
Celebrating Women in Science



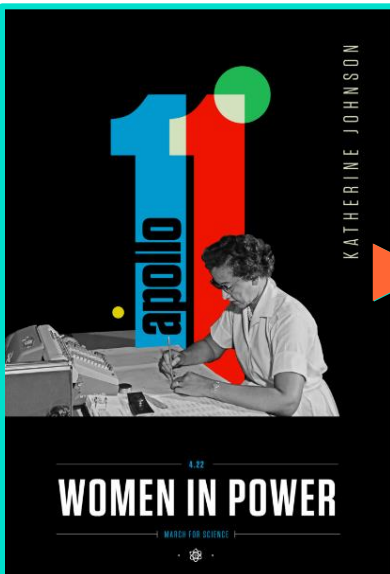
International women's day 2024

As we celebrate International Women's Day on 8th March 2024, CSR is shining a spotlight on the extraordinary contributions of women who have left their mark on the world of science. From unravelling mysteries in laboratories to pioneering groundbreaking discoveries, these women have defied stereotypes to become trailblazers in their respective fields.

In this post, we celebrate the diverse stories of women scientists who have overcome challenges, shattered glass ceilings and continue to inspire the next generation of world-class scientists—you! We will look at the trailblazers of the past, heroes of the present and what you can do for women scientists of the future.

Join us in honoring International Women's Day as we acknowledge the resilience, brilliance and lasting impact of women in science. This day serves as a reminder that the pursuit of knowledge is enriched when everyone, regardless of gender, can contribute their unique perspectives and talents to the scientific community.

Women in Science – The Trailblazers



Katherine Johnson

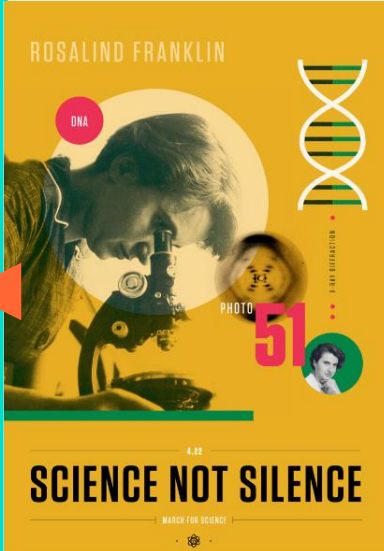
Katherine Johnson (one of the three black female mathematicians portrayed in the film Hidden Figures) made calculations for NASA that were instrumental to America's first manned spaceflight in 1960, the orbital mission of John Glenn in 1962 and the Apollo 11 lunar mission in 1969.



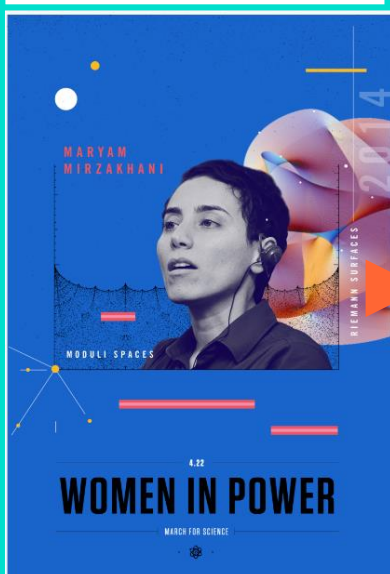
May-Britt Moser

May-Britt Moser, modern heroine, pioneered research on the brain's mechanism for representing space. She won the Nobel Prize in 2014 for her discovery of grid cells in the entorhinal cortex and several other space representing neurons that make up the positioning system of the brain.

Rosalind Franklin
Rosalind Franklin took a picture of DNA, Photo 51, that changed our understanding of the structure of DNA. Snubbed for the Nobel Prize in 1962, Her story is one of the most well-known and shameful instances of a researcher being robbed of credit. Let's celebrate her now.



Chien-Shiung Wu
Few have heard of Chien-Shiung Wu, also known as the "First Lady of Physics" She made history when she disproved the hypothetical law of conservation parity, a bedrock law of physics that many others were too afraid to test.



Maryam Mirzakhani

Maryam Mirzakhani made history when she became both the first woman and the first Iranian honored with the Fields Medal, the most prestigious award in maths. Her work influences material science, quantum theory, theoretical physics as it applies to the origin of the Universe.



Mae Jemison

Mae Jemison was not only the first black woman to travel in space but also an accomplished engineer and physician. On September 12, 1992, she flew into space on the Shuttle Endeavour for mission STS-47.

Women in Science Award Winners 2023



Prof Karen Johnson
Durham University

Dr Abigail Freeman
Science Foundation Ireland

Emily Rose RSciTech
Pfizer

Dr Sam Staniland
AstraZeneca

The Royal Society
Rosalind Franklin
Award 2023

Women in STEM
Science
Award 2023

RSC Chemical
Sciences Apprentice
of the Year 2023

RSC Rising Star in
Industry Prize
2023

For achievements in environmental engineering and her impactful project explaining the importance of soil health and how and why it should be conserved.

For breaking barriers, pushing boundaries and making a significant impact in her role as Director of Science for Society.

For outstanding contributions to the development of synthetic routes and processes for emerging medicines via autonomous high-throughput experimentation workflows.

For impact on the progression of multiple pharmaceutical projects by the application of bio and chemocatalysis and high-throughput experimentation.

Female Science Workforce 2023

FEMALE SCIENCE PROFESSIONALS
MARCH 2023

43.3%

As a percentage of the workforce



70,000 Female Science Professionals



Inspiring The Next Generation



CSR 2023 Community Award Winner Profile

Oliwia Zawadzka

19yrs

Laboratory Technician

Cambridge University Cavendish
Laboratory

L3 Applied Science Apprentice

When looking to the future it is important to acknowledge the part we can all play in improving the landscape for women in science by inspiring the next generation to consider a career in STEM.

Outreach plays a crucial role in empowering women in science by challenging stereotypes, inspiring interest, building confidence, creating support networks and addressing the underrepresentation of women in STEM fields. Here we celebrate CSR apprentice and winner of the CSR 2023 Community Award Oliwia Zawadzka for her contribution to outreach in the community. Here's what Oliwia had to say about the importance of these outreach activities:

“For my outreach, I've been involved here in our physics department where I personally spoke to around 600 students across three days. I produced a presentation where I spoke about gender inequalities in physics, studies, apprenticeships and what we do in our department. A lot of these things came as a surprise to our younger students from around 14 to 16 years old who were not aware of science apprenticeships and general inequalities in the physics sector.

I also work closely with our outreach coordinator on popularising apprenticeships and what they can provide for students who choose to go this way. I feel very strongly about being a woman in science so I'm working really hard on engaging the younger generation in physics and science apprenticeships”.

Further Reading

Women scientists are challenging the STEM career stereotype and inspiring the next generation



Two women in senior STEM roles reveal how their careers have developed, and why mentorship, inspiring role models and inclusiveness have been key to their success.

<https://www.womeninstem.co.uk/breaking-stereotypes/women-scientists-are-challenging-the-stem-career-stereotype-and-inspiring-the-next-generation/>

Visit the Women Who Changed Science Nobel Prize page to read the incredible stories of the female recipients. Take the short quiz to match with a laureate whose interests and ideals most align with your own.

<https://www.nobelprize.org/women-who-changed-science/stories>

The Nobel Prize – Women who changed science



“Dear future woman of STEM”: letters of advice from women in STEM



Although research has identified challenges faced by women in STEM fields and strategies to improve their experience, little research has examined which strategies undergraduate women would recommend. In the current study, undergraduate women in STEM wrote letters to younger women in STEM about their experiences.

<https://www.nobelprize.org/women-who-changed-science/stories>