

PLASTIC HEALTH SYMPOSIUM

2ND MAY 2023

EUROPEAN PARLIAMENT

BRUSSELS



PLASTIC
SOUP FOUNDATION

FOREWORD

Sponsor of the Plastic Health Symposium



Sara Cerdas MEP, Group of the Progressive Alliance of Socialists and Democrats

Good morning,

It is clear the urgent issue that requires immediate attention: the need for more action in the global plastic crisis and the disastrous consequences to health. The European Union has undertaken several initiatives that seek to prevent and reduce environmental impacts. However, they are not enough. If we continue with business as usual.

Let's use this opportunity to build on these efforts and take further action to combat plastic pollution, accelerate the transition to a circular economy and reduce plastic waste. We must act now, before it is too late. Protect our environment, our planet, and future generations.

Official Organiser of the Plastic Health Symposium)



Maria Westerbos, Founder and Director of Plastic Soup Foundation

Good morning,

Thank you for joining me today at the Plastic Health Symposium.

I'm Maria Westerbos and I am the Founder of environmental non-profit organisation Plastic Soup Foundation. I want to extend my thanks to Sara Cerdas MEP and her team for sponsoring and helping us organise this event, and to everyone that has made the journey to attend today to discuss the human health crisis caused by plastic.

I founded Plastic Soup Foundation with the overarching aim to end plastic pollution. We challenge the huge impact of plastic pollution on our environment, our oceans, and crucially, our own body. I have spent over a decade communicating the scale of this problem, backed by scientific evidence, but recent studies show that plastic production continues to increase, and harmful micro- and nano-plastic particles and the hazardous chemical additives in it continue to be found in our human bodies.

Recent innovations demonstrate that we can reduce our reliance on plastic by replacing this with alternative materials and bring in systems that allows us to build a more circular economy, moving away from single-use and reducing the amount of plastic waste.

We are also seeing that big industry is slowly waking up, but that is not enough. This is now a major human health crisis, and the proof is piling up. Plastic and its chemical additives are harmful to human health throughout its entire lifecycle. Enough is enough.

I welcome you to share your expertise, your innovations, and your solutions to this problem during our behind-closed-doors Symposium. All change starts with a convening of pioneers around one central issue. You are these pioneers.

I hope in being here today you find hidden alignments and create new, productive relationships with one another on this central issue. We are all drivers of the plastic crisis, and we all have a responsibility to work together to stop it.

Let's do that.

WHY ARE WE HERE

A critical time for human health

Right now, we find ourselves at a critical moment. We can no longer pretend that damaging behaviour towards the planet advances human health and development – in fact, the opposite is true. But it's hard to imagine a world without plastic. There's hardly a way around it: we eat, drink, and breathe microplastics, nano-plastics and their additives – and their harmful chemical additives – every. single. day.

What is that doing to our health?

Speakers from all parts of the world have presented groundbreaking science, about the status of our exposure, environmental justice, and plastics up close and personal.

As well as in our environment, harmful plastics have been found in every part of the human body. When entering our bodies through ingestion, inhalation, and skin contact, microplastics, nano-plastics and their additives can negatively affect the immunological, nervous, circulatory, respiratory and digestive systems, as well as the embryonic and placental ones.

How can we move forward with an interdisciplinary perspective that involves science, innovation, industry, and public policy?

Momentum is building.

Plastic Soup Foundation first introduced the Plastic Health Summit in 2019, covering the most relevant

and pressing health concerns surrounding plastics and human health. During this event, Professor Dick Vethaak, an ecotoxicologist, pointed out:

“Microplastic is not just one pollutant, it's a cocktail of contaminants”, while other participating scientists and organisations presented findings on 15 different research projects covering the human health impact of additives commonly used in plastic.

In 2021, Plastic Soup Foundation held its second Plastic Health Summit, bringing together all stakeholders involved in this crisis, from scientists and policymakers to politicians, citizens, influencers, NGOs, industry, and innovators to collaboratively create a Healthy Future for All.

This brings us to 2023, with the Global Plastics Treaty in eyeshot, the Plastic Health Symposium has been designed to debate this issue with representatives of business, science, and politics.

It is a critical time for human health.

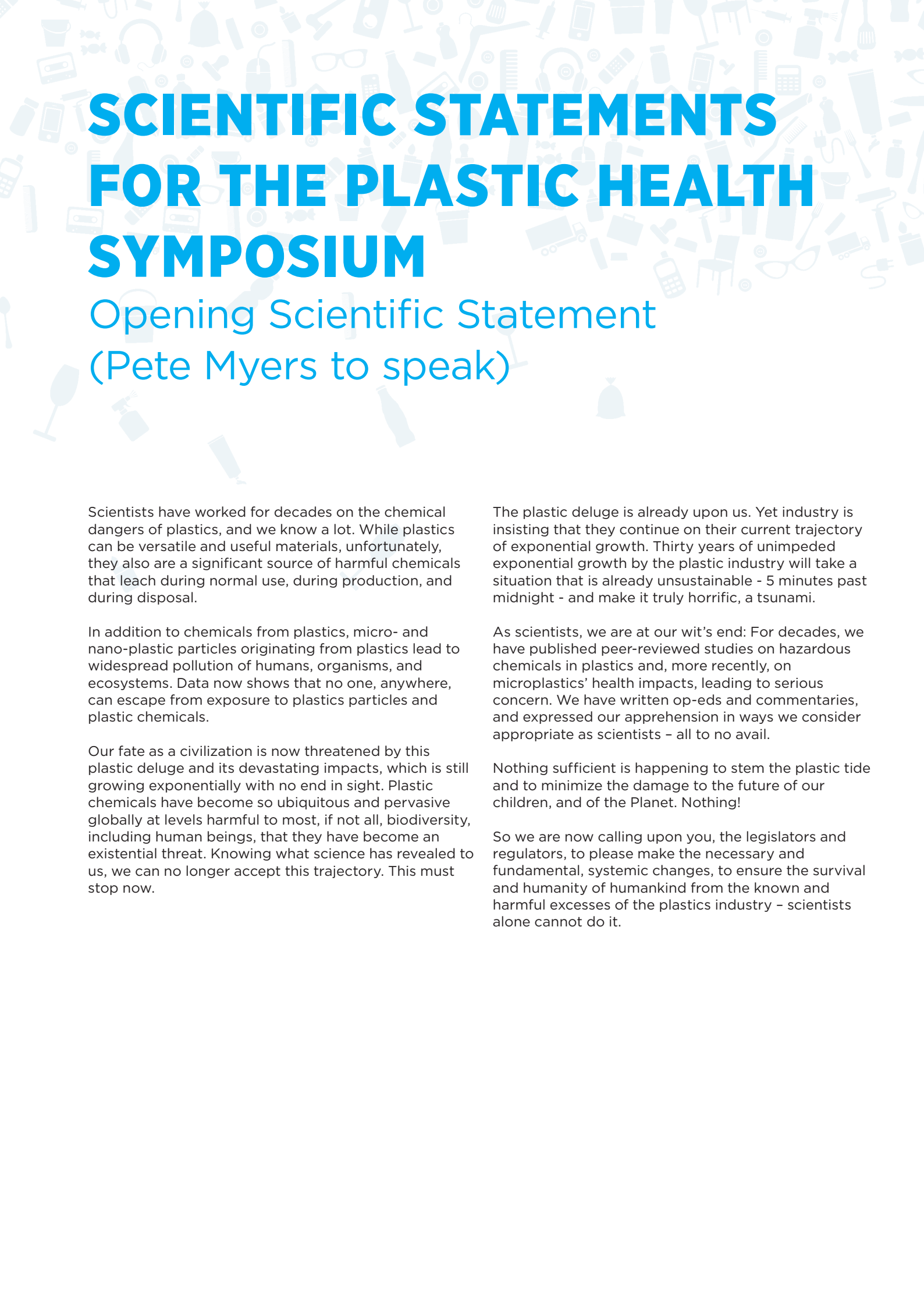


EVENT PROGRAMME

08:00 – 08:20	Registration & Security
08:20 – 08:30	Networking & Buffer time
08:30 – 08:35	Event Moderator introduces first speaker and housekeeping
08:35 – 08:40	Sponsor welcome <i>Sara CERDAS MEP, Member of Progressive Alliance of Socialists & Democrats Group and the official sponsor of the Expert Symposium</i>
08:40 – 08:45	Plastic Health Summit video
08:45 – 08:55	Keynote opening speech <i>Sian SUTHERLAND, Chief Changemaker at A Plastic Planet</i>
08:50 – 08:55	Scientific statement presented <i>Pete MYERS, Founder and Chief Scientist of Environmental Health Sciences</i>
08:55 – 09:00	Buffer
09:00 – 10:00	Roundtable 1: Systems Change & Innovation MEP speaker: <i>Sara CERDAS MEP</i>
10:00 – 10:05	Buffer
10:05 – 11:05	Roundtable 2: Safe and Sustainable Chemicals by Design MEPs speaker: <i>Martin HOJSIK MEP, Member of Renew Europe Group</i> MEPs speaker: <i>Anja HAZEKAMP MEP, Member of the Left Group</i>
11:05 – 11:10	Buffer
11:10 – 12:10	Roundtable 3: Legal Accountability
12:10 – 12:20	Closing remarks <i>Maria Westerbos, Founder & Director – Plastic Soup Foundation</i>
12:20 – 12:30	Networking & End of event

HOUSEKEEPING

- Please indicate if you do not want to be photographed and/or included in social posts.
- Please stay off your phone during the roundtable discussion.
- The Moderator will press you to keep your responses concise and on topic.
- You have two main roundtable topics assigned to which you will be expected to contribute.
- Please also write any contributions you would like to share on the post-it notes in front of you, and the support team will pass this onto the Moderator.



SCIENTIFIC STATEMENTS FOR THE PLASTIC HEALTH SYMPOSIUM

Opening Scientific Statement (Pete Myers to speak)

Scientists have worked for decades on the chemical dangers of plastics, and we know a lot. While plastics can be versatile and useful materials, unfortunately, they also are a significant source of harmful chemicals that leach during normal use, during production, and during disposal.

In addition to chemicals from plastics, micro- and nano-plastic particles originating from plastics lead to widespread pollution of humans, organisms, and ecosystems. Data now shows that no one, anywhere, can escape from exposure to plastics particles and plastic chemicals.

Our fate as a civilization is now threatened by this plastic deluge and its devastating impacts, which is still growing exponentially with no end in sight. Plastic chemicals have become so ubiquitous and pervasive globally at levels harmful to most, if not all, biodiversity, including human beings, that they have become an existential threat. Knowing what science has revealed to us, we can no longer accept this trajectory. This must stop now.

The plastic deluge is already upon us. Yet industry is insisting that they continue on their current trajectory of exponential growth. Thirty years of unimpeded exponential growth by the plastic industry will take a situation that is already unsustainable - 5 minutes past midnight - and make it truly horrific, a tsunami.

As scientists, we are at our wit's end: For decades, we have published peer-reviewed studies on hazardous chemicals in plastics and, more recently, on microplastics' health impacts, leading to serious concern. We have written op-eds and commentaries, and expressed our apprehension in ways we consider appropriate as scientists - all to no avail.

Nothing sufficient is happening to stem the plastic tide and to minimize the damage to the future of our children, and of the Planet. Nothing!

So we are now calling upon you, the legislators and regulators, to please make the necessary and fundamental, systemic changes, to ensure the survival and humanity of humankind from the known and harmful excesses of the plastics industry - scientists alone cannot do it.

Systems Change & Innovation:

Statement 1 – To effectively address the problems, society must prioritise systems change and innovation. This involves rethinking the entire lifecycle of plastic products, from design and manufacturing to consumption and waste management.

Sub-statement – Not only rethinking, this problem also requires carrying out meaningful tests about toxicity and permanence, using the highest standards of contemporary science.

Statement 2 – Too often maximising short-term profits has guided technological progress, and it has led to false solutions for the plastic crisis.

Sub-statement – A good example would be bioplastics, which sometimes contain hazardous chemicals even when not synthesised from petrochemicals, and they do not fully degrade at a suitable timeframe when littered into the environment.

Statement 3 – Encouraging research and development of new technologies, as well as promoting collaboration among industries, governments, and communities, can drive the necessary changes in society's plastic consumption habits and waste management systems. But we're not there yet. "If you don't test, you don't know", should be the principle guiding the assessment of any novel materials.

Sub-statement – Even seemingly promising approaches such as bioplastics need comprehensive study and testing before going to market.

Statement 4 – System change also involves implementing effective policies, regulations, and incentives to encourage responsible production and consumption practices. By fostering a culture of sustainability and supporting innovative solutions, society can collectively work towards a future with reduced plastic pollution and a healthier planet.

Safe and Sustainable Chemistry by Design:

Statement 1 – Today's world-wide chemical enterprise is a ticking time bomb, posing a massive risk to our global community. We cannot continue to operate as we do today.

Sub-statement – The widespread use of certain harmful chemicals, known as endocrine disruptors, is damaging the health and well-being of EU citizens, affecting our ability to think clearly, fight off diseases, have healthy children, and to even have children at all

Statement 2 – Our society's current reliance on these plastics and toxic chemicals is a recipe for disaster. We must change course and innovate to create a safer, more sustainable future.

Sub-statement – We must enter a new era of chemical science, focusing on developing truly safe alternatives to carcinogens, endocrine disruptors, and other types of hazardous chemicals that are widely in use today, and replacing plastics with non-toxic materials that will not harm the environment nor human health.

Statement 3 – Past efforts have stumbled due to a lack of bold action.

Sub-statement – We need an innovative approach that will drive European technology and economic growth while eliminating the risks associated with EDCs and plastics. Science has given a clear direction. Society must work together to build a healthier future.

Legal Accountability:

Statement 1 – Legal and financial accountability for plastic pollution is an essential element in the fight against this pressing human health and environmental disaster. Manufacturers, businesses, and even individuals must be held to account for the negative impact their use and production of plastics has had.

Sub-statement – By creating and enforcing laws, regulations, and penalties for improper plastic disposal or unsustainable production practices, society can encourage more responsible behavior from all stakeholders.

Statement 2 – A key element in fostering this change is encouraging businesses and individuals consider long-term environmental consequences instead of focusing solely on financial gain to help create a more sustainable and conscientious society.

Sub-statement – This means prioritising the well-being of our planet over short-term profit maximisation.

Statement 3 – The requisite tectonic shift from money-first to sustainability-first will require a suite of new laws, as well as the assertive use of the environmental protection laws Europe already has.

Sub-statement – Legal accountability action not only aids in reducing plastic pollution but also cultivates a culture of environmental awareness, ultimately contributing to a cleaner, healthier planet for future generations.



Prof Dr Terrence J. Collins is the Teresa Heinz Professor of Green Chemistry and Director, Institute for Green Science, at Carnegie Mellon University in Pittsburgh, Pennsylvania. Terry received his undergraduate and doctoral degrees from the University of Auckland where he is a Distinguished Alumnus and Honorary Professor. He first learned of the insidious health damage caused by certain commercial chemicals while a student at Auckland. Today, his multidisciplinary research, educational and entrepreneurial programs aim to provide solutions for pollutants that exhibit low dose adverse effects (Iodafs). Typically consequent to endocrine disruption mechanisms, Iodaf chemicals are fast-acting threats to all higher life-forms and are, for example, rapidly sterilizing highly chemicalized human societies. Terry is the creator-founder of the two-year old, multiply awarded startup Sudoc, LLC that is commercializing TAML® applications while developing a working example of what a sustainable chemical corporation should look like.



Dr Jane Muncke holds a doctorate degree in environmental toxicology and a MSc in environmental science from the ETH Zurich. Since 2012 she has been working as Managing Director and Chief Scientific Officer at the charitable Food Packaging Forum Foundation (FPF) in Zurich, Switzerland. FPF is a research and science communication organization focusing on chemicals in all types of food contact materials. Prior to this, Jane worked for Bucher Emhart Glass, a Swiss mechanical engineering company and glass packaging industry supplier. Before leaving academia, she was a scientific associate at Eawag, the Swiss Aquatic Science Institute, collaborating in various different research projects, including endocrine disruption in developing zebrafish, sustainable urban wastewater management, and removal of Arsenic from drinking water in Bangladesh. Since 2019, she is an elected expert member of the Swiss Organic Farming Association BioSuisse's committee on trade and processing.



Prof Dr Dick Vethaak is a biologist and toxicologist by training (Ph.D., ERT). He is a former employee of Deltares in Delft and is currently affiliated with the Institute for Risk Assessment Sciences (IRAS) at Utrecht University. Dick is an emeritus professor of Water Quality and Health at VU University Amsterdam and retired in 2020. His fields of expertise are assessing water quality and ecosystem health, endocrine-disrupting chemicals, and the fate and effects of plastic debris. His research currently focuses on the health effects of microplastics within the Dutch ZonMw program. He is co-leader of the MOMENTUM project (the Dutch Microplastics and Human Health consortium), which aims to determine and ultimately prevent the effects of micro- and nanoplastics on human health. Dick's work is frequently mentioned in national and international media.



Prof Dr Barbro Melgert is a respiratory immunologist at the University of Groningen. Her group investigates how the immune system in the lung is impaired by toxic exposures and can be harnessed to treat chronic respiratory diseases like asthma, COPD and lung fibrosis. Funded by different grants they focus on the role of macrophages in development and exacerbations of asthma and COPD using animal models and 3D lung models with direct translation to the clinic. Another important cause of aggravation of lung disease is exposure to air pollutants. Our indoor environment contains many types, including the recently described novel concern of microplastics. Funded by the ZonMW consortium MOMENTUM, Melgert works on elucidating the effects of inhalable microplastics on human lung health with again special focus on interactions between structural lung cells and the local immune system.



Dr Pete Myers is Chair, founder and Chief Scientist of Environmental Health Sciences, a nonprofit organization dedicated to driving science into public discussion and policy on environmental health issues. In 1991 while working with Theo Colborn he coined the phrase endocrine disruption. As a co-author of Our Stolen Future he has worked on endocrine disruption since the early 1990s, publishing many research and policy papers in the peer-reviewed literature. He has chaired the board of the Science Communication Network since its founding in 2003 and also served as board chair of the H. John Heinz III Center for Science, Economics and the Environment. Dr. Myers is a trustee of the Jenifer Altman Foundation and has served as Board President of the Consultative Group on Biological Diversity, an association of 40+ foundations supporting work on biodiversity, climate, energy and environmental health. In 2020 he joined Professor Terry Collins as co-founder of Sudoc.com.

May 2023

Open Letter Mr Frans Timmermans, Executive Vice - President, European Commission.

Stop plasticene, protect human health.

Dear Mr Frans Timmermans,

The undersigned Members of the European Parliament are deeply concerned about the impact of microplastics on human and animal health and the limited action undertaken by the European Union (EU) in this area. A wealth of scientific studies has demonstrated that citizens inhale, ingest and absorb microplastics in their daily life¹.

Human exposure to microplastics can adversely affect the metabolism and induce severe illness as well as compromise adequate foetus developments². The distribution and abundance of microplastics is so wide that the historical time we live in has been defined as 'Plasticene'³. Microplastic particles, with hazard potential, have been detected in the environment, marine water, freshwater, agroecosystems, atmosphere, food, drinking-water, ecosystems, animals, plants, feedstocks, and other locations. This means that around 450 million citizens are being exposed to harmful microplastics on a daily basis.

The EU has made some progress on this issue. Steps forward have been achieved with prohibiting intentional microplastics in cosmetics, although allowing too much time for the phase out of a few products, as well as the use of certain single-use products. The introduction of precautionary measures to prohibit and minimize both the intentional and unintentional release of microplastics is the only effective solution to secure public health.

Crucially, the recent EU Global Health Strategy⁴, whose objective is to deliver better health and well-being of people across their life course, does not mention the word 'microplastic' once, and there is no specific roadmap set for the phase out of unintentional microplastics.

We therefore call on the European Commission to deliver in this area and propose tangible solutions which would put an end to 'Plasticene' and protect the health of EU citizens. The Commission should take a firm stand and show real leadership by prohibiting and minimizing the intentional and unintentional release of microplastics while promoting advanced technological developments supporting this change.

Signed by:

- Sirpa Pietikäinen (EPP)
- Sara Cerdas (S&D)
- Martin Hojsik (Renew)
- Malte Gallée (Greens)
- Frédérique Ries (Renew)
- Anja Hazekamp (Left)
- Margrete Auken (Greens)
- Martin Buschmann (NI)
- Michèle Rivasi (Greens)
- Henna Virkkunen (EPP)
- Aurore Lalucq (S&D)
- Karen Melchior (Renew)
- Jakop Dalunde (Greens)
- Pär Holmgren (Greens)
- Alice Bah Kuhnke (Greens)
- Marie Toussaint (Greens)
- Maria Arena (S&D)
- Tilly Metz (Greens)

- Jutta Paulus (Greens)
- Maria Angela Danzi (NI)
- Tiziana Beghin (NI)
- Fabio Massimo Castaldo (NI)
- Laura Ferrara (NI)
- Mario Furore (NI)
- Sabrina Pignedoli (NI)

The Open Letter is promoted with the support of the not-for-profit organization the [Plastic Soup Foundation](#).

¹ <https://www.sciencedirect.com/science/article/pii/S0160412022001258>

² <https://ehp.niehs.nih.gov/doi/10.1289/EHP10873>

³ <https://www.sciencedirect.com/science/article/pii/S0025326X19308707>

⁴ https://health.ec.europa.eu/publications/eu-global-health-strategy-better-health-all-changing-world_en

The Letter will be published on relevant media once the collection of signatures is completed.

CONTACT INFORMATION

Thank you for attending our Plastic Health Symposium today.

Participants will be contacted after the event to voluntarily sign a letter of intent on some of the key areas covered in the Symposium. Let's turn this talk into action.

To contact us, please use the below channels:

Maria Westerbos
maria@plasticsoupfoundation.org
+31 6 51090691
www.plasticsoupfoundation.org

Sian Sutherland
Sian@aplasticplanet.com
+44 7768 385383
www.aplasticplanet.com

Tom Beresford
Tom@higginsonstrategy.com
+44 7770 518729

**PLASTIC
SOUP** FOUNDATION

Plastic Soup Foundation

Sumatrakade 1537
1019 RS Amsterdam
+31 (0)20 211 13 48
info@plasticsoupfoundation.org
www.plasticsoupfoundation.org

KVK 5207 2894

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