Introduction to Hyperspectral Imaging and Image processing applied to Agrofood sciences.

Hyperspectral imaging technology has attracted huge interests from researchers to visualize the chemical structures and related physicochemical properties of numerous types of food stuff and it is expected to gain more considerable potentials and optimistic applications in food processing and engineering plants. This technology has already moved from infancy stage to real implementation in different sorts of applications. This seminar will shed the light on the fundamental configuration and working principles of hyperspectral imaging systems as well as the basic concept and structure of hyperspectral data. Image analysis involving mathematical and statistical approaches will be discussed as the essential elements of any computer-integrated hyperspectral imaging systems. The seminar will also present the basic strategies required for making the appropriate decision during detection, classification, identification, quantification and/or prediction processes in different agro-food products to answer the question “what does the user want to see in the target food samples?”

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est actuellement chercheur invité au LARIS dans le cadre du projet PACINP pendant 1 an.