

Delphine Lebrun

Material Scientist



Hi there! I am Delphine Lebrun- A material scientist



Where do I work?

I used to work at Osaka University in Japan, and then I moved to Belgium to work at Ghent University.

What did I like doing when I was at school?

I loved to read, so much that my teacher had to take the books from me at break time. Later, I enjoyed mathematics, puzzles and logic.

What do I like doing in my spare time?

I love doing things with my hands: I make cosplay, embroidery and I enjoy drawing.

What do I do as a material scientist?

I learn about materials and how I can change their properties. I use all types of tools to understand and change them. The most fun is to make a material smaller than a virus (invisible to the naked eye).

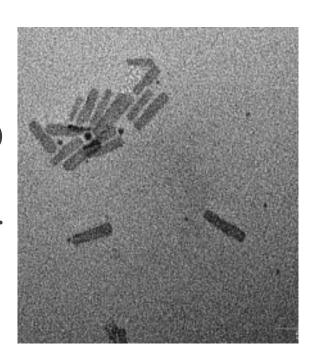


How does what I do make the world a better place?

Materials are very important for all sorts of things in everyday-life, like phones and clothing. The most important work we do deals with types of energy coming from batteries, solar panels and wind-mills. I worked on LEDs used in TV screens that use less energy, and recently I worked on nanomaterials for solar and lightning applications.

What I like about my job

I work in laboratories with a lot of incredible equipment. I love taking pictures of materials on the nanometre scale (a bit bigger than DNA) with electron microscopes. I always learn something new when I talk with my colleagues. I love to discover new materials and new ways to use them.

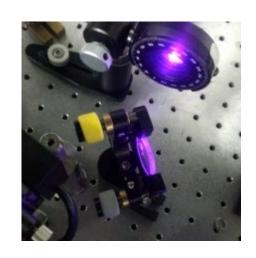


Challenges I have faced

Some of the lectures at university were really hard and I had to work hard to even pass them. I was lucky to have friends that helped me then. My parents are not highly educated, but I did not let this be an obstacle to my ambition. To work with and learn from the best scientists, you need to be prepared to live in new places.

If you want to be a material scientist, you need:

- **curiosity**: science is all about asking questions (why is this glowing?)
- * problem solving: scientists face problems everyday (what can this do?)
- * organisation: avoid mixing up results of experiments (where is this?)
- * computer: material science is nothing without it (can I digitalize this?)





Discussion time

* Would you like to be a material scientist like Delphine Lebrum?

Why? Why not?



- * What skills and interests do you already have that would help you become a material scientist?
- * What new skills and knowledge would you need to develop?

Free supporting resources for material science

Materials Science – create a materials trail using QR codes

Science Fun at Home – see 'Scavenger', 'Salty science' and 'Light up science'

<u>I bet you didn't know...</u> articles use cutting-edge science research as a context for learning. Teacher Guides describing the research and activities and investigations for children can be used as classroom presentations:

- What small robots can do
- How to clean water using a molecular sieve
- Toilets of the future may charge your mobile phone
- Why face mask you should wear

