

REPORT: TwINSol-CECs “Club of Interest” Questionnaire Report

This report presents the results of the TwINSol-CECs Questionnaire entitled “Questionnaire for Identifying Priority Research and Innovation Areas in the Removal of Contaminants of Emerging Concern” conducted as part of the activities of the “Club of Interest”. The purpose of the survey was to identify priority research and innovation areas related to the monitoring, quantification, and removal of Contaminants of Emerging Concern (CECs). The results will support strategic planning and strengthen collaboration between academia, industry, public institutions, and other stakeholders. Respondents provided insights into the environmental challenges associated with CECs and highlighted the technological, regulatory, and financial barriers influencing innovation in this sector. TwINSol-CECs “Club of Interest” Questionnaire was prepared in both English and Serbian language in order to cover both national and international responders. Total of 89 responders completed the questionnaire.

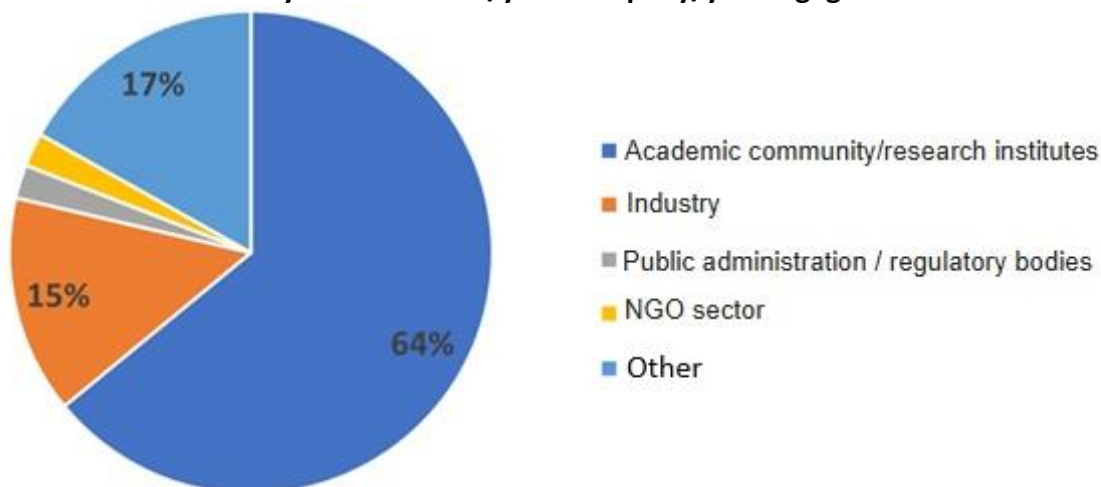
The main findings from the TwINSol-CECs stakeholder questionnaire:

- Respondents agreed that CEC occurrence varies between countries, influenced by differences in industrial activity, regulatory strength, and wastewater treatment capacity. Pharmaceutical residues, pesticides, PFAS compounds, microplastics, and endocrine disruptors were identified as the most concerning groups of contaminants.
- Wastewater and surface waters were marked as priority environments requiring technological intervention. Membrane technologies, advanced oxidation processes, and bioremediation were recognized as the most promising solutions, though financial and regulatory barriers remain major obstacles to implementation.
- Stakeholders emphasized the need for stronger cooperation between scientific teams, industry, policymakers, and environmental authorities. EU programs such as Horizon Europe were highlighted as essential funding sources. Most respondents considered TwINSol-CECs project results valuable and potentially applicable, provided that dissemination and regulatory support continue to improve.

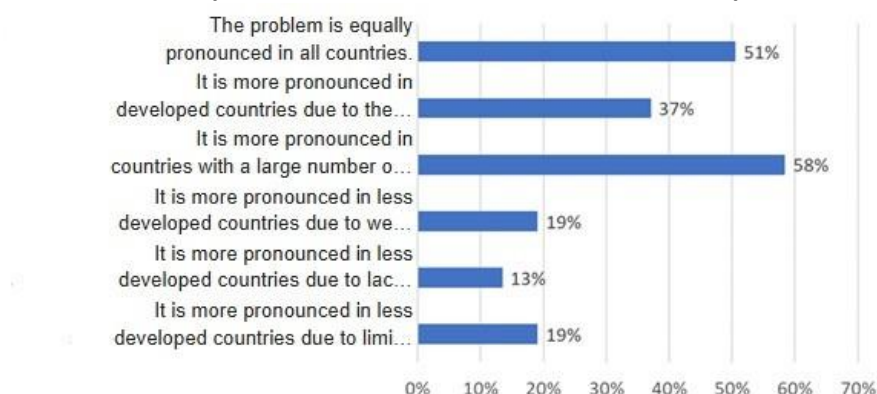
The results of this survey clearly demonstrate a high level of awareness and concern regarding Contaminants of Emerging Concern across various sectors. Stakeholders recognize the urgency of improving monitoring systems, standardizing analytical approaches, and accelerating the development and application of advanced treatment technologies. The insights collected through this questionnaire will contribute to defining future research priorities of the TwINSol-CECs initiative and enhancing cross-sector cooperation aimed at protecting environmental resources and public health.

Highlighted responses are presented in the following figures:

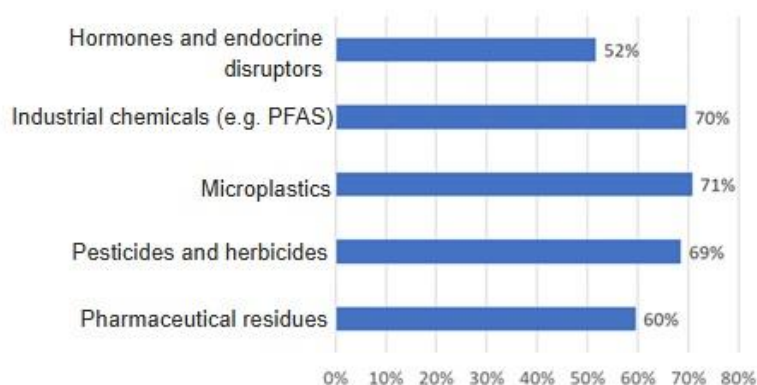
Please mark the sector in which your institution/your company/you engage?



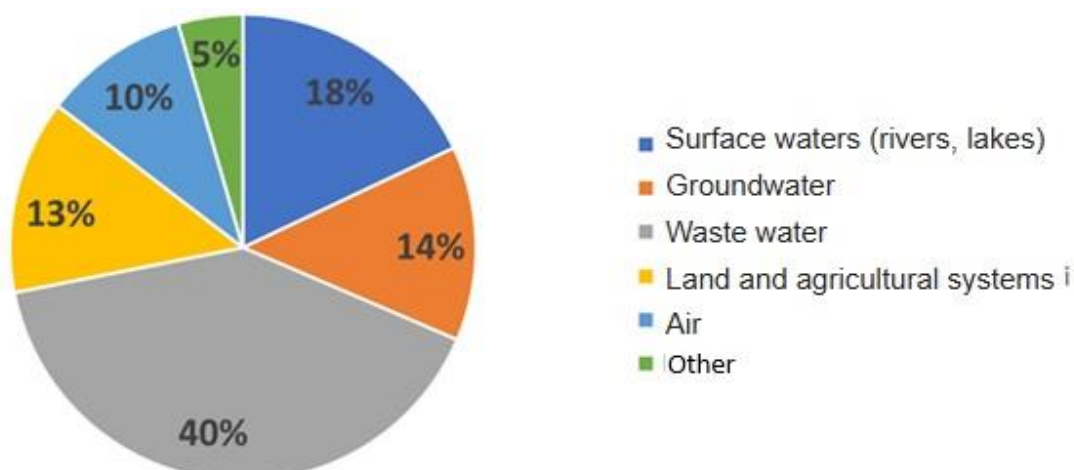
Do you think that the problem of the presence of contaminants of emerging concern (CEC) is equally expressed in all countries, regardless of the degree of economic development and the number of inhabitants? (You can choose more than one answer)



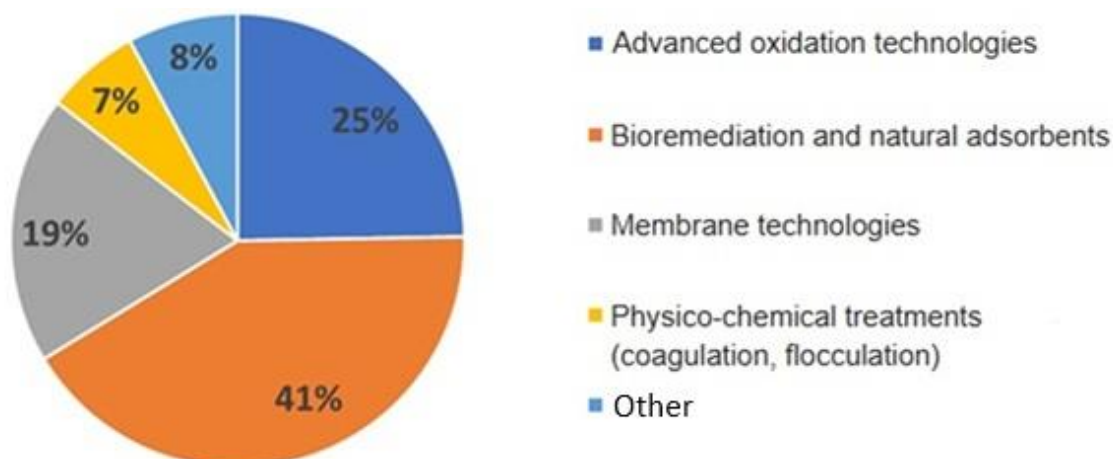
What types of contaminants of emerging concern/micropollutants do you consider most critical to remove from wastewaters? (You can choose more than one answer)



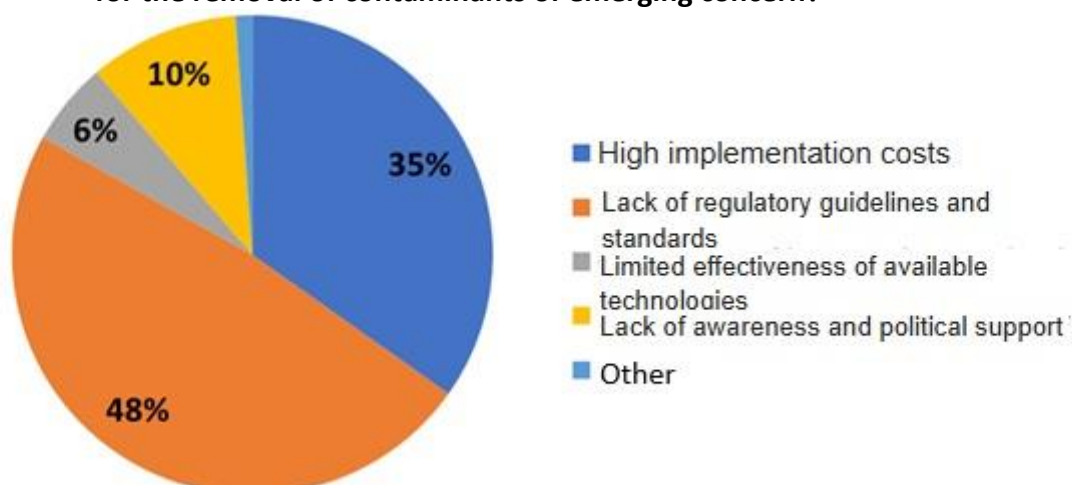
Which environmental segment should be a priority in research and innovation for the removal of emergent pollutants?



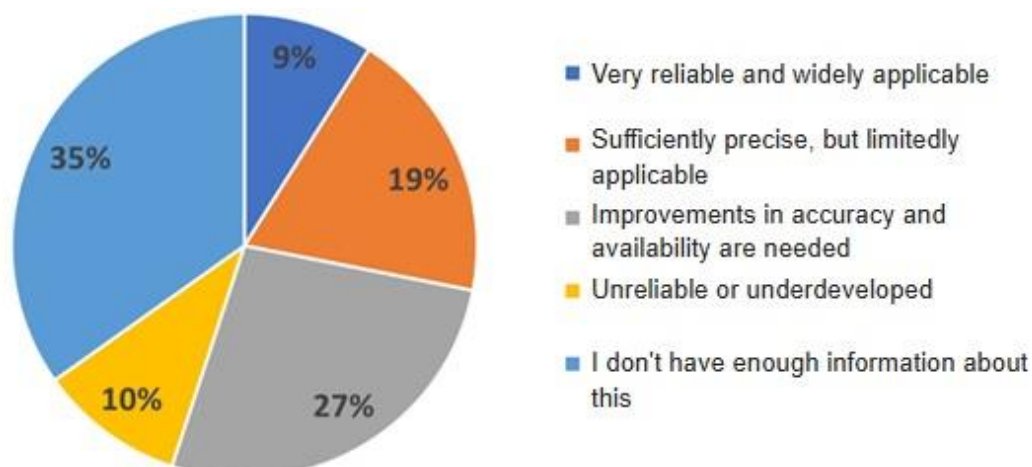
Which technologies do you consider the most promising for the removal of contaminants of emerging concern from the environment?



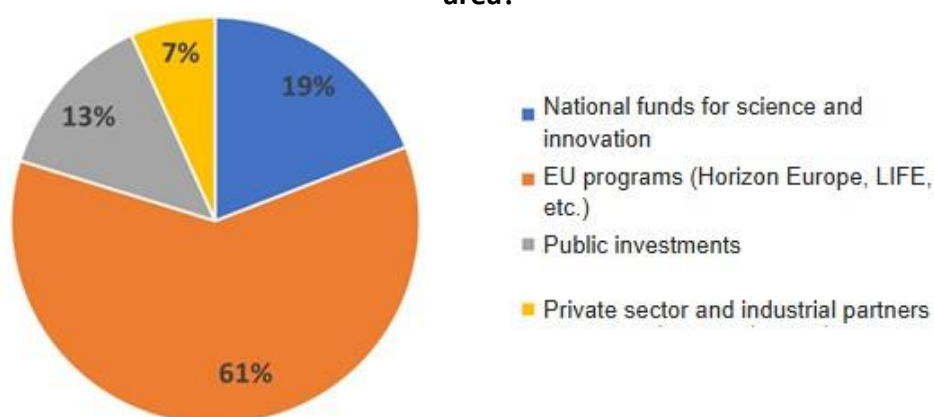
In your opinion, what could be the main obstacles in the application of advanced methods for the removal of contaminants of emerging concern?



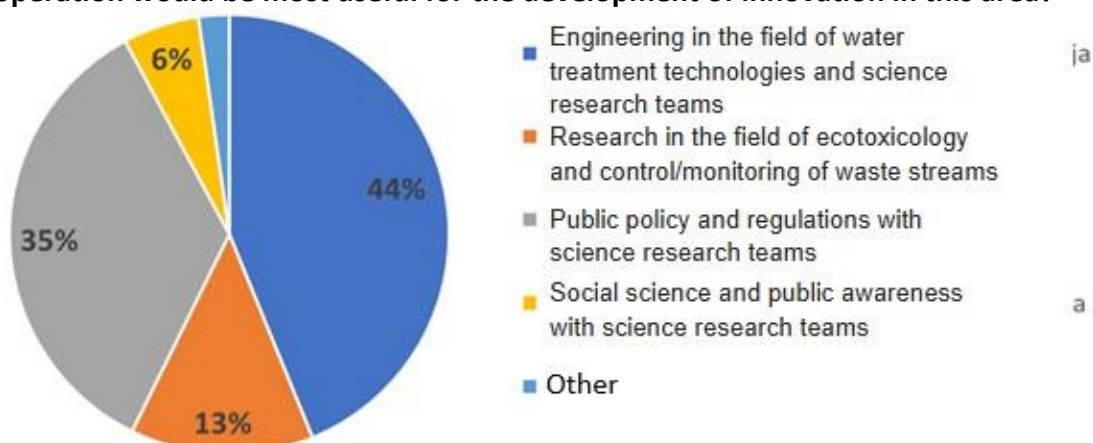
How reliable and applicable are the available methods for the identification and quantification of contaminants of emerging concern in water in your sector?



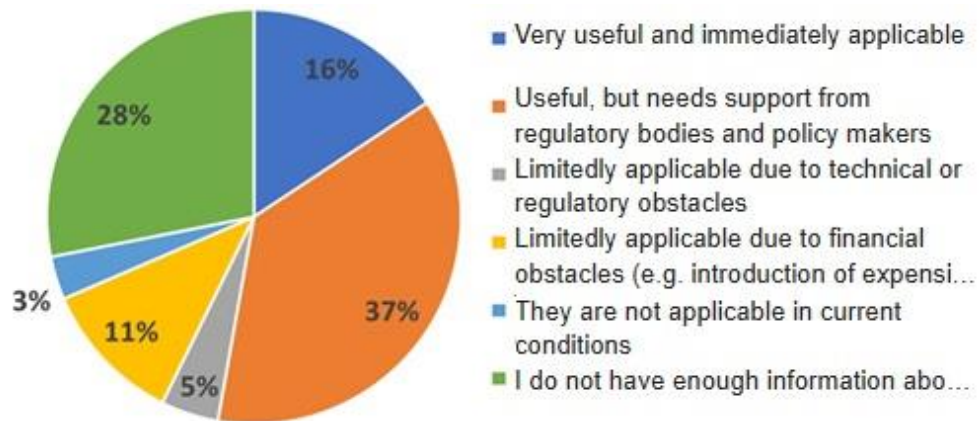
What source of funding do you see as key to supporting research and innovation in this area?



What cooperation would be most useful for the development of innovation in this area?



How do you assess the possibility of applying the results obtained within the framework of the TwINSol-CECs project in your sector?



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