Sensing Moisture in Timber: Measurement Techniques and IoT Monitoring Systems for Sensor Networks

Guest Editor:

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Message from the Guest Editor

Monitoring the moisture content of timber is important to maintain timber in good condition. There are multiple techniques based on resistance, capacitance, microwaves, or a combination of different methods for accurate moisture content measurement. Low-power and reduced size devices need to be developed for sensing timber in multiple locations by using remote monitoring. The Special Issue also welcomes any contribution related to complete IoT systems (data server, user interfaces, etc) and data analysis algorithms for timber analysis, especially moisture content analysis.

The topics include but not limit to:

- Sensors for timber moisture content analysis and other properties
- Timber sensing devices for remote sensing
- Timber sensing devices for specific applications: drying ovens, stocked timber, structural timber, furniture and others
- Communication protocols for timber sensing nodes: low power, long-range, etc.
- IoT infrastructure and applications for timber monitoring
- Timber data analysis methods to detect and predict timber deterioration
- Timber monitoring applications: heritage monitoring, civil infrastructures, buildings, and houses

Special Issue

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Message from the Editor-in-Chief

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