



## Isotope Application in Forest Growth Assessment

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### Message from the Guest Editors

Dear colleagues,

Stable isotopes are valuable sources of information about past climatic and environmental changes, and their impact on forest growth and dynamics.

This special issue focuses on:

- application of stable and compound-specific isotope analyses ( $d^{13}C$ ,  $d^{18}O$ ,  $d^{15}N$  and  $dD$ ) in wood tissues as sensitive indicators for biogeochemical, eco-physiological and metabolic changes at the tree to the forest level;
- forest productivity changes, die-back phenomena and adaptive responses of trees to global change;
- extreme climatic events: impacts and approaches for their reconstruction;
- evaluation of the effects of disturbance and competition over the expression of tree-ring stable isotopes in natural versus managed forests;
- potential application of stable isotopes from the study of hydrological processes to pollution influences.

Dr. Giovanna Battipaglia

Dr. Olga Churakova (Sidorova)

*Guest Editors*





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