

The world needs science, and science needs women

How DSM is accelerating gender equality
and inclusion in science & technology

BRIGHT SCIENCE. BRIGHTER LIVING.™



Frances Arnold recently won the Nobel Prize in Chemistry for the directed evolution of enzymes. She was just the fifth woman to earn the award since its inception in 1901¹.

28.8%

28.8% of researchers worldwide are women.

Women have contributed a lot to science. Countless game-changing discoveries from women past and present have made the world a better place. But the world of science is still far from a level playing field.

Not only is there a glass ceiling for women in science: there are clear barriers to entry. Today, just 2% of women earn PhDs in science, technology, engineering & math (STEM) – which is three times lower than their male counterparts².

Despite girls and boys studying STEM-related subjects in relatively equal numbers at high school, just 28.8%³ of researchers worldwide are women. So, what's holding women back?

The reality is that long-standing biases and gender stereotypes still lurk in our subconscious. According to the Geena Davis Institute, just 14% of on-screen characters portrayed as having STEM-related careers are women⁴. This perhaps helps explain why a shocking 67% of Europeans stated that they felt women didn't have the skills for "high-level scientific positions" when surveyed by beauty brand (and valued DSM partner) L'Oréal⁵.

It's clear that we all need to do more, especially in tackling this unconscious bias to stop women leaking out of the STEM talent pipeline at every stage of their careers. **The question is what? And how?**

At DSM we do not have all the answers, and we are not there yet, but we do have a clear goal: accelerating gender equality and inclusion in science & technology. Our hope is that by sharing some of our experiences and insights gained in recent years from both company initiatives and women and men working at DSM today, we can encourage the industry to join us.

"As an innovative science-based company, we cannot afford to suffer from myopia. We need to embrace diversity by being inclusive to different people. Via this our successes can be sustainable."

Feike Sijbesma, CEO Royal DSM



Creating brighter lives for all

As a purpose-led, performance-driven company that seeks a strong and diverse talent pipeline in the sciences, DSM believes in the importance of improving the representation of women in science & technology.

It's the right thing to do for people everywhere. Equality and inclusion are crucial for nurturing talent and helping all people make a difference and realize their potential.

It's the right thing to do for science (and our business). Scientific innovations in areas like nutrition and health, climate and energy, and resources and circularity are only possible through the contributions of women – not least Frances Arnold, whose work has been instrumental in helping us create many of our biotechnology solutions.

It's the right thing to do for society. If we want to overcome global challenges, like those outlined by the United Nations Sustainable Development Goals, we need more diversity. In fact, the very essence of science is built on diversity: different experiences, views and opinions that lead to different outcomes – and ultimately to brighter science.

It doesn't just make sense for women. It makes sense for all of us.



"I'm a scientist because I want to make a difference to the world. My field of analytics plays a key role in the way we develop biotechnological solutions. You could call analytics the 'senses' of the DSM businesses. Whether we're creating biofuels or biobased food ingredients, we need deep, detailed insights into all products and processes we're developing. Otherwise... how do we know if it works?"

Maurien Olsthoorn,
DSM Corporate Science Fellow Analytical Sciences
Read Maurien's [full story](#) on LinkedIn.



Getting the right mix

Improving representation of women in science

Ultimately, our goal at DSM is to achieve a genuine gender balance, just like the 50/50 split we tend to see in high schools.

As the figures below indicate, today our global female population in R&D stands at 35%. This is significantly above the global industry average of 28.8%. But there remains room for improvement in bridging the gender gap and ensuring we fill and develop the pipeline of female talent in STEM disciplines at all levels around the world. The standout performance comes in North America, where 41% of our R&D population is female – way above the global industry benchmark.



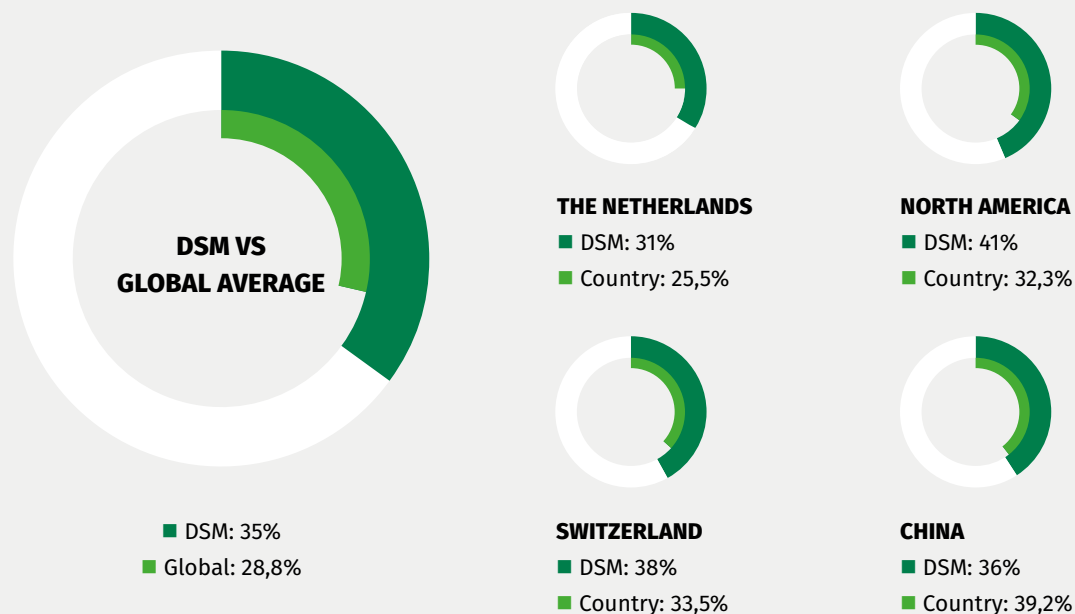
"I joined DSM nine years ago straight from college – and was immediately connected to a female mentor as well as to our Women Inspired Network (WIN). It gave me guidance towards being successful in the professional world, which includes “daring to speak up” and expressing my opinions. I’m pleased to say that in North America the most recent engagement scores for women working in R&D were very high. My guess is that the WIN program and other initiatives have contributed to this result.”

Caroline Liu, Research Scientist, DSM Additive Manufacturing, North America
Read Caroline's [full story on LinkedIn](#).

Female population in R&D at DSM

At DSM we have 1900+ scientist spread over 14 countries across the globe. Our largest research centers can be found in **the Netherlands, Switzerland, North America, and China**.

The biggest chart shows the percentage of women in R&D at DSM compared with the global average of women working in science. We have also made this comparison for the countries where DSM has its largest research centers. The percentage of women working in science per country, comes from UNESCO ⁷.



The employee engagement survey is an important tool to get valuable feedback from our employees on a number of important topics, such as inclusion, open and honest communication, growth and development, leadership and culture. Our goal is to create a company that employees feel proud to work for and where they feel they can excel.

I am proud to work for DSM

86% DSM Female R&D

80% external norm

90% high-performing benchmark

In my unit there is open/honest two-way communication

74% DSM Female R&D

62% external norm

75% high-performing benchmark

I am comfortable voicing my ideas and opinions, even if they are different from others

81% DSM Female R&D

76% external norm

82% high-performing benchmark

86%

86% of female R&D workers are proud to work for DSM.

Getting the mix right

Improving the engagement of women in science

“Getting the right mix” is one thing, but “getting the mix right” is something else - and equally important. We continuously challenge ourselves on inclusion at DSM, which includes regularly asking for feedback through our employee engagement survey to determine areas of relative strength and weakness.

Some of the results are very encouraging and show that we are clearly above the industry average. However, we need to avoid complacency: DSM is still striving to reach the high-performance industry benchmark.

What can China teach us?

As a global company, DSM is constantly looking to learn from colleagues and cultures around the world. One key takeaway from our employee engagement survey was the extremely high inclusion scores for female R&D colleagues in China – some 10% above the high-performance industry norm.



“China has a very strong focus on science. Society encourages smart people - men and women - to pursue a career in STEM. Because of this, I believe that the workplace tends to be more progressive and supportive in career development.”

Bao Ren, Group Lead, DSM Science Center China
Read Bao's [full story](#) on LinkedIn.

Driving inclusion by tackling unconscious biases

Unconscious bias is the set of assumptions and stereotypes we all make about people and social groups, without ever realizing it – and it's what is keeping us from moving from good to great with women in science and technology.

With an estimated 11 million fragments of data to process every day, our brains create comfortable shortcuts as a coping mechanism. This is basic human nature, but these shortcuts often lead us to making assumptions that are wrong, like “scientists are men”.

We need to be more conscious about our unconscious. This means developing the self-awareness needed to recognize these blind spots and assumptions – and then adjust our behavior accordingly.

But the real key is to achieve this without over-compensating and fundamentally changing who we are – because diverse opinions remain essential to scientific success.



“Game-changing science is not a man in a lab having a eureka moment. It’s a mosaic; a diverse and complex team game where innovation happens at different interfaces. It’s often our ability to connect dots differently, or look at things from a different perspective, that determines our success, which is exactly why diverse teams generally perform better.”

Marcus Remmers,
Chief Technology Officer, DSM



Enabling a brighter future for all



“We aim to increase the representation of women at executive level from 17% in 2017 to 25% by 2020. But it’s not all about getting the numbers up. It’s about fostering an inclusive culture where both women and men feel comfortable offering their insights and opinions. It’s about making room for a diverse range of visions that question, explore and build the future of science and technology.”

Helen Mets, President DSM Resins & Functional Materials

Read Helen’s [full story on LinkedIn](#).

At DSM we are implementing various initiatives to boost diversity and inclusion. We’ve already improved considerably, but we must continue to raise the bar: as evidenced by the fact that assessment and measurement is built into all these initiatives. Why? Because what gets measured, gets done.

- **Diversity is a key pillar of our recruitment policy.** That’s why we have set targets for incremental increases for the number of women we recruit – year-on-year, at various levels, and for various functions across our organization.
- We added an **Inclusion Index to our employee engagement survey** to assess whether we are making progress in the right direction.
- We provide **unconscious bias workshops for managers and employees**, supported by a specialist toolkit. At these workshops we organize discussions that enable our people to identify new ways of flagging and tackling our blind spots and biases.
- **Our Women-Inspired-Network connects our female population globally (open to men as well!).** It supports women in their career development through regional events, mentoring programs and training. But it also enables an environment for them to support each other.
- **DSM has an Inclusion & Diversity Council** (chaired by our CFO, Geraldine Matchett). It monitors our progress globally and ensures we remain on track.

25%

DSM aims to have a representation of women at executive level in 2020 of 25%.

Advocating change

The world needs science and science needs women. But we cannot bring our vision to life by ourselves. It's why at DSM we decided to share our thoughts and experiences in this report; and it's why we continue to work with others to advocate a more diverse and inclusive world.

Just one such partner is Catalyst, a global nonprofit organization working with CEOs and leading companies to help build workplaces that work for women. Today, Catalyst works with more than 400 companies around the world, and at DSM we are proud to be one of them.

Our CEO, Feike Sijbesma, is not only a Board member but also a signatory to the Catalyst CEO Champions for Change, where he has pledged (together with some 40 other high-profile CEOs and leaders) to continue accelerating diversity, inclusion and gender equality.



“Gender equality is not a ‘women’s issue.’ It’s an issue that everyone — men, women, organizations — need to address. Organizations that want to innovate and succeed in the future marketplace need to leverage 100% of the talent, and that depends on inclusion. Each and every employee can also be a catalyst for change by confronting barriers, shattering stereotypes, and leading with inclusion from wherever they are.”

Lorraine Hariton,
President & CEO, Catalyst

Join the conversation

We all need to join the conversation! Every one of us has the power and potential to be a catalyst for change – and that starts with talking openly and honestly about women in STEM.

Beyond this report there are many other conversations happening on the topic right now. We therefore invite you to jump in and join the debate.

- Read and comment on the LinkedIn blogs from our female colleagues quoted in this report [Maurien Olsthoorn](#), [Bao Ren](#), [Caroline Liu](#), [Helen Mets](#).
- Watch the YouTube [video playlist](#) of our DSM leadership Feike Sijbesma (CEO), Judith Wiese (CHRO), Marcus Remmers (CTO), Weiming Jiang (President DSM China).
- Engage with DSM on social media: [LinkedIn](#), [Twitter](#), [Facebook](#).
- Any questions or comments? Share them via bright.science@dsm.com.

Join DSM

We are always on the lookout for the brightest minds out there (women and men!).

Check out our vacancies in science, technology and engineering at:

www.dsm.com/corporate/careers.html

Sources:

1. The Nobel Prize: <https://www.nobelprize.org/prizes/chemistry/>
2. United Nations: <http://www.un.org/en/events/women-and-girls-in-science-day/>
3. Unesco: <http://uis.unesco.org/en/topic/women-science>
4. 'Gender Bias with Borders': The Geena Davis Institute: <https://seejane.org/symposiums-on-gender-in-media/gender-bias-without-borders/>
5. #Changethenumbers by The L'Oreal Foundation <https://fondationloreal.com/posts/la-fondation-l-oreal-lance-changethenumbers/en>
7. Unesco: <http://uis.unesco.org/sites/default/files/documents/fs51-women-in-science-2018-en.pdf>



BRIGHT SCIENCE. BRIGHTER LIVING.™

