



## Promoting recognition and implementation of exposure science in Europe: First elements of a European Exposure Science Strategy 2020–2030

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1 Editorial

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3 **Promoting recognition and implementation of exposure science in Europe: First**  
4 **elements of a European Exposure Science Strategy 2020–2030**

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18 Exposure science is one of the key disciplines needed to evaluate chemical and biological  
19 risks as part of human and environmental health assessments, in support of a transition to  
20 sustainable societies in Europe and worldwide. In an effort to identify the needs, challenges  
21 and opportunities for advancing recognition, policy uptake and funding of exposure science  
22 in Europe, the Europe Regional Chapter of the International Society of Exposure Science  
23 (ISES Europe), newly-founded in 2017, started a bottom-up process to identify key priority  
24 areas for a *European Exposure Science Strategy* [1]. By involving experts from occupational,  
25 consumer, general population and environmental exposure assessment, this strategic effort is  
26 based on a broad understanding of exposure scientists across the whole landscape and across  
27 various sectors. This includes experts and stakeholders from academia, the private sector and  
28 regulatory authorities, such as the European Chemicals Agency (ECHA), the European Food  
29 Safety Authority (EFSA), and the European Commission's Joint Research Centre (JRC), as  
30 well as international institutions, such as the United Nations Environment Programme (UN  
31 Environment). Such cross-sector involvement assures a broad stakeholder support and  
32 implementation of the different strategy elements and their proposed action plans.

33

34 Dedicated working groups were formed under the auspices of ISES Europe for the identified  
35 key priority areas on education and terminology, policy uptake, exposure models, exposure  
36 data and human biomonitoring [1]. These working groups reviewed the state-of-science,  
37 discussed critical elements for advancing the field, and developed a concrete action plan for  
38 each respective key priority area. In this ongoing process, ISES Europe acted as both a motor  
39 and a catalyst for the dialogue between different sectors that in Europe are still separated by  
40 regulatory silos and a lack of adequate knowledge exchange platforms around exposure  
41 science [1].

42  
43 The present Special Topic introduces the first elements as output of developing an  
44 overarching European Exposure Science Strategy, and includes the finalized specific  
45 strategies and proposed action plans for the two key priority areas on policy uptake [2] and  
46 exposure models [3]. The Special Topic is complemented by a glossary on exposure-related  
47 terminology as one of the corner stones of consolidating exposure science as a scientific field  
48 [4]. Specific strategies and concrete action plans for all other key priority areas are currently  
49 being finalized and will be published in scientific journals.

50  
51 The role of ISES Europe in the ongoing development of the strategy shows the utmost  
52 importance of scientific societies for promoting recognition and identity of a scientific field.  
53 By furthering the identity of the field, scientific and political recognition will be achieved,  
54 which is key to develop sustainable funding mechanisms for exposure science research and  
55 development. Thus, the European Exposure Science Strategy will help to promote and  
56 advance exposure science in Europe, and may serve as blueprint for establishing strategies on  
57 exposure science worldwide, fully aligned with the global ambitions for a sustainable  
58 development.

59  
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64  
65 **Data Availability Statement**

66 Not applicable

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69 **Author Contribution Statement**

70 NvG provided a first draft, PF and NvG finalized together

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72 **Conflict of interest**

73 The authors declare that they have no conflict of interest.

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91