



ADVANCED MATERIALS INTERNATIONAL TOPIC CONFERENCES

**Conferences on advanced materials: Assessment of needs to act on chemical safety
REFOPLAN-Project FKZ 3719 66 402 0**

Introduction

The German Environment Agency (UBA) and the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) invites stakeholders from academia, regulators and authorities, industry and civil society groups to discuss the implications of advanced materials on chemical safety in a series of three international conferences.

This project description briefly provides information about the project within which the conferences take place and its aim as well as the currently envisaged topics and proceedings of the three conferences. Stakeholders interested in attending and contributing to the conferences and project are invited to contact the project team (c.f. details below).

There is no regulatory definition of the term 'advanced materials'. It is commonly understood as addressing a heterogeneous group of new or modified materials with improved properties in terms of their application. They are used in high-performance applications and are thought of being high value products. Nanomaterials are regarded as a sub-group of advanced materials. While the regulatory situation of nanomaterials has been and is still being clarified, among others by the adaptation of REACH, it is unclear if advanced materials have been sufficiently addressed by existing legislation.

While research on and development of advanced materials are supported by national and European funding, the potential challenges for risk assessment and regulation similar to those of nanomaterials have also been identified by e.g. OECD, the European Commission or the European Chemicals Agency (ECHA).

Aim of the project

- As types, combinations and applications of advanced materials are numerous a structured approach to the assessment of potential risks and regulatory coverage of these materials is a complex task. The project will support UBA and BMU in identifying advanced materials that may be relevant for further regulatory action.



- Among others, the project will examine if advanced materials:
 - are covered by existing legislation, i.e. if they fulfil the respective definition(s);
 - feature specific characteristics that pose risks to human health or the environment, e.g. due to high or manifold (disperse) uses, high toxicity, particle effects etc. and/or
 - can be assessed with the current risk assessment approaches and tools or information gaps exist that hinder risk assessment.

Based on these outcomes, needs for action for chemical safety of advanced materials will be deduced.

Project approach

The project consists of two parts: The first part aims at gathering, evaluating and preparing information on advanced materials and their (potential) application on the European market for discussion with the German authorities as well as with international stakeholders.

In the frame of the second project part, the three conferences will be prepared, organised, conducted and documented. The two parts are interlinked by an iterative process at the end of which a comprehensive documentation will be prepared, including information on their applications, potential risks, regulatory deficits and action needs and other issues of advanced materials in respect to chemical safety that appear to be relevant during the project work.

Phase 1: Information gathering, evaluation and work-up for discussion

The aim of this phase is to develop an overview of relevant (types of) advanced materials and their current as well as potential future uses. Information will be collected from literature and the internet as well as via structured expert interviews (Delphi-Method). Criteria will be developed that indicate 'relevance' of an advanced material (c.f. above) and the identified advanced materials will be qualified as 'relevant' or 'not relevant' for regulatory action from the perspective of the project. The result of the first phase is a report summarising the research results.

Phase 2: Topic conferences

The topic conferences will be two-day events and will take place at three different premises. Per conference, 75 persons from different stakeholder groups with expertise in the respective topic of the event may participate. At the conferences, a good mixture of presentations and break-out group discussions is foreseen to give sufficient time and opportunity for information and experience exchange as well as in-depth evaluation of the challenges related to advanced materials. According to the current planning, the following topics and time-periods are foreseen for the three conferences.



Table 1: Topic conferences

#	Main Topic	Sub-Topics	Date & Venue
1	Overview and evaluation of advanced materials and their applications	Overview of advanced materials; groups and potential definitions, markets and trends of applications, criteria for identification of relevance and evaluation of which advanced materials are relevant	5.12. - 6.12.2019 UBA, Dessau (DE)
2	Regulatory challenges of advanced materials	Applicability of regulatory definitions as well as risk assessment approaches and tools; challenges in hazard identification and exposure assessment, data availability etc.	June 2020 OECD; Paris (FR)
3	Evaluation of project results and recommendations	Identification of regulatory and/or implementation gaps, discussion of regulatory approaches and priorities, recommendations to different actors	May 2021 BMU, Berlin (DE)

Contacts

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Overall project, policy context

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