

Scientists Create World's Smallest Snowman (w/ Video)

December 4 2009, by Lisa Zyga



The world's smallest snowman measures 0.01 mm across, with a nose just 0.001 mm wide. Credit: National Physical Laboratory.

(PhysOrg.com) -- David Cox, a scientist in the Quantum Detection group at the National Physical Laboratory in the UK, is an expert in nanofabrication techniques. Recently, using the tools of his trade and a bit of humor, he has created his latest masterpiece: the world's smallest snowman, which measures just 0.01 mm across (about one-fifth the width of a human hair).

Cox created the snowman "by hand" using a system for manipulating nanoparticles. Rather than being made out of snow, the figure's head and body consist of two tiny beads that are normally used to calibrate [electron microscope](#) lenses. Cox welded the beads together with a tiny bit of platinum, and then used a focused ion beam to carve the eyes and

smile. Lastly, he used an ion beam to deposit a tiny blob of [platinum](#) for the nose, which is less than one [micrometer](#) wide.

As shown in the video, the snowman is mounted on a silicon cantilever from an atomic force microscope, whose sharp tip is used to feel surfaces in order to create topographic surveys at very small scales.

While Cox's snowman holds the record for the smallest, MyFox News notes that the tallest snowman record is still held by the town of Bethel, Maine. Residents of the town [built a snowman](#) with a towering height of 113 feet, 7 inches, on February 17, 1999.

More information: <http://www.npl.co.uk/educate-explore/christmas/>

via: [The Telegraph](#)

© 2009 *PhysOrg.com*

Citation: Scientists Create World's Smallest Snowman (w/ Video) (2009, December 4) retrieved 3 May 2024 from <https://phys.org/news/2009-12-scientists-world-smallest-snowman-video.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--