

# Atoms in industry: radiation technology supports development

By Yukiya Amano, Director General, IAEA

Cutting-edge industrial technologies underpin the success of strong economies, in developed and developing countries alike. Nuclear science and technology, in particular, can make a major contribution to economic growth and competitiveness, and have an important role to play in support of sustainable development. The IAEA helps to make nuclear science and technology available to enable countries to pursue wider development objectives in areas including human health, agriculture, natural resource management and environmental protection. This edition of the *IAEA Bulletin* highlights some of the ways in which the technology is being put to effective use in industry.

Radiation technologies are part of our everyday lives. Buildings, pipes, medical devices and car parts are just some of the items treated and tested with radiation in a controlled and safe manner during manufacturing. Such procedures increase product quality and safety, benefiting both manufacturers and consumers. As the articles in this issue of the *Bulletin* demonstrate, radiation technologies often offer a more environmentally friendly approach than traditional alternatives, requiring less energy and generating less waste.

As their populations grow, low and middle income countries need to find ways to step up their industrial development to boost

production and meet consumer demand in sustainable ways. Nuclear technologies can help make these processes more cost effective, as well as safer for the environment, and lead to better products that will ultimately benefit society.

Making radiation technologies available to Member States and assisting them in the peaceful use of these technologies are an important part of the IAEA's work. Through technical cooperation projects, coordinated research activities and scientific meetings, hundreds of scientists and experts from all over the world work together to further improve radiation technologies and make them accessible to industry. In the last few years, this technical cooperation has also stimulated South–South cooperation among developing countries: Malaysia helps Sudan in non-destructive testing techniques, and Viet Nam transfers radiotracer technology to Angola, to name just two examples covered in this issue.

This year's IAEA Scientific Forum showcases some of these technologies and brings together leading experts to discuss the latest trends and best practices. I invite you to follow the proceedings in person in Vienna, or online via [www.iaea.org/scientificforum](http://www.iaea.org/scientificforum).



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(Photos: C. Brady/IAEA)