

2022-2023 Issue 6

**MaChTazine**

Materials Science &  
Chemical Technology

A large, ornate castle with multiple towers and spires, set against a clear blue sky. The castle is made of light-colored stone or concrete, with dark blue roofs and red accents. It has a central clock tower and several smaller towers with conical roofs. The castle is surrounded by a low wall and a path. The overall scene is bright and clear.

**Cocktail Night**  
**29 March @ Delta**



# Introduction

Hello everyone,

We are already back with the **sixth issue** of the MaChTazine!

In this edition you can find some **pictures** from the CMM Quiz and the MaChT trip to Düsseldorf. We would like to thank you all for being a part of these events and for making them unforgettable!

As **MaChT board** we are almost at the end of our board year. Hence, we are looking for an enthusiastic new group of students to take over our tasks in **2023-2024**. The different functions in our MaChT board are described on page 7 and 8. Take a look and let us know if you are interested to join us next semester!

As usual, we have prizes to win from our **Companies of the Month**. This month **Umicore, Air Liquide, Aluminium Duffel, ArcelorMittal and Volvo Car Gent** are put in the spotlights. Don't forget to deposit your completed puzzles in one of our MaChT boxes for a chance to win a prize. Good luck!

Your MaChT Press—Arthur & Yana

## Coming events

The next event that is coming up very soon is the **Cocktail Night**. On the 29th of March, we welcome you all in the Delta for an amazing night with very cheap cocktails!

On the 19th of April, MaChT organizes a **guest lecture** about hydrogen together with INEOS. Make sure to register for FREE pizza, drinks and knowledge!

Like previous years, MaChT will cooperate with the other student organizations of the engineering degrees for the **Zwijnaardse feesten**. This event will take place on the 20th of April.

In the last week of April, MaChT, SMS and CTSE organize the annual **Movie Night**. More information about this event will follow soon.

Lastly, MaChT provides FREE **ice cream** for all MaChT members on the 10th of May.

<b>Cocktail Night</b>	29 March 2023
<b>Guest lecture INEOS</b>	19 April 2023
<b>Zwijnaardse feesten</b>	20 April 2023
<b>Movie Night</b>	April 2023
<b>Ice Cream Day</b>	10 May

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# Next event



## COCKTAIL NIGHT

WHAT? Very cheap Disney themed cocktails!

WHEN? March 29th 2023, Start at 22h00

WHERE? Delta, Stalhof 17 – 9000 Ghent





# CMM Quiz

We as MaChT and CMM would like to thank you all for being present at this years CMM Quiz. It was once again a great success! For those who couldn't make it, the final ranking of the winning teams can be seen on the next page.







1



2



3





# MaChT Trip 2023: Düsseldorf









# MaChT Board 2023-2024

As you all know, the current MaChT board is looking for its replacements for the year of 2023-2024. For those who are very excited about all the events MaChT organizes and the amazing group spirit that we are trying to create, WE NEED YOU!

Take a look at the different MaChT functions listed here and let us know via mail ([macht@ugent.be](mailto:macht@ugent.be)) if you are interested to join us next year or if you have more concrete questions about anything MaChT related. You can also contact the current board members directly if you want additional information about one of our functions.

## President

- Does all the practical arrangements (reservations, meeting preparations, contact with faculty)
- Motivates all board members!
- Organization of some big MaChT events like the BBQ and NYR

**Contact: Jonas Bastiaen**

## Vice President

- Presidents right hand for practical arrangements
- Sustains and organizes contact with volunteers and new students
- Organization of some big MaChT events like the BBQ and NYR

**Contact: Marie Hondekyn**

## External Relations

- Attract new sponsors (already in July and August)
- More sponsors = More money
- Keep in contact with the sponsors during the whole year

**Contact: Anne-Céline Couck, Marthe Vromant, Mattis de Schrijver**



## Internal Relations

- Communication with students (+ presentation in classrooms every few weeks)
- Event announcement by mail and social media (Fb, Instagram and LinkedIn)
- Organization of the MaChT student trip

**Contact: Joanna Popiel, Jonathan Dumarey, Marthe Meurisse**

## Treasurer

- Draws up a budget for each activity
- Makes an annual financial report
- Goes to WVK meetings (once a month)

**Contact: Jordy Doolaege**

## Press

- Design and printing of the MaChTazines: one issue per month
- Design of the event posters

**Contact: Yana Maudens, Arthur Labijn**

## Secretary

- Takes notes during each board-meeting

**Contact: Manon Breugelmans**


## Web Master

- Keeping the MaChT website up to date
- Handling student registration for events

**Contact: Robin Vandesyppe**



# Company of the Month: Umicore




## Umicore 2030 RISE





**UMICORE 2030 RISE**





At Umicore, technology, innovation and sustainability come together. Not only do we produce and develop advanced materials for key technologies such as high-grade solar cells that you can find in satellites or rechargeable battery materials that you can find in electric vehicles, we also recycle them, recovering precious metals and critical raw materials. With our 2030 RISE strategy, we are entering a new phase in Umicore's journey to become the leading circular materials technology company. A company built on creating sustainable growth and tangible value for all of its stakeholders. We are ready and eager to play a key role in the major trends of mobility transformation, the growing need for advanced materials and the pursuit of a global circular economy. Let's RISE together and continue to create materials for a better life.


### Let's RISE today to transform tomorrow

Umicore in Belgium



-  > **6,220** Belgium
- > **11,050** worldwide
-  **1** HQ
-  **3** manufacturing sites
-  **1** Research & Development

Want to know more about Umicore? Go to [www.umicore.be](http://www.umicore.be) or follow us    





# Puzzle Umicore

Since the prize from Umicore is a good one, we decided to give you all a bit of a challenge! Based on the story below, figure out **who owns which item!** Each person also has a certain **drink and location**, but only the items need to be filled in. (Any relation to real people is entirely coincidental.)

The women sat in a row. They all wore different colours and **Marie** wore a jaunty **Red** hat. **Marthe** was at the far left, next to the guest wearing a **Blue** jacket. The lady in **Green** sat left of someone in **Purple**. I remember that **Green** outfit because the woman spilled her **Blue Lagoon** all over it. The traveller from **Ghent** was dressed entirely in **Orange**. When one dinner guest bragged about her **Earrings**, the woman next to her said they were finer in **Ghent**, where she lived.

So **Manon** showed off a prized **Bracelet**, at which the lady from **Bruges** scoffed, saying it was no match for her **Necklace**. Someone else carried a valuable **Ring** and when the visitor from **Antwerp** next to her saw it, she almost spilt the **Ring's** owner's **Sex on the beach**. **Anne-Céline** raised her **Moscow mule** in toast. The lady from **Brussels**, full of **Mojito**, jumped up onto the table, falling onto the guest at the centre seat, spilling the poor woman's **Mocktail**. Then **Jo-anna** captivated them all with a story about her wild youth in **Leuven**.

In the morning 5 items were found under the table: a pair of **earrings**, a **bracelet**, a **necklace**, a **ring** and a **golden medal**. But who owned what?

Woman					
Item					

**Tear or cut** this page out and deposit it in one of our boxes at buildings 46, 70A or 125 or **send a picture of your solution** to **[macht@ugent.be](mailto:macht@ugent.be)** by **20 March** for a chance to win the awesome prize offered by **Umicore**! Good luck!

Name: \_\_\_\_\_

Email: \_\_\_\_\_



# Company of the Month: Air Liquide



Air Liquide's ambition is to be a leader in its industry, deliver long term performance and contribute to sustainability – with a strong commitment to climate change and energy transition at the heart of its strategy.

As world leader in gases, technologies and services for Industry and Health, Air Liquide is present in 78 countries with approximately 64,500 employees and serves more than 3.8 million customers and patients.

Oxygen, nitrogen and hydrogen are essential small molecules for life, matter and energy. They embody Air Liquide's scientific territory and have been at the core of the company's activities since its creation in 1902.

We value the diversity of the people that make up our company. In fact, we focus on recruiting people with different genders, backgrounds and mindsets because through a variety of ideas and insights, we can reach the extra mile.

More information: <https://www.airliquide.com/nl-be/belgium>



# Puzzle Air Liquide

This is a **Jigsaw Sudoku**, which has the exact same rules as a regular sudoku, but with irregular zones! Each square still needs numbers from 1 to 9.

			7					
		8				6		
	6			5				8
1	9	6						
			8		5			
						1	4	6
7				4			9	
		2				3		
					6			

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Name: \_\_\_\_\_

Email: \_\_\_\_\_



# Company of the Month: Aluminium Duffel



Aluminium Duffel is a European leader in the manufacture and sale of aluminium rolled products for diverse industries worldwide. It features state-of-the-art technology, including the widest Automotive cold rolling mill in Europe and a CALP-line (Continuous Annealing Line with Pre-Treatment).

Our state-of-the-art manufacturing facilities produce rolled aluminium for everything from highly designed cladding for building facades to automotive body sheet. Almost everything we make is manufactured to specific customer requirements. We employ around 1.000 people and produce 200.000 tons of high-value aluminium rolled products annually.

It is our purpose to create a sustainable future for our industry and society. We continuously work to develop innovative solutions that will better position aluminium as the material of choice for customers and consumers seeking high-performance and sustainable products. We remain focused to continuously improve our economic, environmental and social activities so that we can remain the preferred sustainable partner for all our stakeholders.

Are you looking for a job opportunity where you can fully deploy your potential, with growth opportunities and technical challenges? We are currently looking for an R&D Engineer, a Reliability Engineer, as well as a Production Engineer.

Visit <https://jobs.aluminiumduffel.com> for more info on these and other vacancies.

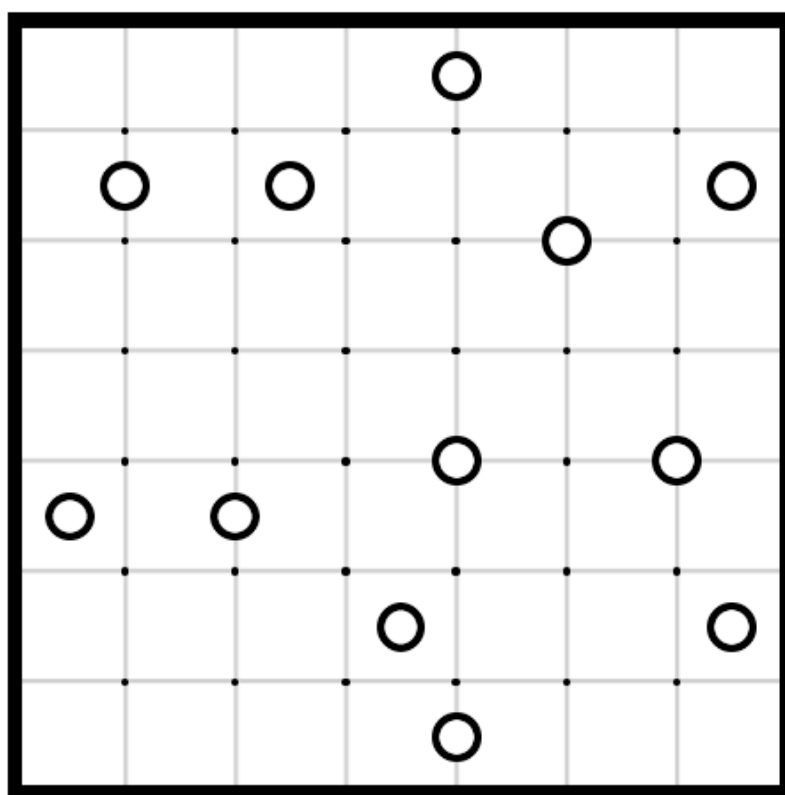


# Puzzle Aluminium Duffel

This is a **Spiral Galaxies** puzzle. The rules are like this:

You have to divide the grid in **regions (galaxies)** in such a way that:

- Each region has exactly one **circle** in it.
- The **circle** is the centre of its **rotational symmetry**. In other words: If you **rotate** the region around the circle at  $180^\circ$  you should get the **same shape, position and orientation**.



A hint in order to get started: mirror the edges of the square first.

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Name: \_\_\_\_\_

Email: \_\_\_\_\_



# Company of the Month: ArcelorMittal



Auto's, windturbines, designwoningen... overall waar je kijkt zie je het staal van ArcelorMittal Gent. Het creëren van innovatieve en duurzame staalproducten voor een brede waaier van dagelijkse toepassingen is waar wij voor staan. Onze sterke punten zijn duidelijk: we werken met hoogopgeleide professionals, staan dicht bij onze klanten en onze infrastructuur maakt samenwerking met complementaire sectoren mogelijk. Daarnaast wordt ons staal ook gezien als de hoeksteen van een circulaire economie en als basismateriaal voor hernieuwbare energie.

Zonder ArcelorMittal, een van de grootste staal- en mijnbouwbedrijven ter wereld, zou je wereld er compleet anders uitzien. Staal is overall. En ons staal kan door jou worden gemaakt! Vervoeg ons team en ga aan de slag met de meest innovatieve technologieën van vandaag.

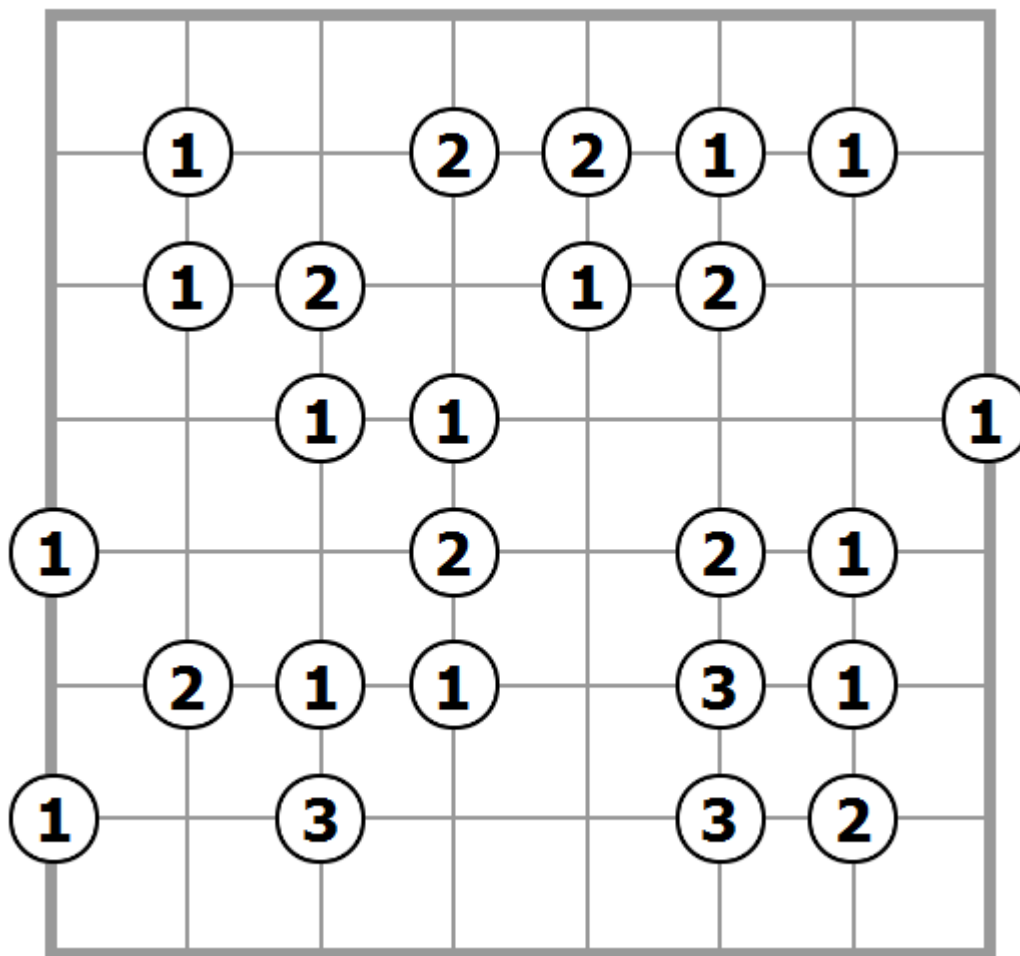
More information: <http://www.arcelormittal.com>



# Puzzle ArcelorMittal

This one is called **Slant**. The rules are simple:

- **Every** square needs 1 diagonal line.
- The **numbers** represent how many lines meet in that point.
- The lines **cannot** form a closed loop.



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Name: \_\_\_\_\_

Email: \_\_\_\_\_



# Company of the Month: Volvo Car Gent

**V O L V O**

## Company info

Volvo Car Gent is a car plant in the North Sea Port in Gent. It consists of a welding factory, paint shop, final assembly line and several adjacent areas. With 183,238 cars produced (2021) per year, Volvo Car Gent is a key player in the Volvo Car Corporation. It currently builds the V60, XC40 and C40 models; the latter two being fully electric. With 7,000 employees, Volvo Car Gent is the largest industrial employer in East Flanders. At Volvo, we look forward to a new future where electrification, autonomous driving and connection are the keywords.

We expect that half of all Volvo cars sold will be fully electric by 2025. More than a century after the invention of the internal combustion engine, we are entering a new chapter in automotive history – that of electrification, which Volvo Car Gent is pioneering.

More information at: <https://www.volvocargent.be/>

## Job options

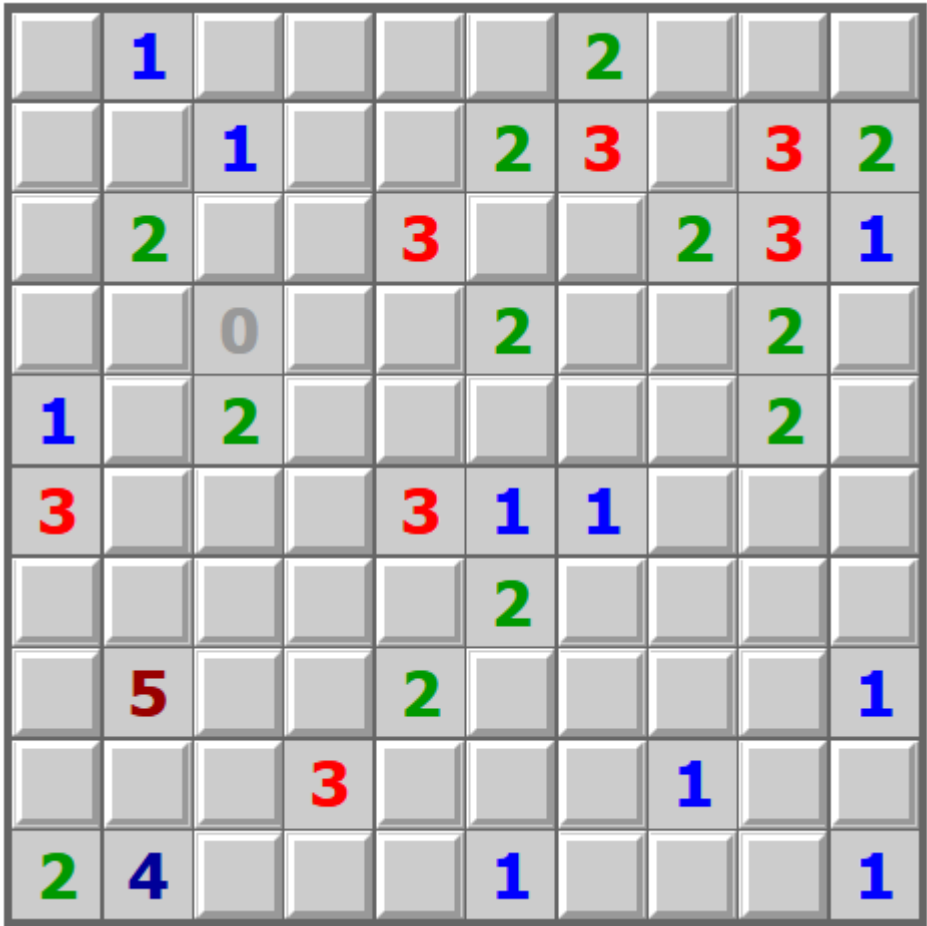
Volvo resolutely opts for the future. That's why we will make only electric cars by 2030. And for that, we need your help. Next year, up to 135,000 fully electric cars will roll off the production line at Volvo Car Gent, equipped with the most pioneering technology. Job security? Check!

More information at: <https://www.volvocargent.be/jobs>



# Puzzle Volvo Car Gent

It's **Minesweeper**, but on paper! (yes, really.) The rules are the same as the computer version: the numbers represent the amount of mines in the squares touching them, horizontally, vertically and diagonally. Mark all the mines present.



To make it easier to check the results: make sure it is obvious what counts as mines and what's a clear space! (like circles for mines and an X for an empty spot)

**Tear or cut** this page out and deposit it in one of our boxes at buildings 46, 70A or 125 or **send a picture of your solution** to **[macht@ugent.be](mailto:macht@ugent.be)** by **20 March** for a chance to win the awesome prize offered by **Volvo car Gent**! Good luck!

Name: \_\_\_\_\_

Email: \_\_\_\_\_



# Sponsors



AD Aluminium Duffel



**EASTMAN**

**ExxonMobil**

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**Air Liquide**



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Progress beyond

**V O L V O**

