

## Neutron Isotope Reactions

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The field of low temperature nuclear reactions has made slow but steady progress. Evidence has accumulated for production of energy at the level of a few watts, for production of helium in proportion to energy, for energetic particles, and for transmutations of elements. But there is no generally accepted theory for these phenomena. Progress requires a body of experimental evidence and a candidate theory through which theory and experiment can gain mutual support and acceptance.

We explore the possibility that transfer of neutrons from neutron isotopes to ordinary nuclei, followed by beta decay of the neutron-enriched nuclei, facilitates a class of low-temperature transmutations. We have tested this possibility by comparing the implications of neutron isotope theory with the transmutations reported by Iwamura and associates. We find that experiment quantifies and supports the theory, and that theory clarifies and supports the experimental observations.