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Pelletized cold moderator with continuous change of pellets

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Abstract

Solid methane is known as a priority cold neutron moderator. But, its very poor radiation resistance put obstacles in the way of installing it at high power neutron sources. A single way to do it seems to use small beads of solid methane continuous removable in a moderator chamber. One of possible conception of a pelletized solid methane moderators is presented together with some theoretical confirmations of solid beads continuously recharging technics and experiments. Will be present a new idea to get solid methane pellets. As it is possible to make solid methane pellets.