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M'sian to assist in Lebanon recovery

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PETALING JAYA: A Malaysian expert in nuclear techniques for non-destructive testing of civil structures is assisting the International Atomic Energy Agency (IAEA) in the reconstruction of Beirut, which was rocked by a massive blast at its port last year.

Noor Azreen Masenwat (*pic*), 37, a research officer with the Malaysian Nuclear Agency's (Nuklear Malaysia) structural integrity and materials group, is one of three international experts asked to lend their expertise in non-destructive testing to assess the integrity of the surviving masonry and concrete structures in the Lebanese port city.

IAEA said a team of experts was in Lebanon this week to help strengthen its capability to examine the integrity of the impacted buildings.

"The team is training national authorities and professionals in conducting non-destructive testing (NDT) to check the structural soundness of such buildings," it said in a recent statement quoting its director-general Rafael Mariano Grossi.

NDT is used to evaluate the integrity and properties of fabricated components as well as structures, without damaging the object being tested.

On Aug 4 last year, the explosion of 2,750 tonnes of ammonium nitrate at Beirut Port left a crater roughly 124m in diameter and 43m in depth, while homes as far as 10km were damaged, leaving up to 300,000 people homeless.

The cause of the blast, which led to at least 218 deaths, 7,000 injuries and US$15bil (RM60bil) in damage to property, is still under investigation.

According to UN-Habitat, there were varying degrees of damage to an estimated 77,000 apartments located across 10,000 buildings within a 3km radius of the blast.

Among the most common methods for NDT are ultrasonic radiography, liquid penetrant inspection and magnetic particle inspection.

"Many buildings directly affected by the devastating blast remain standing, and the use of NDT will help to identify if and where any repairs are required," IAEA said of the week-long mission.

Nuklear Malaysia director-general Dr Siti A'iasah Hashim, when contacted, said she was proud that one of its experts has been recognised globally.

She said Noor Azreen's contribution to understanding the integrity of concrete structures using radioactive and nuclear methods was yet another demonstration of the usefulness of nuclear and related technology in civil applications.

"Nuklear Malaysia, as the premier organisation in nuclear-related research and development in the country, will continue to ensure that nuclear technology will play an active role in national development, in fulfilling the goals under the national science and technology policies," she said.