

Molecular research center opens in Britain

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A British research center has opened in Liverpool to study the molecular design of drugs to combat diseases such as Alzheimer's.

The \$8 million Nuclear Magnetic Resonance Center at the University of Liverpool houses one of the largest superconducting magnets in Britain and will help scientists build a three-dimensional picture of what particular molecules look like.

The center's director, Professor Lu-Yun Lian, said nuclear magnetic resonance allows molecules of all sizes to be studied in microscopic detail.

"We can build a three-dimensional picture of the molecule at atomic resolution so that we can see how molecules work and how they fit together with each other," said Lian. "We can use this technique in the process of drug design."

The new center is constructed to provide a unique environment. Only non-magnetic materials are used for the structure, fixtures and fittings so as not to interfere with the magnets. External vibrations from road traffic are reduced by locating the magnets on glassfiber-reinforced concrete slabs, which are mounted on a specially-designed rubber damping system.

Computers constantly monitor the facility to maintain a constant temperature for accurate experiments.

The NMR center was officially dedicated last Thursday.

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