SRRTTF - Green Chemistry Workgroup

Proposed Ideas for SRRTTF-ACE Green Chemistry Advancement funding

1. Contract with NW Green Chemistry to develop an article for publication in a peer-reviewed journal that would focus on PCBs in packaging from pigments and the problems caused by recycling. The paper would describe the problem and clarify the issue to generate greater awareness of the issue.

   The audience would be a peer-reviewed journal such as [HYPERLINK "http://setac.onlinelibrary.wiley.com/hub/journal/10.1002/(ISSN)1551-3793/"] which is a publication of the [HYPERLINK "https://www.setac.org/?page=Mission"]. The manuscript would also open discussions with [HYPERLINK "http://greenblue.org/"] which is an environmental nonprofit based in Charlottesville, Virginia that promotes sustainable materials by encouraging innovation and best practices.

   The article(s) would describe:
   - Background info on PCBs
   - Why PCBs are a problem
     - fish bioaccumulation & water quality criteria
     - circularity of PCBs
     - paper recycling as a source of PCBs
   - How widespread PCBs are
     - Delaware, San Francisco, Spokane, Duwamish River, & Pend Oreille River
   - How these areas are dealing with PCBs
     - Based on interviews with entities such as: IEP, Penderay Newsprint, WA State Dept. of Ecology, WA State Dept. of Enterprise Services, etc.
     - Other examples
   - PCBs in pigments
   - Safer alternatives with no or low PCBs

   A milestone of the project would be an outline of the article. A draft of the manuscript would be due in the beginning of May or June. SRRTTF members could assist NW Green Chemistry with the development of the paper.

   The outcome of the article is anticipated to be publication in a journal that would inform a large number of scientists about the issue facing the Spokane. Other outcomes could be the development of webinars or educational materials to increase awareness of the issue among the Sustainable Packaging Coalition. This additional awareness could create a greater interest in finding alternatives and lend support to SRRTTF's efforts.

   This option would use all of the $5,000 allocated for the fiscal year 2018 for research and writing time. Additional funding may be required, but other sources may also be available. (80 hours at $62.50 = $5,000)

2. The second idea, which would take place in fiscal year 2019 is to draft a similar paper for titanium dioxide. The paper would provide a literature review of what is known about PCBs in [HYPERLINK "http://www.essentialchemicalindustry.org/chemicals/titanium-dioxide.html"], discuss how widely the material is used, the range of products it is found in, how it is manufactured, etc.