

ISO/TC 229 PROGRAM OF WORK AND STATUS UPDATE – 12/16/2014

PUBLISHED DOCUMENTS DEVELOPED BY ISO/TC 229

ISO/TS 27687:2008 – *Nanotechnologies -- Terminology and definitions for nano-objects -- Nanoparticle, nanofibre and nanoplate*
ISO/TR 12885:2008 – *Nanotechnologies – Health and safety practices in occupational settings relevant to nanotechnologies*
ISO/TR 11360:2010 – *Nanotechnologies – Methodology for the classification and categorization of nanomaterials*
ISO/TS 80004-3:2010 – *Nanotechnologies --Terminology and definitions --Part 3: Carbon nano-objects*
ISO/29701:2010 - *Nanotechnologies --Endotoxin test on nanomaterial samples for in vitro systems -- LAL Assay*
ISO/TS 10867:2010 – *Nanotechnologies -- Characterization of single-wall carbon nanotubes using near infrared photoluminescence spectroscopy*
ISO/TS 80004-1:2010 – *Nanotechnologies – Vocabulary – Part 1: Core terms*
ISO/TR 12802-2010 – *Nanotechnologies – Model taxonomic framework for use in developing vocabularies – Core concepts*
ISO/TS 11251-2010 – *Nanotechnologies – Characterization of volatile components in single-wall carbon nanotube samples using evolved gas analysis/gas chromatograph-mass spectrometry*
ISO 10801:2010 – *Nanotechnologies --Generation of metal nanoparticles for inhalation toxicity testing using the evaporation/condensation method*
ISO 10808:2010 – *Nanotechnologies --Characterization of nanoparticles in inhalation exposure chambers for inhalation toxicity testing*
ISO/TR 13121:2011 – *Nanotechnologies -- Nanomaterial risk evaluation*
ISO/TS 10798:2011 - *Nanotechnologies -- Characterization of single-wall carbon nanotubes using scanning electron microscopy and energy dispersive X-ray spectrometry analysis*
ISO/TS 10868:2011 - *Nanotechnologies -- Characterization of single-wall carbon nanotubes using ultraviolet-visible-near infrared (UV-Vis-NIR) absorption spectroscopy*
ISO/TS 80004-7:2011 - *Nanotechnologies -- Vocabulary -- Part 7: Diagnostics and therapeutics for healthcare*
ISO/TS 13278:2011 – *Nanotechnologies – Determination of metal impurities in samples of carbon nanotubes using inductively coupled plasma mass spectrometry*
ISO/TS 11308:2011 – *Nanotechnologies – Characterization of single-wall carbon nanotubes using thermogravimetric analysis*
ISO/TS 11888:2011 – *Nanotechnologies - Characterization of multiwall carbon nanotubes -- Mesoscopic shape factors*
ISO/TS 12805:2011 – *Nanotechnologies -- Materials specifications -- Guidance on specifying nano-objects*
ISO/TS 80004-4:2011 – *Nanotechnologies – Vocabulary – Part 4: Nanostructured materials*
ISO/TS 80004-5:2011 – *Nanotechnologies – Vocabulary – Part 5: Bionano interface*
ISO/TR 10929:2012 - *Nanotechnologies -- Characterization of multiwall carbon nanotube (MWCNT) samples*
ISO/TR 13014:2012 - *Nanotechnologies - Guidance on physicochemical characterization of engineered nanoscale materials for toxicologic assessment*
ISO/TS 10797:2012 – *Nanotechnologies -- Characterization of single-wall carbon nanotubes using transmission electron microscopy (TEM)*
ISO/TR 11811-2012 – *Nanotechnologies -- Guidance on methods for nano- and microtribology instruments*
IEC/ISO TS 62622 - *Nanotechnologies – Description, measurement and dimensional quality parameters of artificial gratings*
ISO/TS 12025:2012 - *Nanomaterials -- Quantification of nano-object release from powders by generation of aerosols*
ISO/TS 14101:2012 - *Surface characterization of gold nanoparticles for nanomaterial specific toxicity screening: FT-IR method*
ISO/TS 12901-1:2012 - *Nanotechnologies – Occupational risk management applied to engineered nanomaterials Part 1: Principles and approaches*
ISO/TR 13329:2012 - *Nanomaterials -- Preparation of material safety data sheet (MSDS)*

ISO/TS 11931:2012 - *Nanotechnologies -- Nanoscale calcium carbonate in powder form -- Characteristics and measurement*
 ISO/TS 11937:2012 - *Nanotechnologies -- Nanoscale titanium dioxide in powder form -- Characteristics and measurement*
 ISO/TS 16195:2013 - *Nanotechnologies -Generic requirements for reference materials for development of methods for characteristic testing, performance testing and safety testing of nano-particle and nano-fiber powders*
 ISO/TS 17200:2013 - *Nanotechnology -- Nanoparticles in powder form -- Characteristics and measurements*
 ISO/TS 80004-6:2013 - *Nanotechnologies -- Vocabulary -- Part 6: Nano-object characterization*
 ISO/TS 13830:2013 – *Nanotechnologies – Guidance on voluntary labelling for consumer products containing manufactured nano-objects*
 ISO/TS 80004-8:2013 - *Nanotechnologies -- Vocabulary -- Part 8: Nanomanufacturing*
 ISO/TR 14786:2014 - *Nanotechnologies — Considerations for the development of chemical nomenclature for selected nano-objects*
 ISO/TS 12901-2:2014 – *Nanotechnologies – Occupational risk management applied to engineered nanomaterials – Part 2: Use of the control banding approach*
 ISO/TR 16197:2014 - *Nanotechnologies -- Compilation and description of toxicological screening methods for manufactured nanomaterials*
 ISO/TS 16550:2014 - *Nanotechnologies -- Determination of silver nanoparticles potency by release of muramic acid from Staphylococcus aureus*

Current ISO/TC 229 Program of Work

Working Group	Designation	Title
JWG 1/PG 1 Rev	ISO/TS 80004-2 (formerly ISO/TS 27687)	Nanotechnologies – Vocabulary – Part 2: Nano-objects – Nanoparticle, nanofibre, nanoplate
JWG 1/PG 5 Amd	ISO/TS 80001-4 Amd. 1	ISO/TS 80004-1:2010/AMD 1 'Nanotechnologies — Vocabulary — Part 1: Core terms' – Amendment 1
JWG 1/PG 12	ISO/AWI 17302	Framework for identifying vocabulary development for nanotechnology applications in human healthcare
JWG 1 /PG 13	ISO/TS 18110	Nanotechnologies - Vocabularies for Science, Technology and Innovation Indicators
JWG 1/PG 14	ISO/DTR 18401	Nanotechnologies - Plain Language Guide for Terminology
JWG 1/PG 17	ISO/DTS 80004-11	Nanotechnologies - Vocabulary - Part 11: Nanolayer, nanocoating, nanofilm and related terms
JWG 1/PG 18	ISO/DTS 80004-12	Nanotechnologies – Vocabulary – Part 12: Quantum phenomena
JWG 1/PG 19	ISO/DTS 80004-13	Nanotechnologies – Vocabulary – Part 13: Graphene and other 2d materials
JWG	ISO/DTS 17466	Use of UV-Vis Absorption Spectroscopy in the Characterization of Cadmium

2/PG 14		Chalcogenide Semiconductor
JWG 2/PG 15	ISO/DTR 18196	Measurement technique matrix for nano-objects
JWG 2/PG 16	ISO/DTS 19590	Nanoparticles: Detection and characterization using single-particle ICP-MS
JWG 2/PG 17	ISO/DTR 19716	Nanotechnologies -- Characterization of cellulose nanocrystals -- Particle morphology, purity and surface properties
JWG 2/PG 18	ISO/DTR 19733	Matrix of characterization and measurement methods for Graphene
JWG 2	ISO/PWI	Determination of size and size distribution of nano-objects by scanning electron microscopy
JWG 2	ISO/PWI (Now NWIP)	Nanotechnologies - Guidelines for collection and sample preparation of airborne nanoparticles for microscopy techniques
WG 3/PG 12	ISO/TR 16196	Compilation and description for sample preparation and dosing methods for engineered and manufactured nanomaterials
WG 3/PG 15	ISO/DTR 18637	General framework for the development of occupational exposure limits for nano-objects and their aggregates and agglomerates
WG 3/PG 16	ISO/TS 18827	ESR as a method for measuring ROS generated by metal oxide nanomaterials
WG 3/PG 17	ISO/AWI 19007	<i>In vitro</i> MTS Assay for measuring the cytotoxic effect of nanoparticles
WG 3/PG 18	ISO/AWI 19006	Dichloro-dihydro-fluorescein diacetate (DCFH-DA) Assay for evaluating nanoparticle-induced intracellular ROS production in Raw 264.7 macrophage cell line
WG 3/PG 19	ISO/DTR 19057	Nanotechnologies – the use and application of acellular in Vitro Tests and Methodologies to assess Nanomaterial Biodurability
WG 3/PG 20	ISO/DTS 19337	Characteristics of working suspensions of nano-objects for <i>in vitro</i> assays to evaluate inherent nano-object toxicity
WG 3/PG 21	ISO/DTR 19601	Aerosol generation for NOAA air exposure studies
WG 4	ISO/PWI	Specification for magnetic nanoparticle suspensions
WG 4	ISO/PWI	Specification for carbon nanotube dispersions

ISO SYSTEMATIC REVIEW BALLOTS

Working Group	Designation	Title
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JWG 1	ISO/TS 80004-7	Nanotechnologies – Vocabulary – Part 7: Diagnostics and therapeutics for healthcare
JWG 2	ISO/TS 10798	Nanotechnologies – Characterization of single-wall carbon nanotubes using scanning electron microscopy and energy dispersive x-ray spectrometry analysis
JWG 2	ISO/TS 10868	Nanotechnologies -- Characterization of single-wall carbon nanotubes using ultraviolet-visible-near infrared (UV-Vis-NIR) absorption spectroscopy
JWG 1	ISO/TS 80004-4	Nanotechnologies – Vocabulary – Part 4: Nanostructured materials
JWG 1	ISO/TS 80004-5	Nanotechnologies – Vocabulary – Part 5: Bionano Interface
JWG 2	ISO/TS 11308	Nanotechnologies – Characterization of single-wall carbon nanotubes using thermogravimetric analysis
JWG 2	ISO/TS 11888	Nanotechnologies - Characterization of multiwall carbon nanotubes -- Mesoscopic shape factors
JWG 2	ISO/TS 13728	Nanotechnologies – Determination of metal impurities in samples of carbon nanotubes using inductively coupled plasma mass spectrometry
WG 4	ISO/TS 12805	Nanotechnologies -- Materials specifications -- Guidance on specifying nano-objects

IEC TC 113 LED WORK ITEMS BEING JOINTLY DEVELOPED

WG?	Designation	Title
JWG 1/PG 15	ISO/DTS 80004-9	Nanotechnologies - Vocabulary - Part 9: Nano-enabled electrotechnical products and systems
JWG 1/PG 16	ISO/DTS 80004-10	Nanotechnologies - Vocabulary - Part 10: Nano-enabled photonic components and systems
	IEC 62565-3-1	Nanomanufacturing — Material specifications — Part 3-1: Graphene — Blank detail specification

CEN LED WORK ITEMS BEING JOINTLY DEVELOPED UNDER THE VIENNA AGREEMENT

WG?	Designation	Title
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WG 2	ISO/AWI TR 11808	Nanotechnologies --Guidance on nanoparticle measurement methods and their limitations
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Acronym Key:

AWI – Approved Work Item

CD – Committee Draft (ballot at TC)

DIS – Draft International Standard

DTR – Draft Technical Report

DTS – Draft Technical Specification

FDIS – Final Draft International Standard

PWI – Preliminary Work Item

WD – Working Draft (being developed by WG)

TR – Technical Report

TS – Technical Specification