





Special Issue Reprint

# **Modeling of Soil Erosion and Sediment Transport**

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Edited by Vlassios Hrissanthou

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The Special Issue entitled "Modeling of Soil Erosion and Sediment Transport" focuses on the mathematical modeling of soil erosion caused by rainfall and runoff at a basin scale, as well as on the sediment transport in the streams of the basin. In concrete terms, the quantification of these phenomena by means of mathematical modeling and field measurements has been studied. The following mathematical models (software) were used, amongst others: AnnAGNPS, SWAT, SWAT-Twn, TUSLE, WRF-Hydro-Sed, CORINE, LCM-MUSLE, EROSION-3D, HEC-RAS, SRC, WA-ANN. The Special Issue contains 14 articles that can be classified into the following five categories: Category A: "Soil erosion and sediment transport modeling in basins"; Category B: "Inclusion of soil erosion control measures in soil erosion models"; Category C: "Soil erosion and sediment transport modeling in view of reservoir sedimentation"; Category D: "Field measurements of gully erosion"; Category E: "Stream sediment transport modeling". Most studies presented in the Special Issue were applied to different basins in Europe, America, and Asia, and are the result of the cooperation between universities and/or research centers in different countries and continents, which constitutes an optimistic fact for the international scientific communication.





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