Steering Committee
NanoRelease Consumer Products

CALL MINUTES

Tuesday July 24th, at 11AM-12:30PM

<u>Participants</u>: Shaun Clancy, Richard Zepp, Bill Kojola, Janet Carter, Aleks Stefaniak, Darrell Boverhof, John Monica, Stacey Harper, Cathy Fehrenbacher, Carolyn Cairns, Myriam Hill, Michael Hansen, Debbie Kaiser, Treye Thomas, Richard Canady, Steve Froggett, Libby Tsytsikova

1) Approval of last call minutes

- No objections were raised during the call, members asked to review the minutes and send any comments by July 31st. Without further objections, minutes will be posted on public website.

2) Co-Chair rotation

- Darrell Boverhof and Yasir Sultan have been serving for ~8 months as SC Co-Chairs, the ending of phase 2 is a good time to nominate new Co-Chairs. The preceding were Shaun Clancy and Cathy Fehrenbacher. SC members agree Yasir and Darrell have done a great job.
- Rotation allows balance in leading the SC. All SC members who have been active in the project are welcome to self-nominate.
- Yasir and Darrell will help with the transition to new Co-Chairs, once nominated.

3) Presenting NanoRelease to external audiences by SC members

- Tinh Nguyen is helping with an upcoming conference in Grenoble, France, proposed that Lie Chen of Health Canada (and of the SC) present on behalf of the SC. SC approves the proposal with no objections.
- SC members encouraged to represent the project at various upcoming meetings of their interest. Rick and Libby can provide as much or as little support as needed.
- Slide sets on our project are available and have been adapted continuously throughout the past year, will add content based on workshop and next steps.
- Action Item: At Nanotech 2012, Myriam Hill gave a presentation on our updated project as of June 2012; Myriam will send her slides to the SC.
- Create a webpage on the website listing past presentations and slide sets, for SC member use at any upcoming meetings. SC members should use this opportunity to their advantage, for attending conferences of interest.

4) Drafting of Workshop Outcomes

- A fused BOG table, PPT presentations for the BOG groups, and official workshop summary are in process of drafting. Preliminary key points are presented in attached document as based on consolidated notes from the workshop.
- In the document, the issue is raised that the Methods for Measurements list is inadequate and not useful, and that it is necessary to add SEM, TEM, ASM, and potentially remove the already listed.

- The second day had a lot of discussion on a "Tiered Approach", such as testing for carbon first and then doing nano after, and so on (establishing whether there is a release or not, and then characterizing the nano-characteristics). It is important to capture this debate. This supports the idea that we are building an approach towards this issue, understanding opportunities and limitations of different stages of assessing release.
- Without the right approach and the potential for useful methods, it would be a waste of time to do an inter-laboratory study. How applicable are the existing methods in the materials we are interested in?
- Think about identifying areas of agreement and consensus in terms of moving forward and outstanding questions or controversies, as a form of document moving forward.
- The imaging techniques were not ruled out; many saw those as the gold standard.
- How can we possibly use carbon testing as Tier 1 if the polymer matrix has carbon in it? Pyrogenic analysis would give the differentiation between carbon and carbon nanotubes.
- There was a lot put out there, and it was captured, but will there be any review of accuracy for what was said? This is something we need to work towards, address what is proposed in some capacity, though we do not want to create a whole new project out of creating a summary.
- Biggest take home message from the workshop was idea of a tiered approach and how that may pan out.
- Webcasts are available, the quality is good and most statements are heard, please use these as a resource if you need to jog your memory when reviewing the draft key points document.
- Action item: Please send comments by July 31st on this draft workshop outcomes document (add points, clarify points, object to anything), so that Libby can finalize and expand to get to a final workshop outcomes document.
- Action item: Rick and Libby will reflect back on the promised deliverables or products of the workshop. Summarizing for the ITG and SOST, the relevant points that were made, points of general agreement, and any minority disagreements.

5) Group updates

- **Task Group 1** (with input from Debbie and Aleks) has not yet met since the workshop, there are a few issues that need to first be addressed for specific sections that Libby will be assisting with to move forward and eventually schedule a conference call to discuss publication.
- **Task Group 2** (*with input from Richard Zepp*) has met on July 16th and gone over key points from the workshop relevant to TG2, anything concerning gaps and interpretations on materials information. TG2 will be moving forward in the next 3-4 weeks on final edits to their white paper, and then having another call to move towards publication. TG2 may not address textiles to the full extent.
- **Task Group 3** (with input from Richard Zepp) leader(s) have set deadlines and seem to be moving forward well with their white paper towards publication. An update for textiles was added, noting that wash out/laundering would be the primary release scenario (water medium), similar to nano silver.

- **SOST** (with input from Shaun and Stacey) had a call two weeks ago to discuss the current state of their SOS report draft, and the strategy for further writing. Authors recognized the value in figures as a framework for their report, and a few more figures are needed to bring the paper around as a whole. They are currently working on their introduction and additional figures.
- What is the scope of the SOS report? The idea is to capture the state of the science for measurement for CNT polymer matrices, the existing gaps, and how to move forward for methods development in terms of the scenarios and applications identified in the white papers.
- There was discussion of the SOS having 2 documents, 1st introductory for why the work was needed, and 2nd to identify gaps and how to address them. The last SOS call had mentioned the possibility that we may not need two documents.
- Nature Nanotech was approached in the past with the possibility of publishing all 4 reports as a set, but told it is unlikely that all 4 would be accepted, given the acceptance rate.
- Action item: need to identify journal(s) that would be willing to take the set of papers, and/or have detailed monographs published separately, potentially through ILSI. SC members are asked to send ideas for journals. Think about what each paper might fit into based on topic, it might be that they might appropriately fall in different journals. Lead authors from each TG should set up a project to identify the journals and identify the topic, Rick and Libby can help with any sort of front work, connections, and fees involved.
- Ultimate goals are to get broader acknowledgement of the TG members hard work, and for the project as a whole, it is important that this gets out there to some capacity, regardless of the impact factor of the journal.
- Action item: <u>Libby will distribute the full version TG white paper drafts to all the SC members in</u> Word with figures, etc., noting that these are not for citing, quoting, or sharing.

6) ITG & Proposal for Phase 3 Transition

There are three main elements to this proposal:

- (1) Bundle together the existing projects/studies/data that are actually using methods to evaluate the release of CNTs from polymer matrices. Virtually all of these projects have unpublished work right now.
- (2) We will evaluate across those studies in terms of what they are doing similarly, what materials are covered, what methods are used. Consider these with the white papers; what methods are NOT being used that are of importance? What materials are out there, which are not being covered? What scenarios and uses are not being studied that should be studied?
- **(3)** Develop and review this analysis at a workshop. Try to identify methods to carry forward. There are no methods out there that are really to the point of inter-laboratory study, though there are lots of studies out there that are converging in the sense of methods to be looked at and useful findings.
- In a sense our "inter-laboratory study" is the bundling of these existing studies.
- There is a lot of redundancy in some of these projects. We want to get a good product out of this phase; we want to use these existing projects/studies to our advantage without repeating work. Perhaps ITG with this bundling project can get a better direction after the SOS report is

completed. We do not have a clear direction as we have not in the past and do not necessarily have the expertise to really move the science forward. Is it better to wait for TGs and SOS publications to be completed before we make final outcomes from the bundling project? How should we collect experts in the ITG to carry forward, and how should the SOS and ITG documents overlap or not overlap?

- The first part is to look at existing projects working with CNTs and polymers, so it is not something that needs to be waited on until after the SOS is complete.
- Members voice some additions to the document and this is incorporated during the call.
- We need to clarify in what we propose going forward for which roles the SOS and ITG will take on. We will most likely not have data from the existing unpublished studies, but we can get information on what they are studying, materials, methods, sources, applications. We will not have the actual data on release rates, etc.
- TG3 went through the scenarios, had different phases of use, and considered exposures for different phases. This may be a good approach because it keeps focus close to important reallife scenarios. This comment should be noted by the SOST.
- The August 2012 time-point may not be feasible for the SOST to have their drafts ready.
- We can have webinars leading up to the workshop, inviting specific experts to present on talking points, thus having more input from experts with focused experience on actual methods and so on.
- Location of the workshop may be an issue for the U.S. agency members current legislation restricts federal scientists from going to any meetings outside of the U.S., so likely there will be issues with U.S. and Canadian issues with attending a European workshop for this phase of the project. The point is well taken that one could have concurrent workshops, a meeting in Europe and a meeting in the U.S., connected electronically. We need to realize that 3-4 projects we need to bundle are actually in Europe so they will have issues coming here as well. This is an issue of funding and can potentially be overcome with the webinar approach. Breakout sessions could occur on one end while the other time zone is out of office hours.
- We need to keep this document as a living, open document until the SOS team starts to move forward. Furthermore, this is a rapidly changing topic with all of the relevant projects moving forward, so we do need to move forward within reasonable time.
- We are not yet at the point of acting on this proposal, but rather we need to edit the strategy of this idea, but there are no general objections to the entire proposal.
- Action item: Members are asked to send back comments by August 8th at latest for this document.

7) Next steps

- Address all action items outlined above, in general move forward with editing the Proposal for Phase 3 Initiation.
- Reminder to consider self-nominating or identifying new SC Co-Chairs.
- Note that we are almost at the point of rewarding hard work and expert input, but we need members who contributed to help the secretariat help them to publish, move forward, etc. Rick

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and Libby's main focus over the next couple of months will be to help TGs publish their work. Furthermore, the more we can disseminate this information, the better it is for our project and for everyone involved.

- We need input into the experts for ITG.
- A monthly meeting of an hour makes sense moving forward. TGs, ITG, and SOS will continue to meet separately.
- Libby will send out a Doodle poll for the next set of calls, along with follow-up items.