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TYPE: Q=question; C=comment	Content (copy&paste from zoom chat)	Attribute d to (Name)	Answered/discussed? Y/N
Q	From: Thierry Rabilloud, CEA France What about degradation of macroplastics released in the environment (e.g. food container, plastic bags etc...) as a source of micro/nano plastics ?	Valentina	y
C	From: Esther Kentin Leiden University Yes, I miss the Packaging regulation and Urban waste regulation in this overview.	Valentina	y
C	From Hooshyar Hossini To be honest, all of us like to solve the problems of MPs, but I think an international collaboration is needed. We have no chose at this moment and only have a life with them. We understand some locations and goverments are determined for this matter, but It is no enough. for example many countries in Asia and Africa, there is no decision for it because they have more important problems than MPs.	Valentina / Andrej	
C	From Marcello ENTNER, FCIO to Everyone 09:34 AM We need more experimental data on actual microplastics releases into the environment. So far most of the data is based on in some cases very rough estimations. Only then impact assessments can be performed properly.	Andrej	
Q	From Gidon Feen, Polymateria to Everyone 09:43 AM Thank you Tobias. Can you share if EEA is looking at, and if so to what extent, biodegradable options to address the challenges outlined today?	Tobias	Y: @gidon we have published on the topic. I think we are in line with the recent DG Environment communication on bio-based, biodegradable and compostable plastics, saying that the primary options is to reuse and recycled plastics even biobased, for a few limited applications biodegradable is a suitable options, but it's not a blanket solution to plastic pollution.
Q	From Steffen Foss Hansen to Everyone 09:51 AM	Tobias	Y: From Tobias Nielsen (EEA) to

	@ Tobias - I wonder what the best way is to communicate our knowledge about new topics, impactful findings, etc. to the EEA? Is 4 page Policy Brief what you prefer or should we “just send you” our research papers?		Everyone 09:56 AM @steffen I think policy briefs are more effective, especially with a clear message, but we also want academic publications to help support our analysis
Q	Good comment that “water is not water”--different methods needed for drinking water, but also coastal water/river water etc. what is JRC doing on this? Are they developing methods? Who in CUSP is tackling this?	Birgit	Answered live
Q	From Gabor Bordos to Everyone 10:03 AM Dear Birgit, what is the status of the analysis method required in directive 2020/2184? Will something be approved to start the obligatory watchlist monitoring in 2024?	Birgit	Birgit: Methods are being developed e.g., Raman and electroscopic methods
Q	From Steffen: Will the Commission act on plastic pollution, if it turns out that plastic is not risky to human health?	Birgit	Valentina: The actions will continue. If the pollution continues, it's clear that we will reach a risk level. The only solution if we want to avoid the risk is to address pollution. We cannot risk waiting for the levels to be adverse for humans to act. Tobias: beyond human negative effects, we need to solve other related issues with plastic pollution.
Q	You mentioned how important and useful infographics are for policy makers. Should CUSP researchers be spending much more time on developing infographics? Where can scientists learn how to make good infographics?	Tobias	Answered live
Q	From Marcello ENTNER, FCIO to Everyone 10:07 AM How do you plan to enforce the REACH restriction with a current lower size limit of 100 nm if there are no standardized analytical methods available yet for particles as small as 20 µm for enforcing the drinking water directive?		
Q	Gabor Bordos (live question): method for DW analysis of MNPs?	Birgit	Answered live
Q	From Hooshyar Hossini to Everyone How can we collaborate with your team?		

C	From henrikbehapedersen to Everyone 10:19 AM We must take care not to repeat the single substance paradigm from REACH and forget cocktail effects of both polymers and mixtures of polymers and chemicals		
C	From: Thierry Rabilloud, CEA France (to Henrik) 200% agreed, but this is a daunting analytical challenge and how can we address this question in a scientifically sound manner ?		
C	From Raymond Pieters to @henrikbehapedersen Agree....complexity of MNP, including weathering effects is indeed an important issue within CUSP projects, in particular with regard to real-world exposures. Would miss a lot (wrt hazard, exposure and risk) if we would not consider this complexity		
C	From Michael Guy Diemar - 3RsMC - part of ONTOX project Might be an idea to change the approach towards that industry must prove that materials/substances are safe in the whole lifecycle before approving the same.		
C	From Rudolf Reuther ... and to address this complexity in a RA needs a robust reliable methodology which is a strong focus of all CUSP projects		
Q	From Thierry: Many of us use in vitro models with experiments that are far from the classical standardized tests such as those used in REACH. What would be required from us to provide data that would be useful for assessment. Of course we cannot think of making our experiments standardized protocols, this is far beyond our reach (no play on words here)	Djien	
C	From Thierry to everybody: be aware that RNA is thus transcriptomics is quite remote from the functional outcome, as there are many layers of modulations between the mRNA level and the final protein activity, just to keep at that simple level	Djien	

Q	(from Jane) What about the key characteristics concept? Are you also working on this? It may be a good approach to complement AOPs which can be very time-consuming to develop	Djien	
Q	From Jane: when developing predictive toxicology models, the old rule “garbage in=garbage out” applies. So how do you ensure adequate data quality as you develop in silico tools for risk assessment?	Djien	
Q	From Jane: you mentioned the size matters for particle fate. But what about the chemical properties? How do those affect fate in the human body? And isn't there already a lot of knowledge regarding the chemicals in plastics and their harm to human health?	Todd	
Q	Steffen: I wonder whether you came up with the criteria for evaluation data or whether you used e.g., Klimisch scoring or SciRAP?	Todd	Todd Gouin 11:38 Criteria were developed based on previous approaches, such as those that have been proposed and used in the ToxRTool and a modified version that was developed for engineered nanomaterials, as well as building on approaches that were developed by Bart Koelmans group in relation to ecotox effects test systems
Q	Jane: When developing your criteria for “fit for purpose” studies, did you also take into account what the state of the science is? So, consider what actually could be reported/done in a study based on available methodologies? And: what are immediate take-aways for researchers from your study? How should they design and report studies?	Todd	
Q	From Julia Catalan: Is JRC planning to generate reference standard micro- and nano-plastics? That could help a lot to current and future research projects.	unclear/A lba going into this	a.dehaut: We recently published a method paper on that topic. Others colleagues are working on the topic too.
C	From Thierry It seems to me that there is a major discrepancy between what can be easily detected when assessing exposure (i.e. mainly very large	Todd	Todd: Agree, prioritisation is needed towards identifying most meaningful results, although, even data that demonstrates no effect

	<p>particles for us biologists) and what we know from a biological point of view, I.e. that small particles are the ones able to cross biological barriers and induce adverse effects. I do not think that working on particles which we know will have little (if any) effect</p>		<p>would also be helpful. From tr099838: Sure, but how to publish data using large particles that do not enter cells, and thus with no effects ? 😊 Journal of obvious and negative results does not exist From Todd again: As an associate editor at the journal Microplastics and Nanoplastics, I can say we would be equally happy to receive no effect results as we would adverse effects...apologies for the shameless plug!?!)</p>
C	<p>From Henrik Beha Pedersen We really need your qualified estimation of the time frame regarding having risk assessment of nmp in place. How do we balance the precautionary principle (and start acting now) and the fact that we risk in the future to see adverse human population effects</p>	Unclear / Todd?	
Q	<p>From Bernd Giese (ISR, BOKU) Is it not advisable to adopt a hazard-independent, (external) exposure-related policy here, i.e., to focus on persistence, bioaccumulation, mobility, and other exposure-determining properties and use them as reasons for high concern? Instead of waiting years for more toxicity data? The adverse effect of CFCs was discovered after 50-60 years ...</p>		
C	<p>From Michael Guy Diemar - 3RsMC - part of ONTOX project EU agencies must align ambitions in relation to NAMs. In ONTOX we realise that i.e., ECHA and EFSA approach and ambitions in relation to NAMs differs - meaning EFSA more positive and ECHA more reluctant to NAMs. An example is also cosmetics where animal testing in principle are banned however, ECHA continue to require animal in vivo studies on several chemical compounds, nanomaterials and microplastics, even if they are only used in the cosmetic industry.</p>		
C	<p>Esther Kentin Leiden University 12:46</p>		

	Just some thoughts: It seems that the starting point is that there are knowledge gaps for regulation. But when will there be enough scientific evidence for regulating plastics and will it be there on time? Are regulatory authorities asking a reasonable level of scientific evidence? Or are we stuck in a risk assessment and regulatory frameworks that is not suiting the effective protection of human health and a clean environment?		
Q	From Nathaniel Shi Could the present experiment results support that NMPs can be the vectors for the food allergen? such as OVA, BLG that you referred. Since the interaction between the two have not be well studied, thank you. Is it just co-exposure ?	Tanja	Y: That is exactly what we are looking at. MNPs as vectors for allergens. It can have interesting consequences for transport and presentation to the immune system.
Q	From henrikbehapedersen We have seen studies about effects of heated plastics; https://pubs.acs.org/doi/pdf/10.1021/acs.est.1c06768 . Will this exposure scenario be addressed?		Virissa Lenters: Hi Henrik, We will not address this directly but indirectly. We are asking study participants about their frequency of drinking drinks out of throw-away cups (along with other food preparation questions), and hope to be able to find associations with internal MNP levels (ie, determinants of exposure). We will also use non-targeted HRMS chemical profiling - and hope to be able to infer the sources of MNPs based on chemical fingerprints and food-contact material databases. However, these are exploratory efforts. I agree this is an important research question!
C	Julia Catalan: Read-across with nanomaterials would be really interesting. Unfortunately, most of the existing info on nanomaterials concerns to pristine nanomaterials, which don't reflect the complexity of nano-enabled products and environmental relevant nano-plastics.		From Anja Ramsperger, University of Bayreuth, PlasticsFatE We performed an extenisve literature research where we compared MP with other airborne microparticles in terms of their toxicity: https://doi.org/10.1016/j.jhazmat.2021.128151

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