v. 1.01 May 2, 2016

NanoSafer v. 1.1beta QuickQuide

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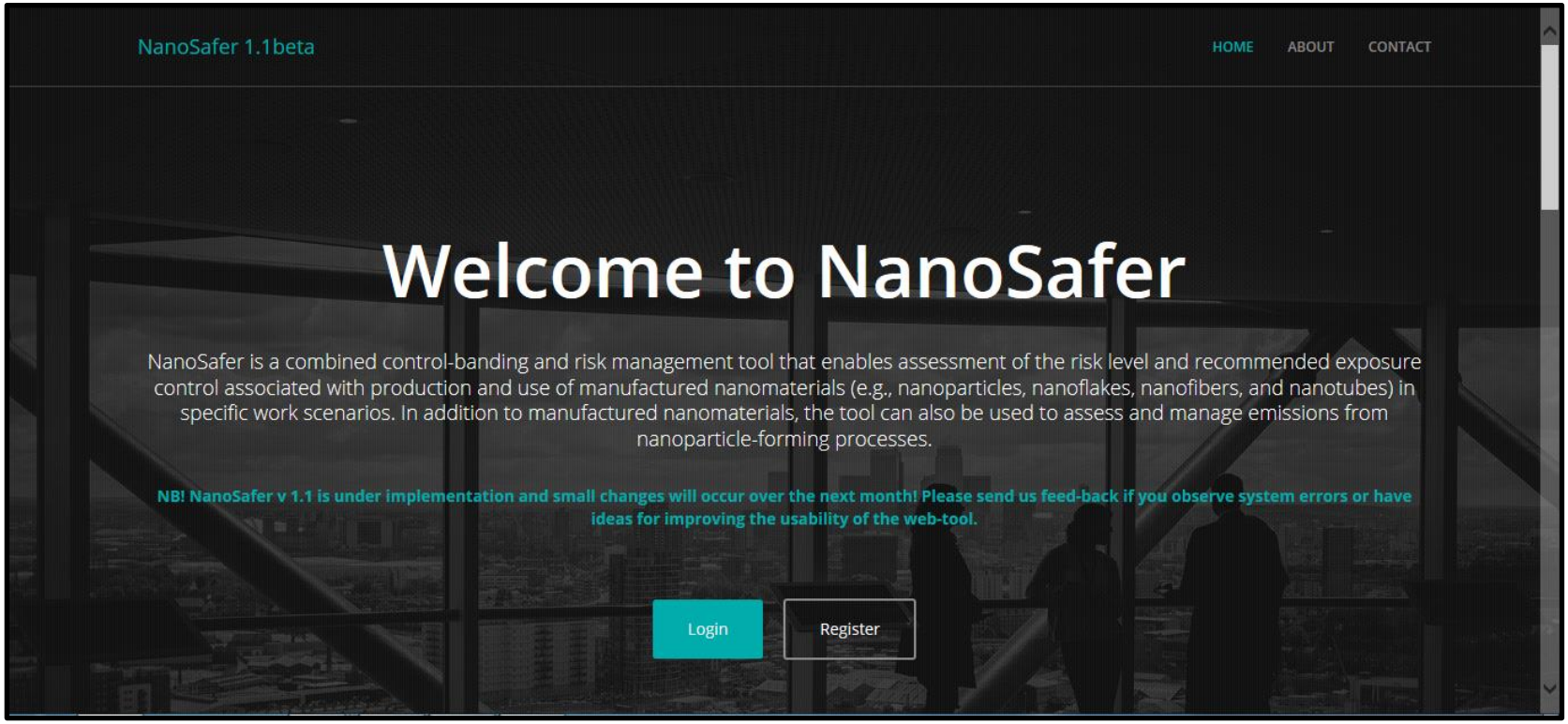
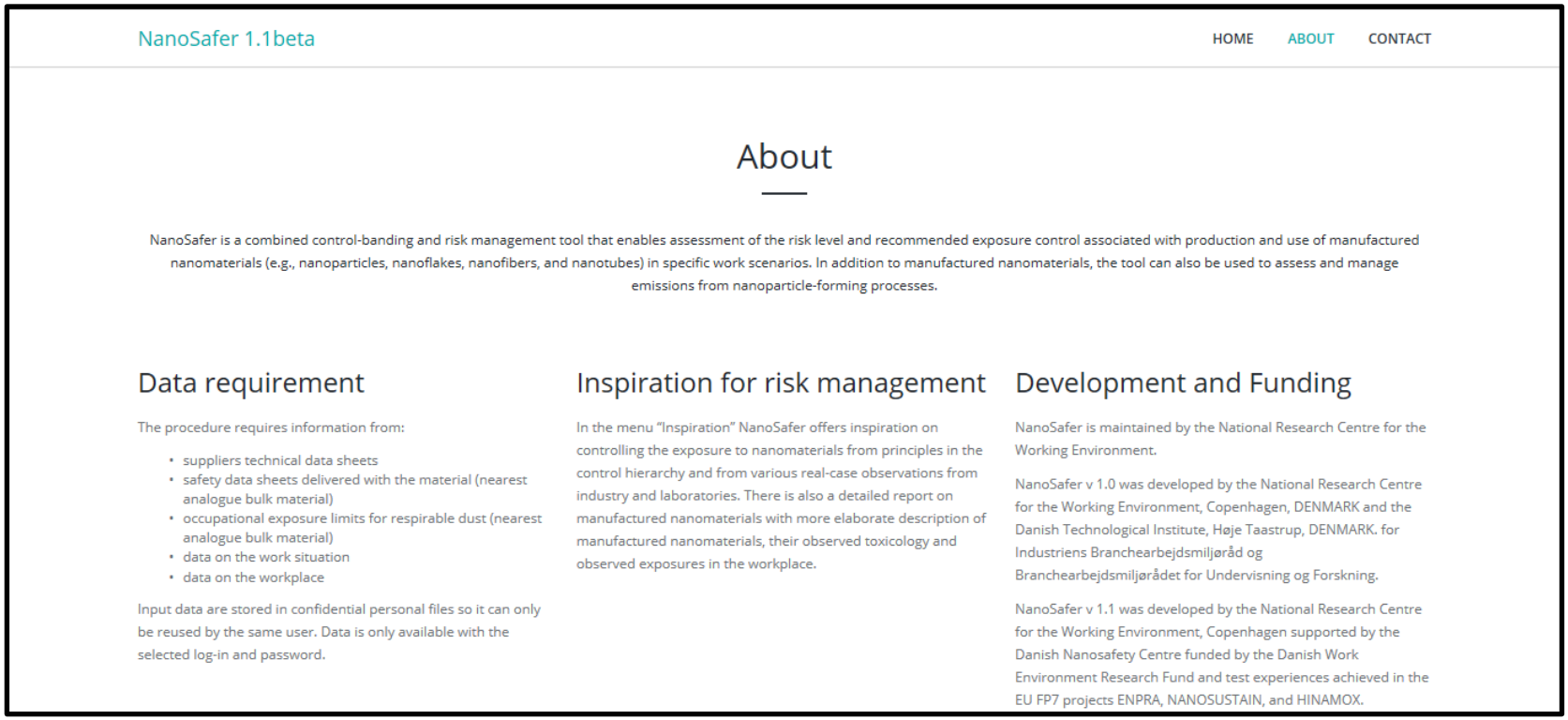
Login or register at front page

www.nanosafer.org



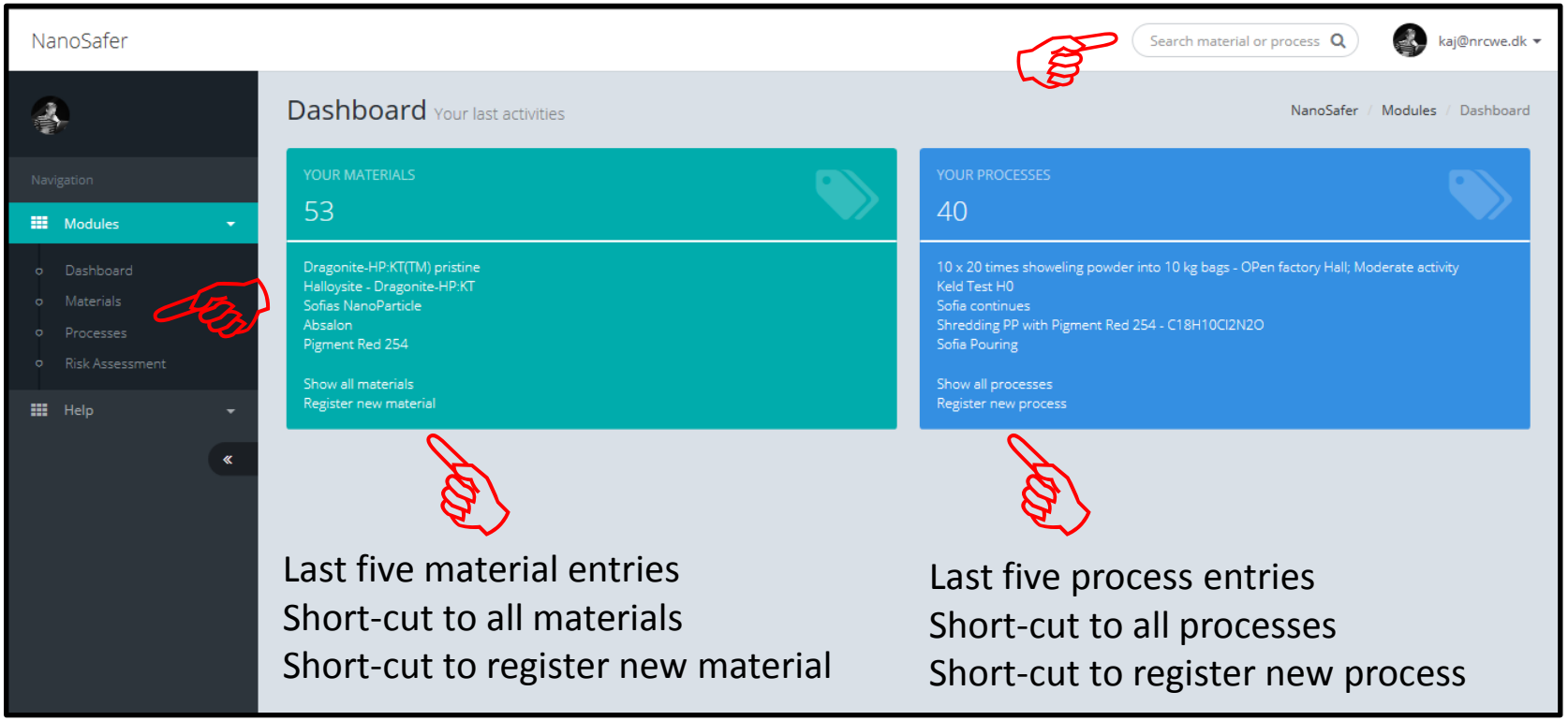
Data requirements

[see brief information under “About”]



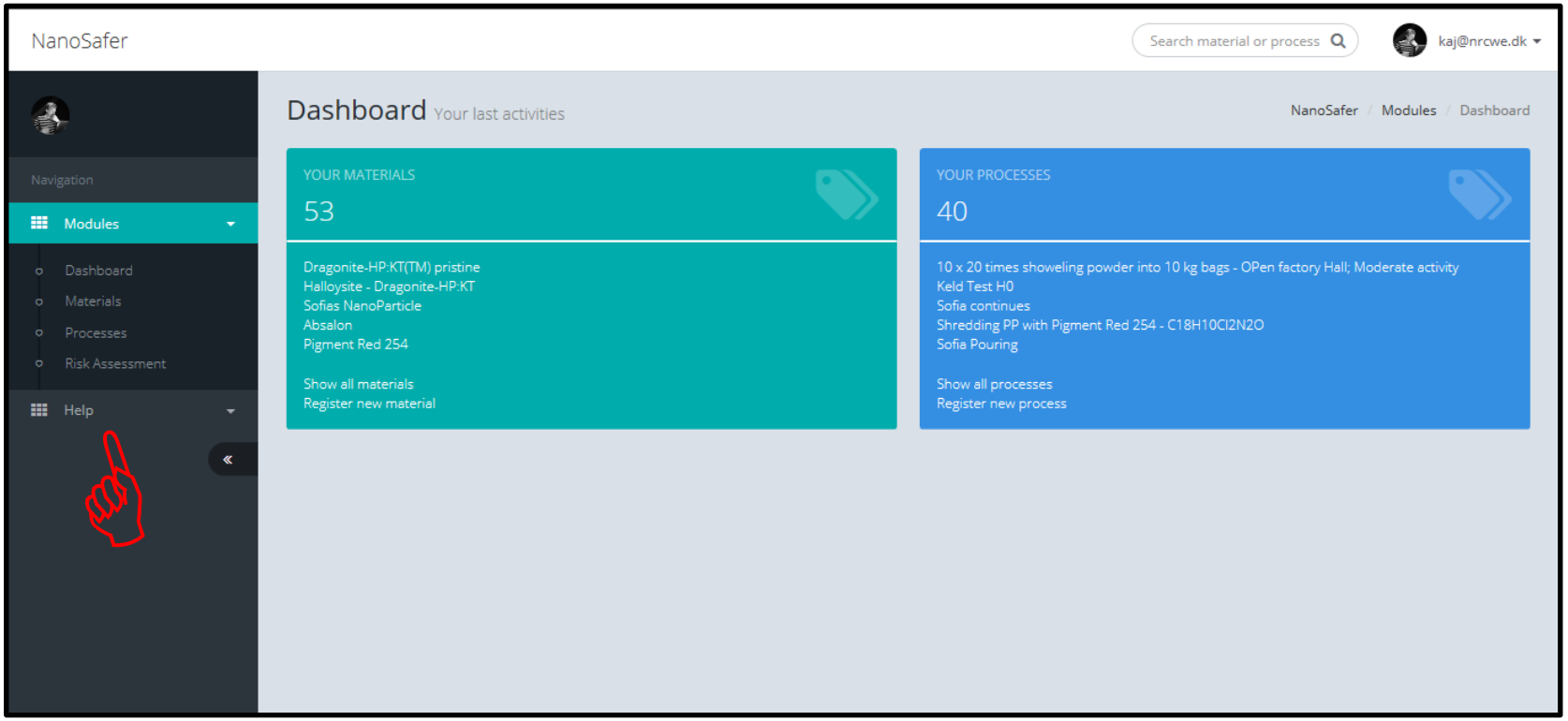
Getting started
Dashboard upon login

1. Menu bar to the left for access between modules
2. Dashboard gives quick overview over last five entries
3. Free text search in materials and processes



Facilities under “Help”

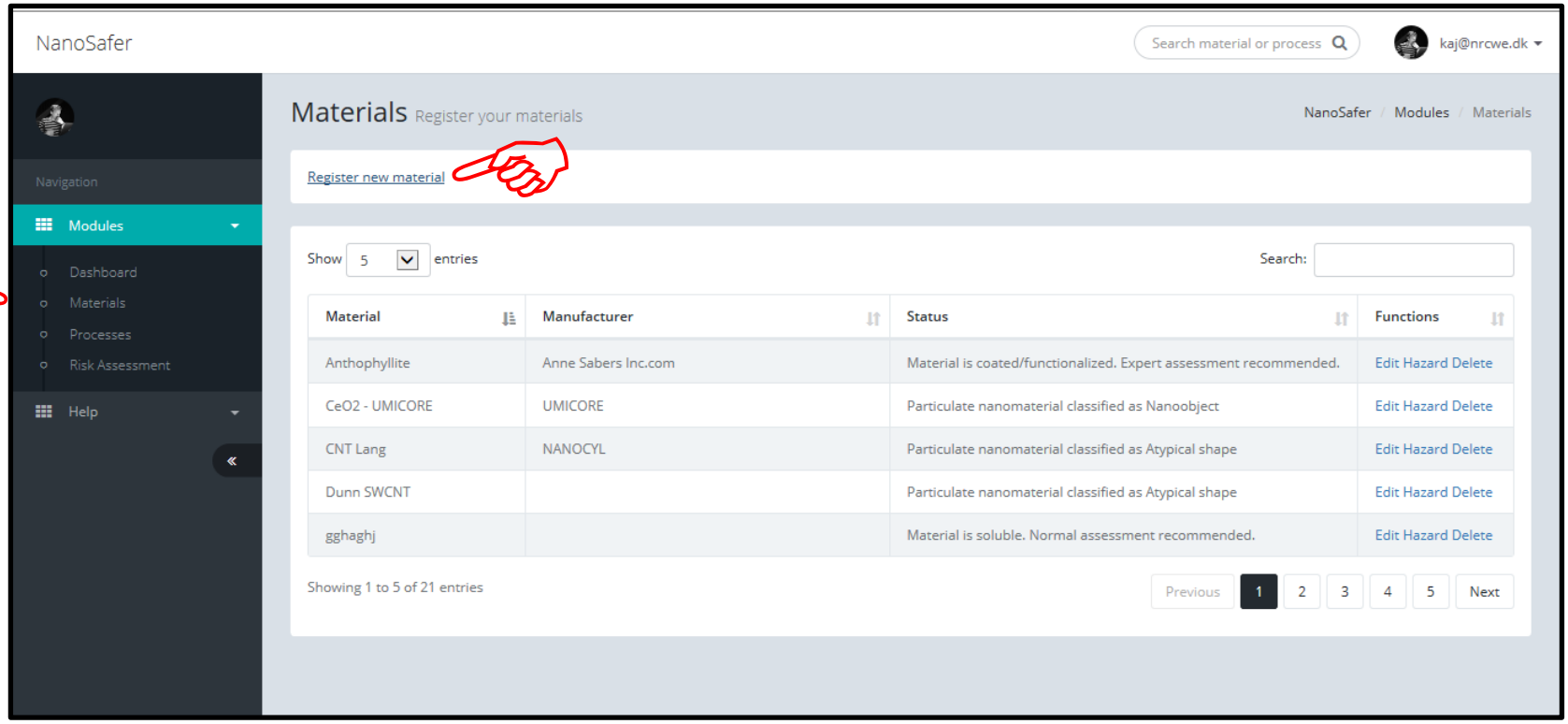
1. Quick Guide
2. Identify: Do I work with nanomaterials?
3. Relevant methods and standards
3. EU Nanosafety information and regulation
4. E-learning (good practise, hierarchy of controls)



Register Material

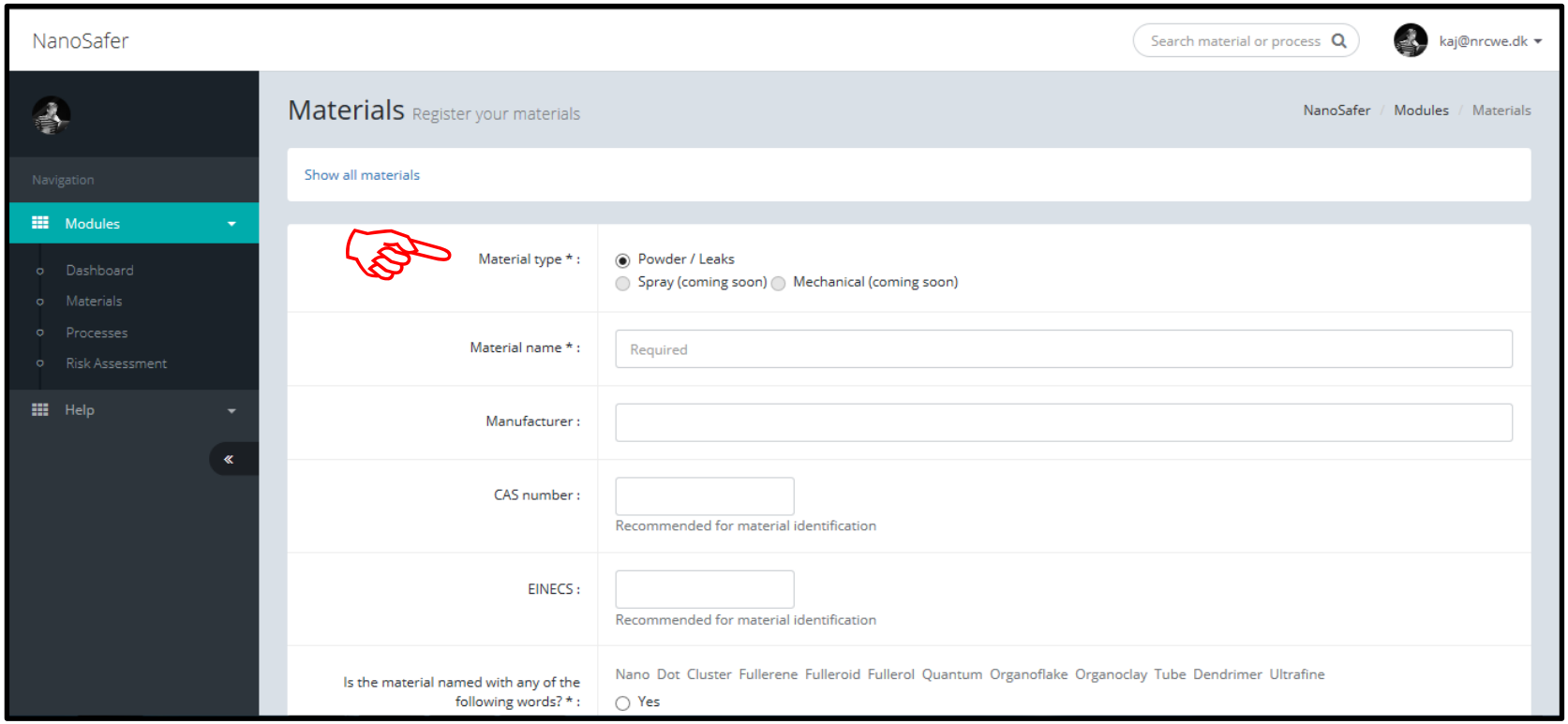
1) Click Material in menu to the left

2) Click Register new material



Register Material

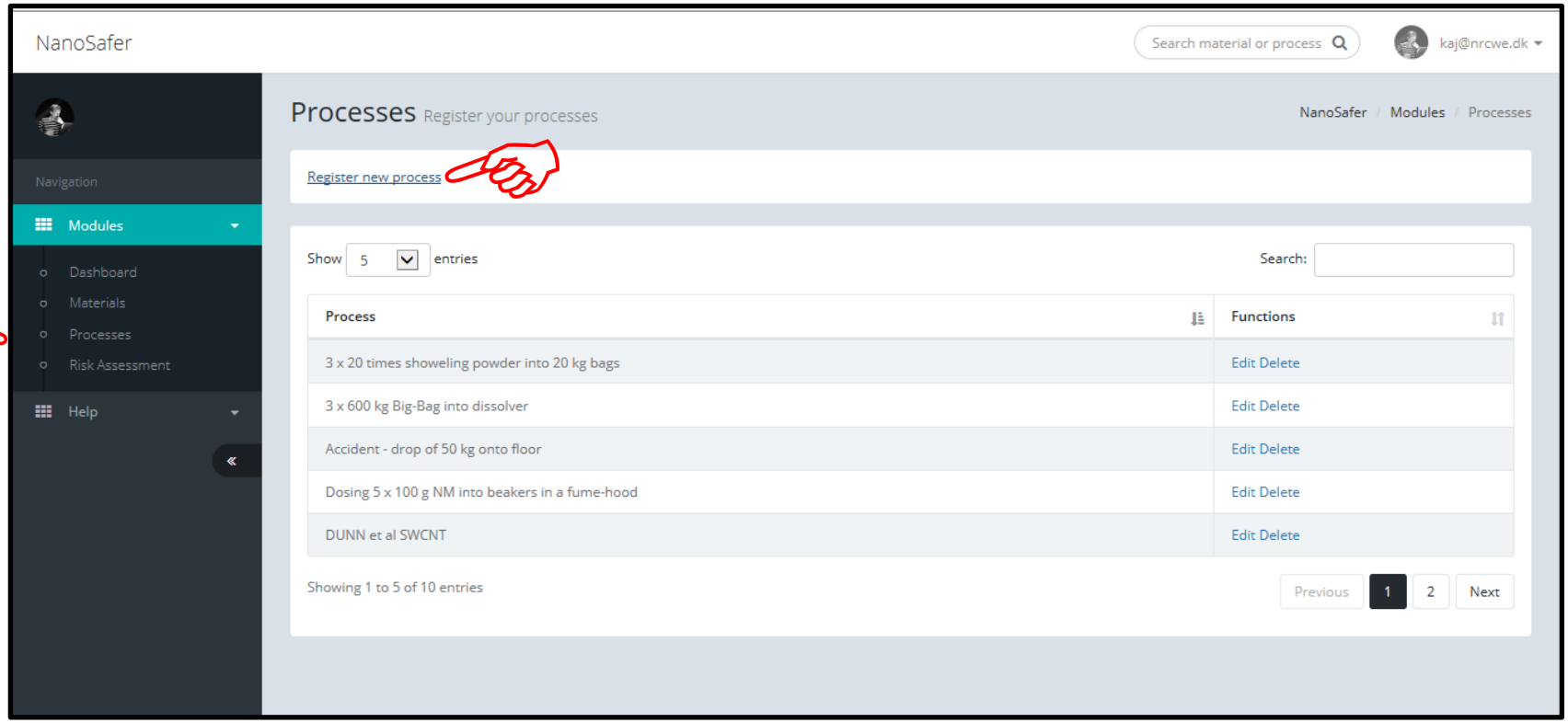
1) Click which type of material / product to enter
2) Enter the requested technical and safety data



Register Process

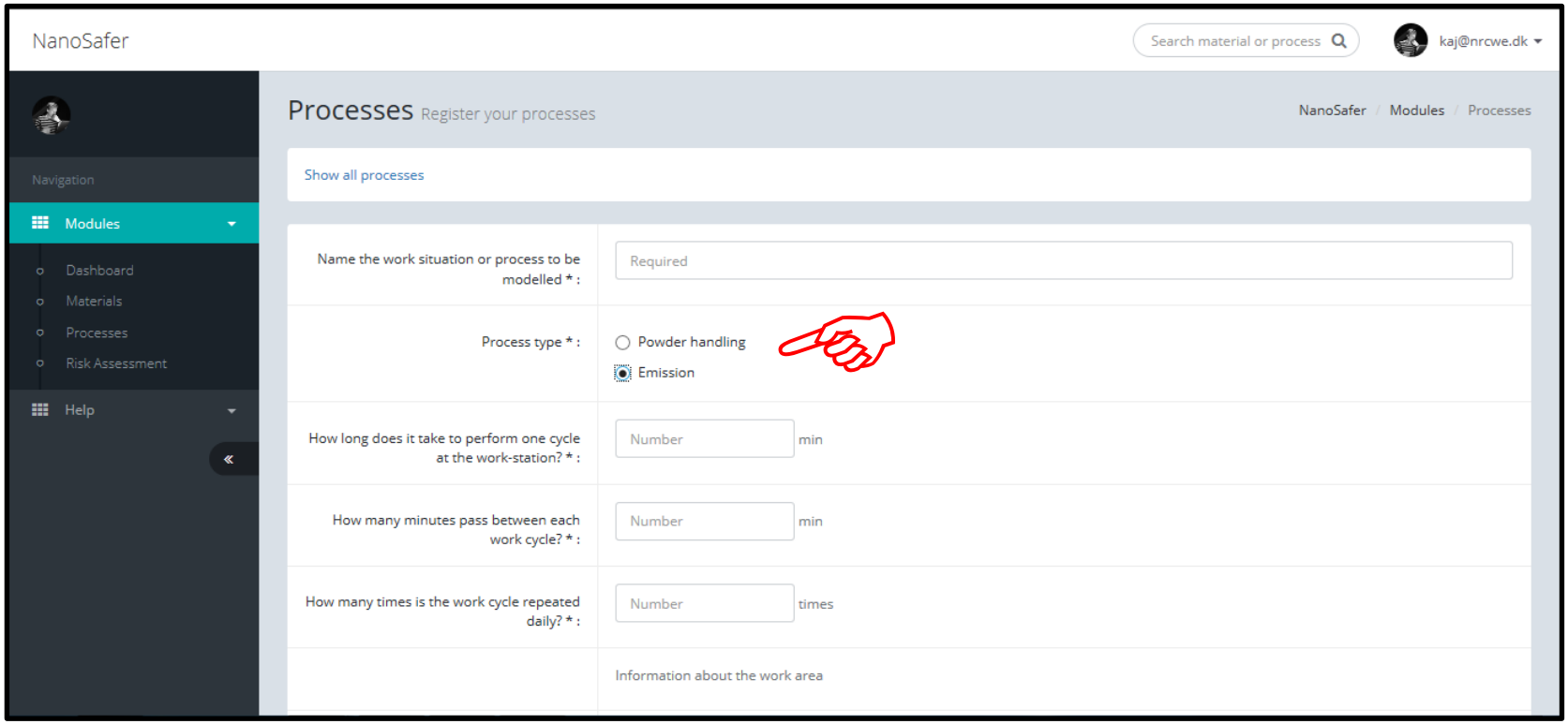
1) Click Process

2) Register New Material



Register Process

Select type of process
(powder handling or emission [constant release])
Enter the requested information and submit data



IMPORTANT to select the correct type of OEL (Exposure limit)

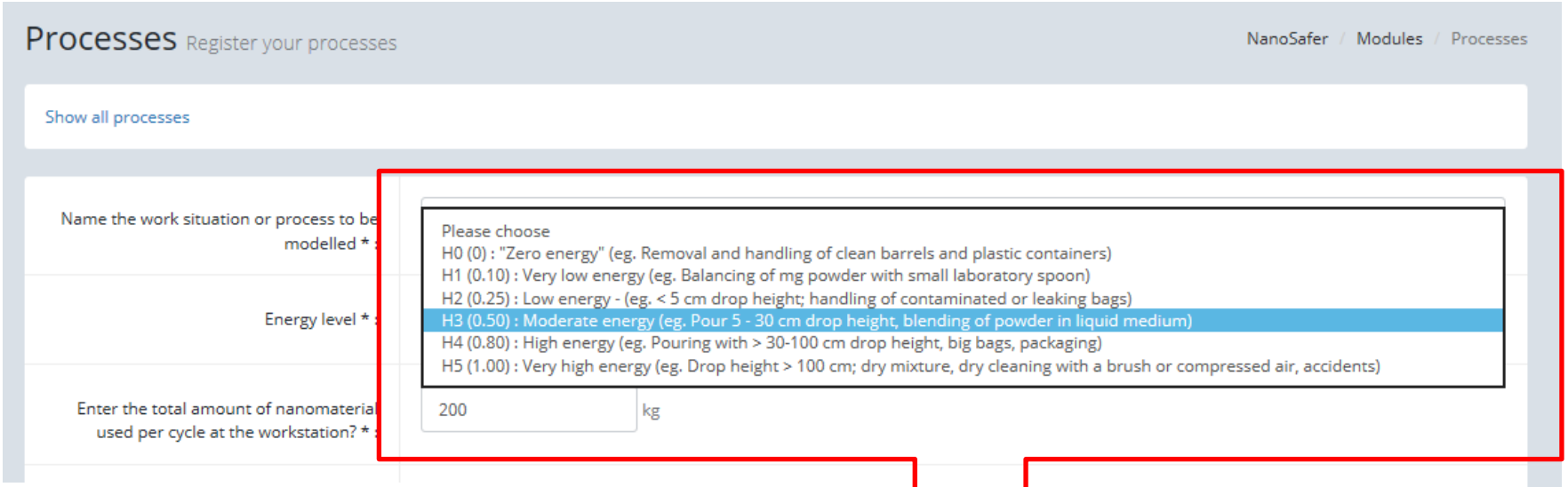
Use OELnano when you have an OELnano or an in-house limit or target value. In ALL other Cases, one should use official OELs on bulk materials from your national authorities.

Search mate

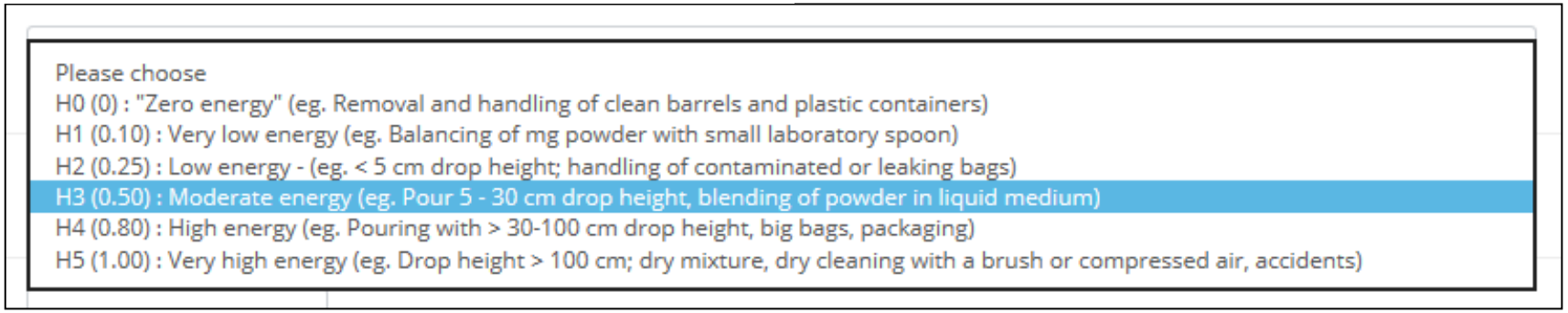
Hazard Register your hazard

General toxicity :	Is there a nanospecific occupational exposore limit (OELnano) or target value? ○ Yes ◉ No
Exposure limit for respirable dust * :	What is the occupational exposure limit for respirable dust of the nearest analogue bulk material? Check the administrative occupational exposure limits at the authorities in your country! If no specific limit, select value for inert respirable organic or mineral dust. 0.1 mg/m3
Select type of toxicological information :	Choose ○ Risk sentences ◉ GHS/CLP hazard statements

Important note in selected handling energy factor for powder handling

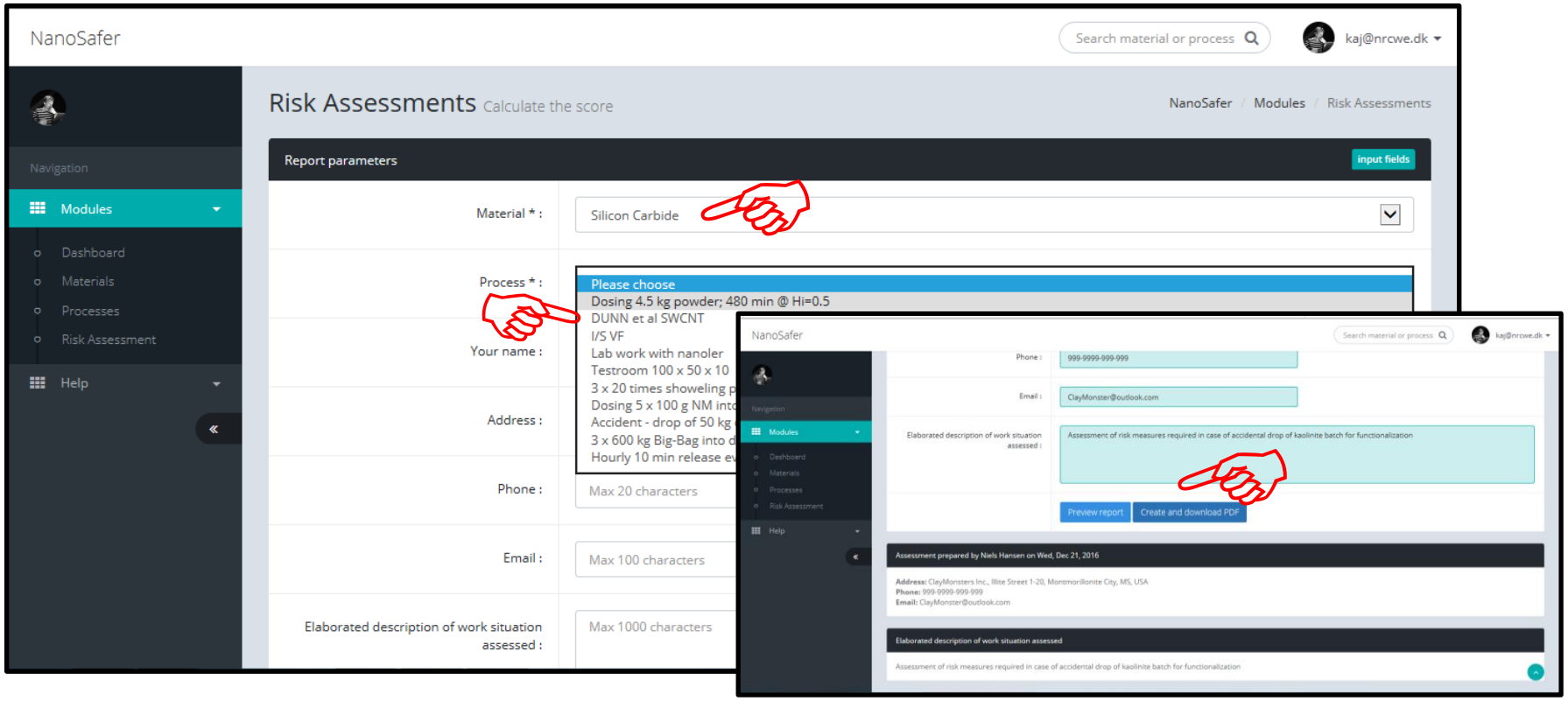


The drop height referred to here is the FREE drop height in air. So NOT the drop height after passing a e.g., lid in a container or bag.



Make an Assessment

1) Select the registered material and process to assess
2) Enter requested information as required
3) Click [Preview report] or [Create and download PDF]



Result

Scroll down if pre-view report selected

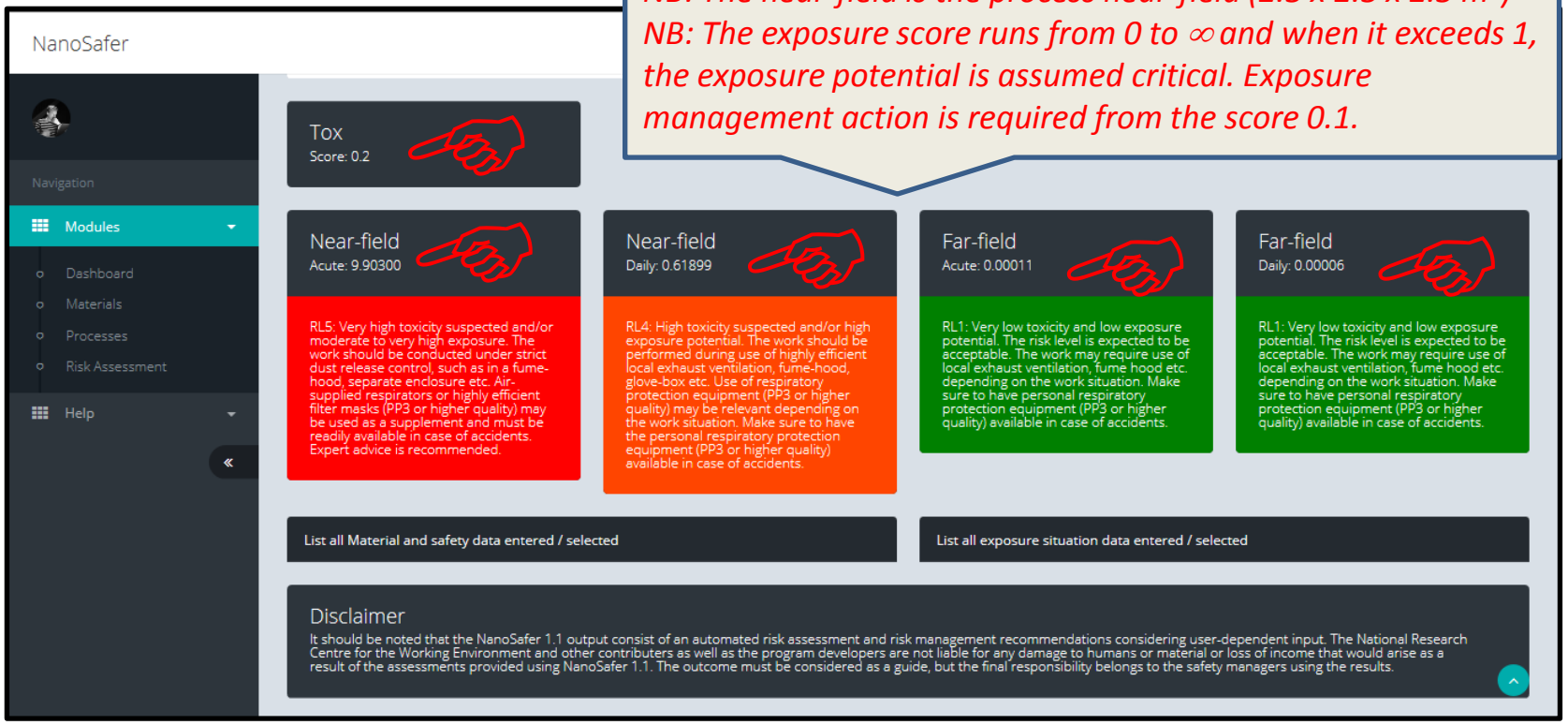
Result is a risk management recommendation based on a hazard score and a case-specific assessment of the exposure potential

(output module not 100% finalized)

NB: The hazard score runs from 0.2 to 1.0 where the value 1 is assigned to materials with high potential hazard

NB: The near-field is the process near-field (2.3 x 2.3 x 2.3 m^3)

NB: The exposure score runs from 0 to ∞ and when it exceeds 1, the exposure potential is assumed critical. Exposure management action is required from the score 0.1.



PDF Report 1 (beta version)

If you pressed [Create and download PDF]

NanoSafer Control Banding Report for Airborne Occupational Exposure Assessment

This document can be used for documentation of the control banding assessment. It can include information on who did the assessment and a further elaboration of the background or description of the exposure scenario as added in the web-tool. The pdf report contains the results and the key information used in the control banding assessment. Recommendations on the needed efficacy of the exposure protection strategy is provided and will be linked to the ECEL library for specific tool guidance on exposure management.

Assessment prepared by

Name:	Niels Hansen
Address:	ClayMonsters Inc., Illite Stre
Phone:	999-9999-999-999
E-mail:	ClayMonster@outlook.com
Date:	Wednesday, Dec 21, 2016

Assessment of

Material assessed: Kaolinite
Producer: Claymonster Inc.,. 412 Sudbury Road, GB-255681 Alburry, UK
Classified as nanomaterial consisting of: Nanoflake

Work situation assessed: Accident - drop of 50 kg onto floor
Process type: Powder handling

Result of assessment

Estimated hazard level 0.2
The hazard level is estimated based on

Estimated time-resolved exposure potential

PDF Report 2 (beta version)

If you pressed [Create and download PDF]

Based on the estimated hazard and exposure potential it is recommended to apply engineered protection equipment with a protection factor of 99.03

Elaborated description of work situation assessed

Assessment of risk measures required in case of accidental drop of kaolinite batch for functionalization

Material, safety and contextual information used in the assessment

Material and safety data entered

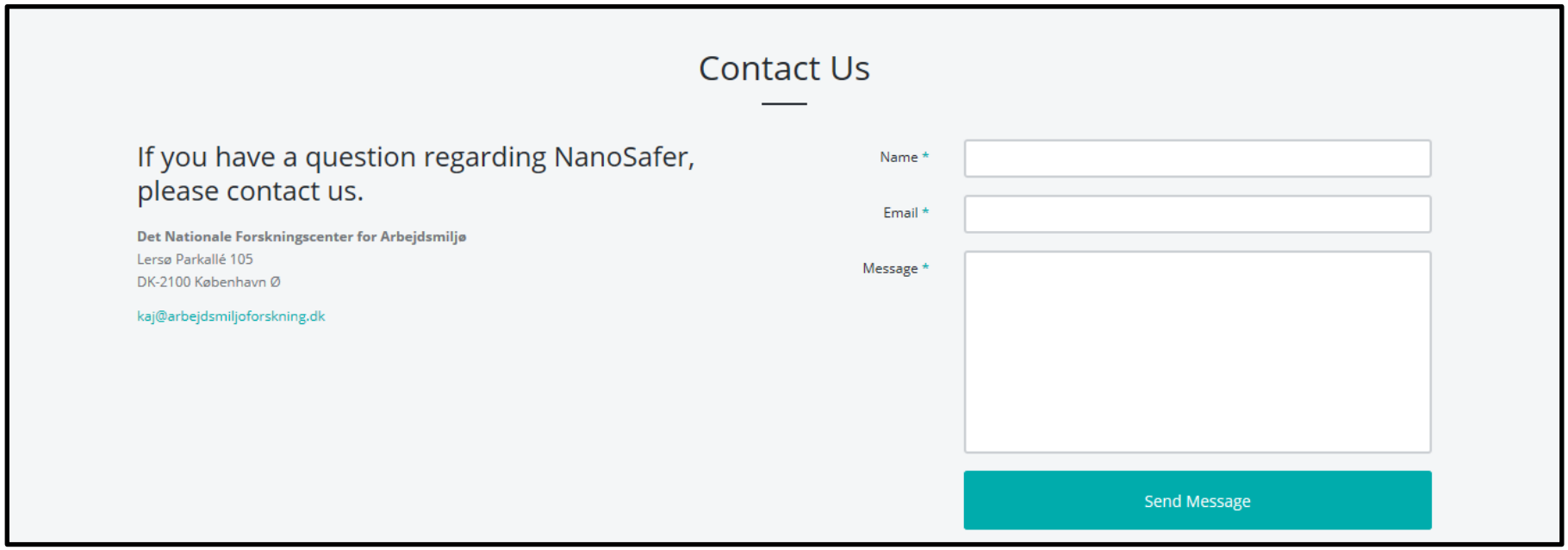
Manufacturer: Claymonster Inc.,. 412 Sudbury Road, GB-255681 Alburry, UK
CAS: NA
EINECS: NA
Relevance: No
Coated: No
Known shape: Yes
Morphology: Flake / Plate / Tabular / Clay
Shortest dimension: 10 nm
Intermediate dimension: 500 nm
Longest dimension: 600 nm
Size is known: No
Average size: No
Size range known: No
Surface area: 85 m2/g
Relative density: 2.8 g/cm3
Solubility: Insoluble (< 1 g/L)
Respirable dustiness: 37.5 mg/kg

Exposure situation data entered

Process type: Powder handling
Energy level: H5 (1.00) : Very high energy (eg. Drop height > 100 cm; dry mixture, dry cleaning with a brush or compressed air, accidents)
Cyclus volume: 50 kg
Cyclus duration: 1 min
Cyclus pause: 0 min
Cyclus repeated daily: 1 times
Mass handled per cycle: 50 kg
Time required per cycle: 1 min
Length room: 500 meters
Width room: 500 meters
Height room: 50 meters
Air exchange room: 1 meters

Thank you for using NanoSafer 1.1

Do you have trouble using the tool, comments or observations that needs correction, please report back using the form at the bottom of the login page



Change Log

- NanoSafer v. 1.1beta Quick Guide V. 1.0 Dec. 21, 2016
- NanoSafer v. 1.1beta Quick Guide V. 1.01 May 2, 2019.
  - Current slide 4 and 5 added and replaces previous slide 4 on dashboard. Additional information is given and follows updates made to the Help-section in the left-hand menu bar.
  - Current slide 10 and 11 added to specify that it is critical to be precise in selection of OEL (slide 10) and further clarification for selection of the handling energy factor (slide 11).
  - Current slide 17 Change Log is added.
  - Editorial layout work made on existing screen shots in V. 1.0.