

## **New beryllium oxide nuclear fuel improves heat conduction**

*Unfortunately such a discovery also demands a great deal of qualified research before it could be used.*

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Purdue University engineers claim to have developed a new nuclear fuel that is 50% better at conducting heat, significantly improving efficiency.

The team based in West Lafayette, Indiana, added beryllium oxide – which allows the fuel to cool more efficiently – to standard uranium oxide pellets. More efficient cooling prevents the cracks that typically appear in standard fuel and which necessitate their replacement before all the fuel has been consumed.

The addition of the beryllium oxide means the combined pellet lasts much longer than the standard one, according to Alvin Solomon, who led the research funded by the US Department of Energy.