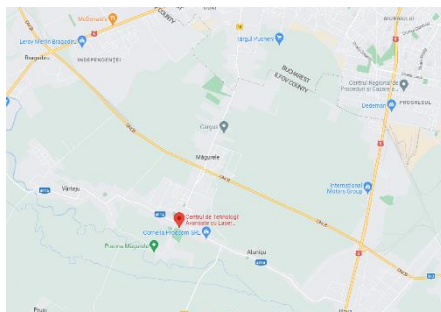


CETAL Seminar

- Near-surface hyperspectral remote sensing of northern trees and forests -

The impact of climate change on forests requires measurement at multiple spatial scales. For decades, passive remote sensing techniques, where reflected or emitted radiation is monitored from space or airborne platforms, have been at the heart of such efforts. Excitingly, several recent developments have propelled the field forwards. These include rapid progress in AI, the launch of constellations of CubeSats, new techniques such as sun-induced fluorescence, the rise of drones and proximal sensing and the emergence of small hyperspectral imaging systems. These technologies are best used in combination to examine processes that occur between the traditional sensing scales of laboratory and satellite pixel. For example, we address the role of individual trees, which were previously obscure, in contributing to remote sensing measurements of evergreen forests. To do this we deploy hyperspectral imaging in greenhouse and research station settings, using close-to-ground and drone-based platforms. In this talk I will describe scientific background, measurements, calibration activities and upcoming field campaigns in this direction.



Location:
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