## Welcome to the ninth issue of Science in School





Before I start, I'd like to mention two things: half of what I'm telling you will be wrong; and I don't even

know which half." This introduction by renowned molecular biologist Ueli Schibler to his students illustrates a discomforting aspect of science. The only way to find out which half is wrong and which is right, is by disproving existing 'truths' and replacing them with new ones. To do this takes inventive, creative minds with a curiosity about questions such as "what if ...?" Challenging young people to tackle these questions and inspiring them to see the beauty of science, rather than being discouraged by it, is the difficult but important task of the science teacher.

Having worked as a developmental biologist, I made the move into science journalism and publishing with the firm belief that science is exciting – all science, that is, not just biology. Being exposed to a wide variety of topics and satisfying my own curiosity is one of the joys of my job, and I hope to convey this excitement to others. How better to do this than through *Science in School*, which aims to overcome the frontiers between subjects and countries, researchers and teachers?

Space – the final frontier? Not any more, now that nations have transcended their frontiers to build the International Space Station (ISS) in the shared pursuit of scientific knowledge. Shamim Hartevelt-Velani and Carl Walker take us on a two-part journey to this orbiting laboratory – find out more in the next issue!

The main purpose of the ISS is research – in which even students can take part, for example through the ESA Success contest. Cornelia Meyer is one of the lucky ones. She wants to test the idea that life on Earth may have arrived on board a meteorite.

Does that sound like a silly idea? Perhaps, but its feasibility can be scientifically tested. Unlike creationism, that is – or so says Steve Jones, our featured scientist, who strongly favours evolution as the only scientific explanation for the origin of biological diversity. What is your opinion? Why not debate this topic further in our online discussion forum?

## **Editorial**



From the origins of life, via its evolution, to its extinction: a fate that woolly mammoths met about 6000 years ago. Caitlin Sedwick describes how a computer model is helping scientists to investigate why. A warming climate seems to have destroyed much of the mammoths' habitat, with humans hunting the woolly giants into extinction.

Are you concerned about the warming of our own habitat? In the third article in our series on climate change, you can even try modelling this phenomenon yourself, with the help of Dudley Shallcross and Tim Harrison. If modelling sounds too dry, and you'd prefer something more handson, take a look at this issue's laboratory activities for the classroom. Anna Lorenc introduces urease from soya beans as a model for explaining enzymes, while the sugar detection experiments by Fred Engelbrecht and Thomas Wendt are a great way of demonstrating some of the problems faced by people with diabetes every day.

As the Assistant Editor of *Science in School*, I hope to inspire young people to be curious about the world. Science is all around us, and it can be a lot of fun. With your help, we can get this message across to many more students. We look forward to your feedback and contributions, since you as readers and teachers know best how *Science in School* can be useful to you.

## Marlene Rau

Assistant Editor of *Science in School* editor@scienceinschool.org

