mobile electronics can be used to make "smart" things, like smart textiles, smart cars. Many of the underlying enabling materials are DuPont's electronics technologies.



Figure 2 Alumni and guests engaged with the hosts

## Examples of DuPont's Sustainability Innovation

Examples of innovation that helps to meet sustainability goals include new materials for parts to be used in automotive and aerospace markets that are lighter, easier to manufacture, and ultimately more energy efficient compared to metal competitors; or additives for food that extend shelf-life of bread, milk, and cheese; or additives that boost the protein content of beef products. Such products help meet global sustainability goals.

Other enzymes in the portfolio can help reduce disease risks in animals avoiding antibiotic over-use while others can eliminate certain chemicals from animal waste avoiding water pollution from phosphorous.

Another example, a more mature one, are new processes and membranes for water filtration and reverse osmosis. In renewable energy markets, the company is strong in new films and materials for solar cell manufacturing, enabling panels to generate greater levels of power output.

## Summary

The Innovation Center in Geneva reflects its location in the heart of Europe. The Center's team building capabilities and resources serve several industries and markets, including adjacent opportunities. Its clearly defined competences and innovation strategy are meant to drive growth by addressing global megatrends and increase collaboration with customers.

#### Speakers

Dr. Simone M.P. Arizzi, DuPont Switzerland Country Leader and Technology & **Innovation Director EMEA**, has a chemical engineering degree from the ETH (Zürich) and a Ph.D. in chemical engineering from MIT. In this role Simone defines the critical competencies, infrastructure footprint and portfolio initiatives to implement the Science and Technology strategy across the region. He develops and executes DuPont's Open Innovation strategy with industrial partners, academic institutions and start-ups. Also, Simone acts as a Principal Consultant with external clients for DuPont's Innovation Management Practice. Furthermore, since 1991 in DuPont, he led different roles, being responsible for technology globally in DuPont Photovoltaic Solutions and creating next generation of materials for PV applications that improve the efficiency, lifetime, and cost of modules, thus accelerating the path to grid parity. In addition, he worked as Technology Manager in the Material Science & Engineering division of DuPont's Central Research and Development, in Wilmington (USA) in the areas of alternative energies with a focus on fuel cells, new materials for photovoltaic applications, as well as renewably sourced materials for packaging applications. Also, he held a variety of technology and business management positions in the Lycra® and nylon Specialty Intermediates businesses in the US and Europe.

Alessandra Bonvini, DuPont Geneva Innovation Center Leader, has an engineering degree from Politecnico of Milan, holds this position for the last 5 years and is very passionate about it. She leads and fosters inclusive collaborations with all DuPont partners to create new projects as well positions the Center internally as a tool to support the businesses innovation developments based on maximizing the collective insights available, both internals – with DuPont technology and externals – with customers and markets, combining them to generate growth opportunities. Alessandra is with DuPont for 20 years covering different roles – starting from Product Manager to South Europe Sales Manager for Electrical Insulating Systems. Also, she covered marketing roles as Marine Industry Leader for Italy, the biggest world market for construction of yachts, cruises and ferries. In addition, Alessandra is a LEGO SERIOUS PLAY® certified facilitator and is building a Design Thinking Community to better connect DuPont to it's partners' Needs.

# Impressions

