

Aiming at preserving nuclear knowhow

Discovering the nuclear sector while ‘playing’

The SCK•CEN Academy wants to improve literacy about ionising radiation and its applications. Through in-depth training and education, inspiring company visits and fun scientific challenges such as the Nuclear Game Challenge. “Our task is to inform current and future generations and, as a result, preserve nuclear knowledge”, says Michèle Coeck, Head of SCK•CEN Academy.

In 2018, SCK•CEN in cooperation with the Joint Research Centre (EC-JRC), launched the very first edition of the Nuclear Game Challenge. “The Nuclear Game Challenge was a science contest for third-grade high school pupils. We challenged the youth to devise an interactive and educational game themed around nuclear sciences and applications”, explains Michèle Coeck, Head of SCK•CEN Academy. The science contest was a sure hit: no less than 100 pupils from 17 different schools registered. The competition started during a kick-off event at the Natural Science Museum in Brussels, where the pupils discovered different nuclear themes and gathered inspiration for their games. “Radioactivity, radiation protection, nuclear applications and nuclear research were tackled. Then, the pupils got going”, tells Lisanne Van Puyvelde, co-organiser of the contest.

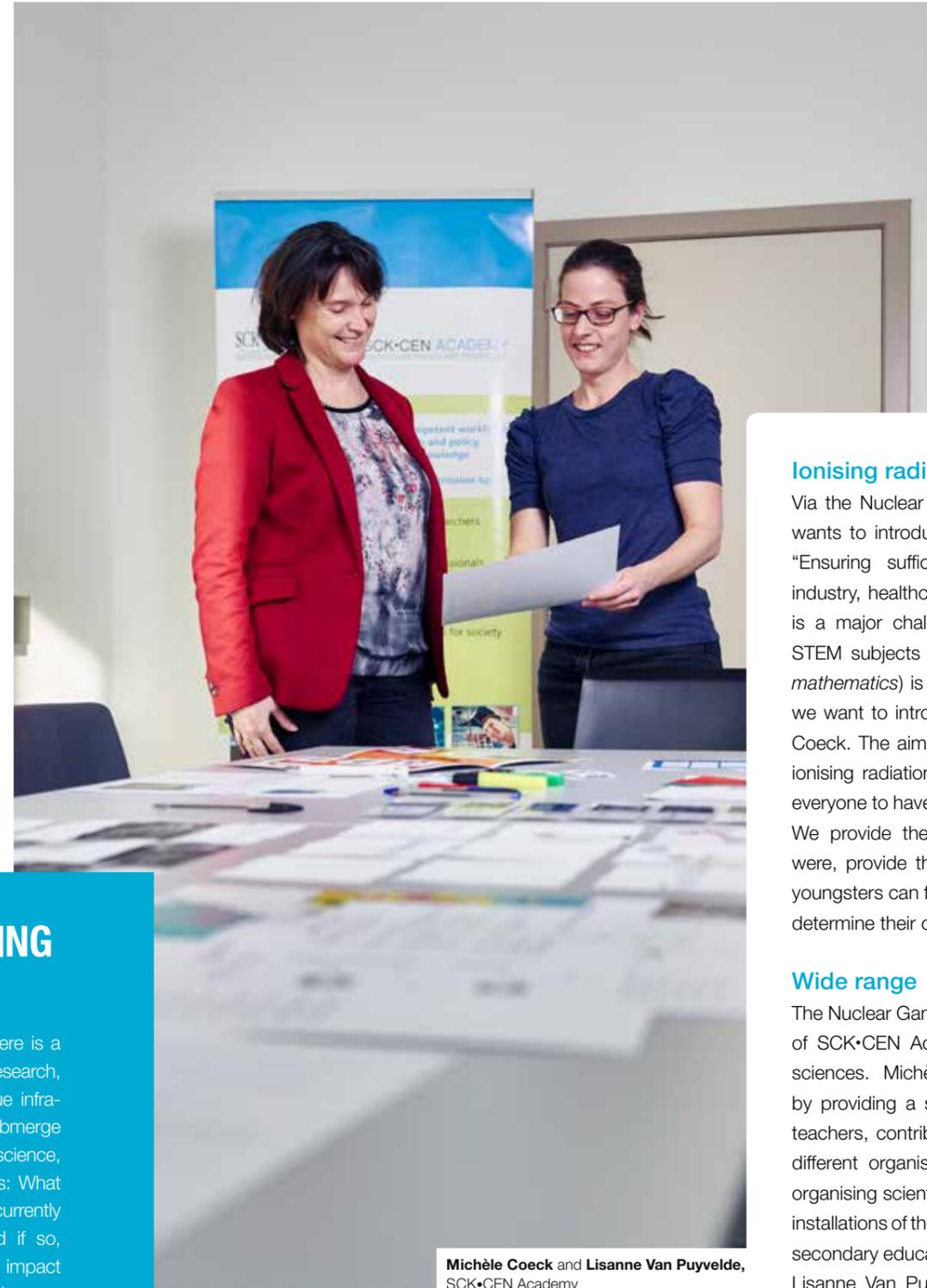
SCK•CEN Academy received 18 creative games in total. “A big thumbs up for all pupils, because they set the bar high. Amazing concepts, astonishing originality and detailed elaboration were the common thread throughout many of the games submitted”, says Lisanne.

The game Enrich U developed by team Nuclairons of the Brussels school Collège Jean XXIII was the ultimate winner. “An innovative and original game because of its diversity, its constructive level of difficulty, the different disciplines covered and the challenge to think strategically. Chance cards and other twists and turns keep you riveted right to the end. Excitement guaranteed”, says Michèle Coeck. The team also devised an extension to the game.

“In the extended version, certain boxes were blocked because of so-called ‘gamma rays’, giving the game a whole new dimension. Other strategies are required to win.”

LEAVING A LASTING IMPRESSION

Behind the gate of SCK•CEN, there is a lot to discover: ground-breaking research, innovative technologies and unique infrastructures. “Our colleagues submerge visitors in the world of nuclear science, but the big question, of course, is: What impression do we leave? We are currently assessing whether or not – and if so, how – our school visits have an impact on the knowledge, perception and career intentions of young people. We are expecting the results next year”, concludes Michèle Coeck.



Michèle Coeck and Lisanne Van Puyvelde, SCK•CEN Academy

“With initiatives like this one, we want to improve scientific literacy among young people in the fields of ionising radiation and its applications.”

Ionising radiation literacy

Via the Nuclear Game Challenge, SCK•CEN Academy wants to introduce youngsters to the nuclear industry. “Ensuring sufficient skilled workers in the nuclear industry, healthcare sector, public service and research is a major challenge these days. Attracting youth to STEM subjects (*science – technology – engineering – mathematics*) is a first step. With initiative like this one, we want to introduce them to these”, explains Michèle Coeck. The aim is to increase scientific literacy around ionising radiation and its applications. “This empowers everyone to have an informed involvement in the debate. We provide the correct facts and figures and, as it were, provide the scientific building blocks with which youngsters can form their own opinion and possibly also determine their choice of academic subject.”

Wide range

The Nuclear Game Challenge is only one of the initiatives of SCK•CEN Academy to enthuse youth for (nuclear) sciences. Michèle Coeck: “We also support STEM by providing a specific website for young people and teachers, contributing towards educational initiatives of different organisations (such as VONW, Vlajo,...) and organising scientific tours in the unique labs and nuclear installations of the research centre for third-grade pupils in secondary education.” Michèle Coeck and her colleague Lisanne Van Puyvelde experience a lot of interest for the initiatives they offer. “Because SCK•CEN is active in different fields, we can put forward a highly diverse offer. There is something for everyone”.