Training offers by NanoCommons





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Chair WG-A Education,
Training, Communication

www.nanosafetycluster.eu



Events

- ▶What we had so far?
- ►What is planned?

Online available materials

► Where do I find them?

NanoCommons Webinars & Hackathons, #nanocommons

This project has received funding from the European Union Horizon 2020 Programme (H2020) under grant agreement no. 731032.

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NanoCommons User Guidance Handbook

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NanoMaterialCommons User Handbook

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Home Data management FAIRification Nanoinformatics Training courses NSC day 2021 Nanosafety training school 2021 Demonstration cases V

About & partner projects

Complete series of training materials

In addition to structuring the material by topic, as was done in other sections, we list here courses and series of training materials that provide an overview of nanosafety and nanoinformatics useful for beginners or people looking to get an overview of the areas. Parts of these courses are then also linked in the sections that cover the specific topic.

■ NSC day 2021

This day acted as guidance for the entire NanoSafety community, including young researchers, to highlight how individual research projects fit as a puzzle piece into the wider picture. It shall be an orientation-giving and educational event depicting the overall strategy behind NanoSafe(ty).

Nanosafety training school 2021

The School features keynote speeches a variety of hands-on sessions aimed to transfer state-of-the-art knowledge on a variety of topics from key experts to the new generation of nano-environmental, health and safety, and biomedicine professionals, using interprofessional education.

Powered by NanoCommons and Seven Past Nine and based on Jekyll and Just the Docs.

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Events



EU Nanosafety Cluster Education Day @ NanoSAFE 2020 Digital

Conference

Webinar, Training, Workshop (organized by NanoCommons)

16 Nov 2020

The University of Birmingham (UoB)

Edelweiss Connect GmbH (EwC)

United Kingdom Research and Innovation (UKRI)

National Technical University of Athens (NTUA)

LEITAT - ACONDICIONAMIENTO TARRASENSE ASSOCIACION (LEITAT)

Universitat Salzburg / Paris Lodron University of Salzburg (PLUS)

NovaMechanics Ltd (NovaM) Universiteit Maastricht (UM)

2020 U.S.-EU NanoEHS COR Workshop: Bridging Insights and

Perspectives

Conference, Workshop

16 - 17 Sep 2020

The University of Birmingham (UoB)

Edelweiss Connect GmbH (EwC)

National University of Ireland Dublin - University College Dublin (NUID-UCD)

Universitat Salzburg / Paris Lodron University of Salzburg (PLUS)

Universiteit Maastricht (UM)

Online Electronic Lab Notebook basics - Hackathon

Webinar, Hackathon, Training, Workshop (organized by NanoCommons)

14 Jul 2020

The University of Birmingham (UoB)

United Kingdom Research and Innovation (UKRI)

BioNanoNet (BIONANONET)

Universitat Salzburg / Paris Lodron University of Salzburg (PLUS)

SmartNanoTox International Online Conference

Conference

24 - 24 Jun 2020 / Online

The University of Birmingham (UoB) BioNanoNet (BIONANONET)

Online Jagpot Hackathon - Take your research from the bench to the

The University of Birmingham (UoB)



December 10, 2020

Presentation Open Access

EU NanoSafety Cluster Education Day @ NanoSafe 2020

Dr Martin Himly

The EU NanoSafety Cluster WG-A on Education, Training, and Communication organized this Education Day on Nov 16 as satellite event of the NanoSafe Digital Congress 2020. This day acted as guidance for the entire NanoSafety community, including young researchers, to highlight how individual research projects fit as a puzzle piece into the wider picture. It was an orientation-giving and educational event depicting the overall strategy behind NanoSafe(ty).

Means to achieve this included:

- to offer a WG-overarching education/communication/discussion event involving the audience via interactive sessions:
- to layout ways to go beyond with anything the nanosafety community have learned/developed to serve the emerging topics of Horizon Europe (emerging contaminants incl. microplastics, nanomedicine, safety assessment of novel/innovative/advanced materials for tomorrow along their entire life cycle):
- to foster participation in creating better sustainable materials (than e.g. nanosilver in socks), technologies, medical approaches, etc.
- to exhibit the perspectives of the NSC Working Groups and the different currently ongoing projects;
- to be as interactive as possible using hands-on activities, e.g., by showing how-to operate e-tools, upload/retrieve data to/from repositories & perform models;
- to facilitate vivid contribution to discussions using survey tools such as Mentimeter, WooClap, VoxVote, etc.
- to offer different perspectives in pro/contra discussions, e.g., by defining challenger defender roles taken by experts on specific topics or evtl. by dividing attendees into zoom breakout rooms
- to show application of emerging NRG frameworks or SbD tools;
- to request feedback to user interfaces and enable stakeholder involvement

We herewith share and document the educational materials for later use by the scientific community.

Martin Himly, Chair of the EU NSC Working Group A with gratitude to all presenters for their contributions!



Communities

EU NanoSafety Cluster

H2020 Infrastructure Project NanoCommons

H2020 NMBP-15 Project SbD4Nano

H2020 Project SABYDOMA

Horizon2020 GRACIOUS

Nano Risk Governance

NanoSolveIT H2020 Nanoinformatics Project **≭** Remove

35

60 downloads

See more details.

OpenAIRE

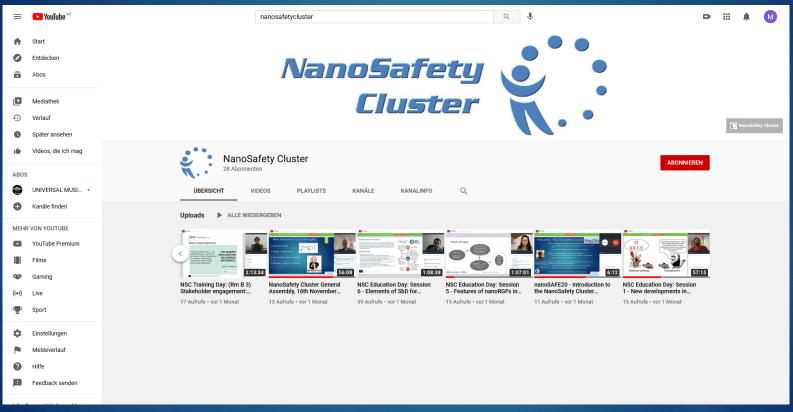
Publication date: December 10, 2020

DOI:





... the NC & NSC channels @ YouTube

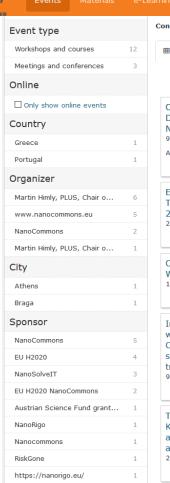






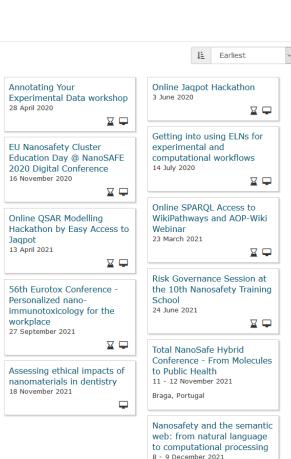
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Nano-Knowledge Community



Target audience







Nanosafety Training School: From Basic Science To Risk Governance

Event Date: 21st June 2021 - 25th June 2021 Online



Nanosafety Training School: From Basic Science To Risk Governance

Interprofessional Education Training School

Organisers























TOPICS:

- Hazard to Human Health & Environment
- Fate & Exposure Assessment
- Nanomedicine: from the lab to the market
- Modelling
- Grouping & Read Across Approaches
- Risk Governance Session



The NanoCommons Knowledge Base





BioXM™ Knowledge Portal





You don't have an account yet? Please register here.
Forgot password?
Contact Biomax if you need help support@biomax.com
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Supporting experimental-2-informatics workflows



The NanoCommons Knowledge Base (NC KB) integrates reliable experimental in vitro data on nanomaterials (NMs), ontology-annotated & metadata-supplemented, with in silico prediction tools

11. Ontology annotation & data FAIRness powered by NC KB

Protein corona formation?

1. NM synthesis & surface functionalization

10. NM-protein conjugate data & metadata upload to NC KB

9. Functional assays of noncovalent NM-protein conjugates-> orientation, epitope display?

8. Structural assays of non-covalent NM-protein conjugates -> 3D fold?

7. Quantitative assays on non-covalent NM-protein conjugates -> selectivity?

Integrated
in vitro-in silico
workflow

Retrieval of suitable data/metadata template for physico-chemical NM characterization from NC KB

3. Physico-chemical characterization of NM

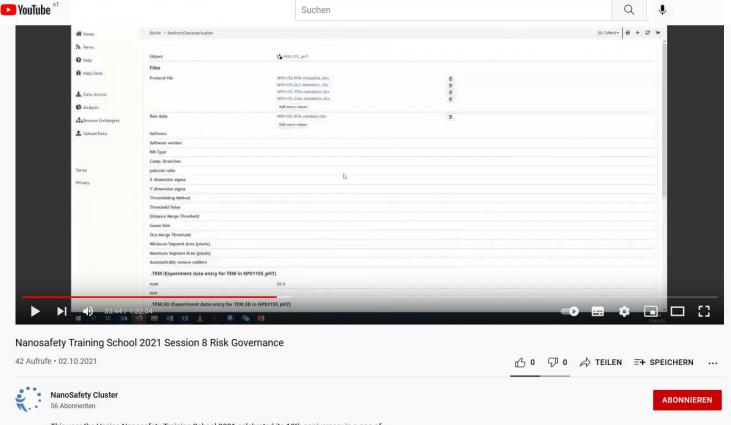
4. Physico-chemical NM data & metadata upload to NC KB

5. NanoXtract-based TEM image analysis

6. Protein corona in silico modelling



The NanoCommons Knowledge Base



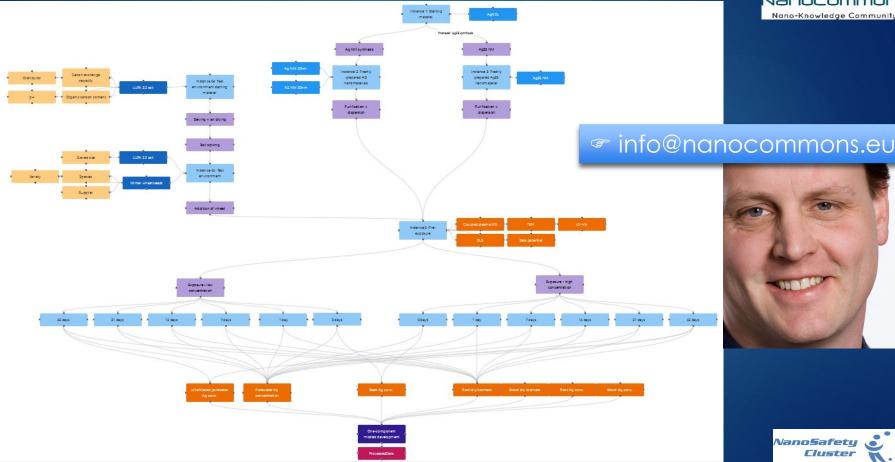




This year the Venice Nanosafety Training School 2021 celebrated its 10th anniversary in a one-ofa-kind, large-scale event organised by the EC funded H2020 projects: Biorima, Gov4Nano, Gracious, NanoInformaTIX, NANORIGO, PATROLS, and RiskGONE.

Friday trainings on instance mapping

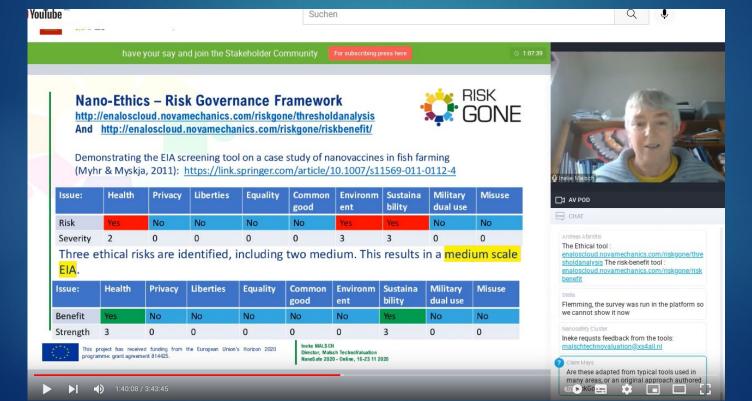






Upcoming training events – Nov 18, 15-17 h CET

The Ethics Impact Assessment Tool showcasing nano in dentistry



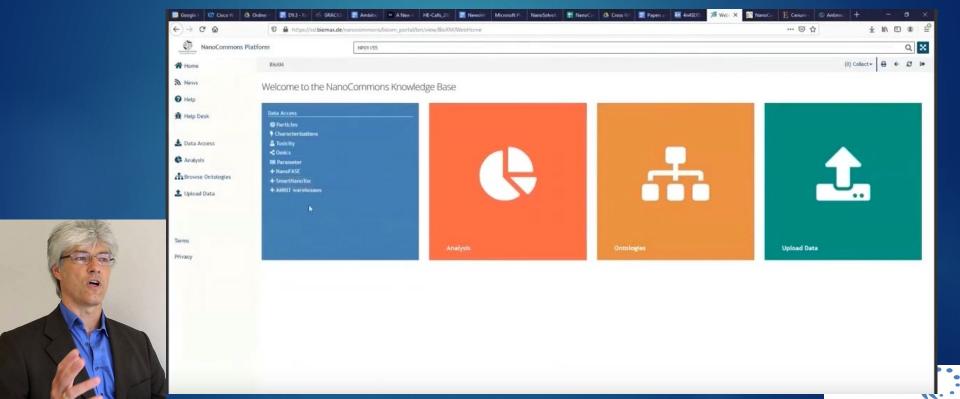




Upcoming training events – Dec 2, 15-17 h CET

NanoCommons
Nano-Knowledge Community

"NC KB: how to find all data for one nanomaterial across multiple data sources"



Upcoming training events – Dec 8&9, 13-17 h CET

Nanosafety and the semantic web: from natural language to computational processing

8th and 9th of December 13.00-17.00h















Day 1 - Wednesday 8th of December 2021

	-		
13.00 - 13.15	Welcome		
RDF and SPARQL			
13.15 - 13.45	Introduction to RDF and SPARQL - Lecture (Denise Slenter)		
13.45 - 14.15	Gene variants in Wikidata - Hands on session		
14.15 - 14.45	Drug Targets in Wikidata - Hands on session		
14.45 - 15.15	Break		
15.15 - 16.00	Overview of our SPARQL endpoints - Lecture (Marvin Martens) WikiPathways ChEMBL AOP-Wiki / AOP-DB Nanosafety Landscape		
16.00 - 16.45	Querying your SPARQL endpoint of choice - Hands on session		
16.45 - 17.00	Closing remarks		

Day 2 - Thursday 9th of December 2021

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	13.00 - 13.15	Welcome and recap Day 1		
		Ontologies		
	13.15 - 13.45	Introduction to ontologies - Lecture (Egon Willighagen)		
	13.45 - 14.10	Using the eNanoMapper ontology - Hands on session		
	14.10 - 14.30	Extending the eNanoMapper ontology - Hands on session		
	14.30 - 14.45	Entering and analysing nano safety data - Hands on session		
	14.45 - 15.15	Break		
	15.15 - 15.45	SbD4Nano landscape - Lecture (Jeaphianne van Rijn)		
	15.45 - 16.15	Querying the SbD4Nano SPARQL endpoint - Hands on session		
	16.15 - 16.45	Q&A session		
	16.45 - 17.00	Closing remarks		



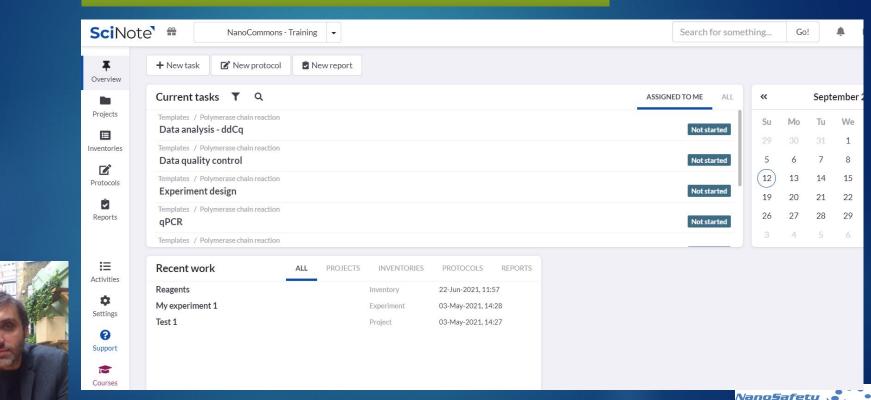


Upcoming training events – Jan 13, 15-17 h CET

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"Electronic Lab Notebooks - Demo of NanoCommons-powered Features"



Upcoming training events – Jan 27, 15-17 h CET

"Electronic Lab Notebooks – Getting Your Hands on"



Cluster





Useful links:

User Guidance Handbook @ www.nanocommons.eu

https://www.nanocommons.eu/e-infrastructure/user-guidance-handbook/



Training events and materials @ NanoCommons Infrastructure

- https://infrastructure.nanocommons.eu/events/
 - NSC Education Day Session 1
 - NanoSafety Training School

NanoCommons @ ELIXIR TeSS

https://tess.elixir-europe.org/content_providers/nanocommons#events

NanoCommons community @ Zenodo

https://zenodo.org/communities/nanocommons

NanoCommons Channel @ YouTube

https://www.youtube.com/channel/UCuawpRvXNpglwyeItefTctw

mailing list of WG-A Education, Training, Communication

www.nanosafetycluster.eu





Thank you for joining our Workshop!



Upcoming training events:



▶ Thu, 18.11. 15-17 h CET, "Ethics Impact Assessment Tool showcasing nano in dentistry" by Ineke Malsh

Nano-Knowledge Community

- ▶ Thu, 2.12. 15-17 h CET, "NC KB: how to find all data for one nanomaterial across multiple data sources" by Dieter Maier
- Wed+Thu, 8+9.12. 13-17 h CET, "Nanosafety and the semantic web: from natural language to computational processing", Workshop by Egon Willighagen's team at UM, BiGCaT group
- ▶ Thu, 13.1. 15-17 h CET, "Electronic Lab Notebooks Demo of NanoCommons-powered Features" by Tassos Papadiamantis
- ▶ Thu, 27.1. 15-17 h CET, "Electronic Lab Notebooks Getting Your Hands on" by Tassos Papadiamantis

