

**Participants:** Janet Carter, Bill Kojola, Shaun Clancy, Darrell Boverhof, Rick Canady, Michael Hansen, Yasir Sultan, Steve Froggett, Lie Chen, Myriam Hill, Carolyn Cairns, Chuck Geraci, Treye Tomas and Cathy Fehrenbacher

**Updates:**

Approve consolidated Workshop notes: a few members indicated they would be sending a few minor editorial comments, but otherwise they were ready for posting on the website.

**Agenda:**

(1) Discuss which ENM to move forward

- Cathy went over the “straw poll” results and indicated that after two polls, the group’s preference for one ENM over another didn’t appear strong and that both would be difficult to develop methods for measuring release. Because of these difficulties, recent interest had been expressed to examine nano-titania, rather than either of the two nanomaterials considered during the workshop. However, it was pointed out that while n-TiO<sub>2</sub> may at this time be perceived as easier, once hearing from experts working with nano-titania it may actually be as challenging as other nanomaterials.
- It was stressed that two pragmatic considerations had not be raised during previous SC discussions: (1) likelihood of obtaining additional support (funding) for one particular ENM, and (2) natural collaborators to perform the methods development. During the workshop, strong interest was shown from both nano-silver and carbon nanotube companies/consortiums and researchers. The level of interest and possible funding for investigating nano-titania is, at this stage, not known. There may be natural partners and funding, and thus success of the project.
- It was generally agreed that it may be worth considering a timeline for securing funding, i.e. if the SC/NanoRelease project is unable to find funding for one particular nanomaterial within a reasonable period of time (TBD), then we should switch to another ENM.
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- Those in the group closer to the research world commented that there’s very little interest to investigate silica or titania (and far more interest in nanotubes). As an aside, it was mentioned that a Univ of Oregon researcher recently developed a technique to detect released nanoparticles of silver.
- While there was consensus that the interest in nano-silver and nano-titania derived from their use in products on the marketplace and thus potential for consumer exposure, a few members made a strong argument that nano-silver is used because of the release of silver ions are released, which would add another level of complexity to developing methods to measure release of ENMs.
- There was general consensus among the SC members that the goal of the project is to develop release measurement methods. So, to be successful, we select an

ENM that *will* be released in *measurable* levels and is insoluble so we can *connect* the released particles.

- In addition, it was raised that the SC should be mindful about having approached the experts invited to the workshop with the intention that either nano-silver or MWCNTs would be selected and we would follow up with those experts to carry the next phase of the project forward.
- A final and critical concern raised was whether or not we would lose interest from any of the steering committee members by going forward with one ENM over another. No SC members expressed interest in discontinuing their involvement based on ENM selection.
- In addition, it was noted that the selection at this point was for the first ENM to carry forward. Clearly the decision is difficult; that nano-silver and nano-titania are likely candidates for the second and third ENMs to carry forward. At a few times during the discussion there was interest expressed in going forward with multiple tracks, one for each of these materials. At this time funding and availability of SC members were limiting that approach.
- Given all of the considerations made by the SC members and concerns raised both on calls and in email, it was proposed that discussion be closed and a selection be made. -- No objections were raised.

(2) Select the first ENM to move forward

- Without objection raised on the call, the SC members agreed to select MWCNTs to move forward first, while keeping both silver and titania as ENMs to investigate next.

Next Steps:

1. Steve will request input from the SC members on:
  - Identify additional labs, partners and affiliations for MWCNT
  - Additional consumer applications to add to the current list
  - Additional experts to approach for the expert process
  - The draft work-plan