

Updates to the ISO Series of Standards for Nanotechnology



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The business of nanotechnology – or extremely small things – is as complex and widespread as its constituents are small. Used in virtually every industry, nanotechnology enables the manipulation of materials at the level of the individual atom and is responsible for products being lighter, faster and more efficient. Microchips in computers are one example, biological analysis another, and even the better bounce in tennis balls is thanks to nanotechnology.

The industry comprises a vast range of different players, including scientists, regulators, manufacturers and much more, so having a widely understood, international vocabulary is essential.

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This includes technical specification [ISO/TS 80004-3](#), Nanotechnologies – Vocabulary – Part 3: Carbon nano-objects, which defines important terms and concepts for carbon nano-objects in a precise and consistent manner. It does so in a way that clarifies their interrelationship as well as their relationship to existing terms previously used for conventional carbon materials.

Others recently updated are [ISO/TS 80004-6](#), Nanotechnologies – Vocabulary – Part 6: Nano-object characterization, and [ISO/TS 80004-8](#), Nanotechnologies – Vocabulary – Part 8: Nanomanufacturing processes. Work is also underway to develop a standard that will consolidate some of the most fundamental terminology in the series.

Other standards in the current series include:

[ISO/TS 80004-1](#), Nanotechnologies – Vocabulary – Part 1: Core terms

[ISO/TS 80004-2](#), Nanotechnologies – Vocabulary – Part 2: Nano-objects

[ISO/TS 80004-4](#), Nanotechnologies – Vocabulary – Part 4: Nanostructured materials

[ISO/TS 80004-5](#), Nanotechnologies – Vocabulary – Part 5: Nano/bio interface

[ISO/TS 80004-7](#), Nanotechnologies – Vocabulary – Part 7: Diagnostics and therapeutics for healthcare

[ISO/TS 80004-9](#), Nanotechnologies – Vocabulary – Part 9: Nano-enabled electrotechnical products and systems

[ISO/TS 80004-11](#), Nanotechnologies – Vocabulary – Part 11: Nanolayer, nanocoating, nanofilm, and related terms

[ISO/TS 80004-12](#), Nanotechnologies – Vocabulary – Part 12: Quantum phenomena in nanotechnology

[ISO/TS 80004-13](#), Nanotechnologies – Vocabulary – Part 13: Graphene and related two-dimensional (2D) materials

The ISO/TS 80004 series was developed by ISO technical committee [ISO/TC 229](#), Nanotechnologies, whose secretariat is held by BSI, ISO's member for the [UK](#), in cooperation with ISO's partner organization, the International Electrotechnical Commission (IEC).

Read the [original article](#) on International Organization for Standardization (ISO).