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Relevance of Integrated Air, Soil and Water Research Studies for the New Millennia

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ABSTRACT: Our ecosystems are facing changes at a local and global scale because of human interventions. These transformations are a result of drastic urbanization, rapid industrialization, and natural resources exploitation to provide livelihoods and commodities for the increasing population. Recent global events such as the COVID-19 pandemic or cross-bordering conflicts are not delaying these changes. To understand these changes, increasing efforts of the scientific community to find sustainable solutions is vital as it is consistent financial support from governments and scientific agencies. Air, Soil and Water Research (ASW) Editorial Board envision multidisciplinary and transversal research as an interesting strategy to develop knowledge and useful datasets which can directly benefit society through efficient land management plans.

KEYWORDS: Multidisciplinary research, integrated investigations, atmosphere, hydrosphere and pedosphere

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Our ecosystems are facing changes at a local and global scale because of human interventions. These transformations are a result of drastic urbanization, rapid industrialization, and natural resources exploitation to provide livelihoods and commodities for the increasing population. Recent global events such as the COVID-19 pandemic or cross-bordering conflicts are not delaying these changes. To understand these changes, increasing efforts of the scientific community to find sustainable solutions is vital as it is consistent financial support from governments and scientific agencies.

Air, Soil and Water Research (ASW) Editorial Board envision multidisciplinary and transversal research as an interesting strategy to develop knowledge and useful datasets which can directly benefit society through efficient land management plans. Deciphering how these three spheres (atmosphere, pedosphere, and hydrosphere) interact and establishing vital connections to develop up to date, useful information that supports adaptation measurements will be fundamental for the survival of our society. In 2021, we received an increased number of high-quality contributions that definitively filled these gaps. This editorial board would like to thank our associate editors, reviewers, and authors for their generosity in sharing their experience and abilities with us.

Thanks to your contributions, we closed two excellent special issues: Case studies of a grassroots binational restoration collaborative in the Madrean Archipelago Ecoregion (2014–2019; Manteca-Rodríguez et al., 2021) and Vineyards Assessed Under a Biophysical Approach: Findings from the Biohydrology and TerraEnvision Meetings. In both, we learned about ecosystem services, restoration, and alternatives to conserve bucolic landscapes and reach biodiversity

territories. Moreover, interesting contributions on climate change in Mexico, Iran or Ethiopia (Eskandari Damaneh et al., 2021) were published, revealing a negative impact on vegetation, agriculture, and soils.

Wildfires also had a presence in our last issue with two preliminary investigations: One about carbon and nitrogen sequestration in California (Callegary et al., 2021). The second was the first European review on forest fire with more than 90 authors belonging to the COST Action FIRElinks, which is trending as the top publication on the field (Fernandez-Anez et al., 2021). About soils and water, specifically, key topics were contaminated surfaces restoration (Cordova Estrada et al., 2021; Mahmoud et al., 2021) and modeling techniques (Adam et al., 2021; Pandey et al., 2021). The journal also included a contribution by Tobias and Mandel (2021) aimed to develop a literature mapper tool, which has attracted significant attention after publication in a pre-printed version and on social media (Twitter). We planning to continue strengthening gender equality and regional representation in our Associate Editors and board members to make ASW a world-class space of coincidence for knowledge and new advances.

Finally, we would like to thank Bree Sundling for supporting us during challenging 2021 and contributing to making ASW a better journal. Now, it is time to welcome our new Manager Editor, Sevda Dogan, to share with us the adventure at ASWR.

Author Contributions

All the authors contributed equally.



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