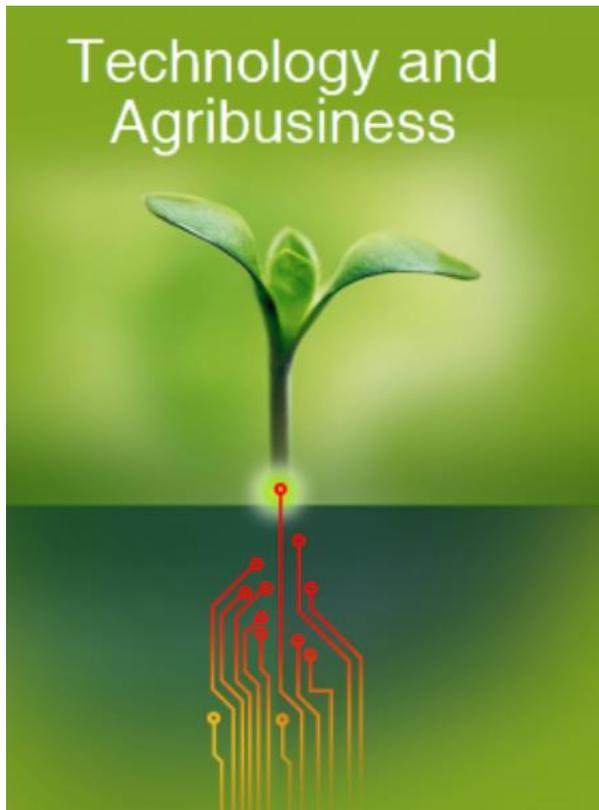


# Technology and Agribusiness: How the Technology is Impacting the Agribusiness



A virtual seasonal school on Technology and Agribusiness was held from November 16<sup>th</sup> to November 20<sup>th</sup>. This school was organized by the Chile CAS chapter. During the school, 17 prestigious professionals from all over the world shared their knowledge and work with the audience. Each day a mix between agricultural topics and technology topics were presented. More than 150 participants registered from all over the world and in average the daily attendance was 60 persons. Other participants, that were not able to connect online because time zone, look at the recorded session.

The first day we had an overview of the vegetable industry followed by a talk about IoT in the Agribusiness showing technology trends and application examples. The second day, after a presentation about the fruit sector in Chile, we study sensor for water and agrifood monitoring followed by an interesting talk about semiconductor sensors for biomedical and agricultural applications. The third day was dedicated to IoT for precision agriculture and some improved IoT capabilities for agriculture applications. We learned about some experiences in India that are using IoT for precision agriculture on the rice production. We also discussed about WPLAN communication options that can be used for IoT in the agricultural domain, such as LoRa and

Sigfox. The third day we also talked about how to monitor the soil quality and how CAS technologies can be applied for that purpose.

The fourth day was dedicated to semiconductor and circuit design with the agricultural constraints, low power and low cost. We had a talk about semiconductors technology and its benefits to the society followed by two talks related to chip design, one for analog circuits and the second one for digital circuits.

The fifth and last day we started with a talk about the dairy industry, followed by an IoT application aimed to detect cow behavior through a collar. After that we had two interesting talks about how to improve crop growth and production through technology and IoT.

According to the survey we did at the end of the school a vast majority of participants were satisfied or very satisfied with the school and they are willing to participate in a new version. We collected several comments that will help us to improve next versions of the school and all the activities we are performing related to Technology and Agribusiness. Participants are asking for more agronomist participation provide clear insights on how plants and fruits growth. Technology and agribusiness is a domain we want to develop at CAS.

Virtual schools are different from presential ones, on one hand we have the opportunity to have more participants, however, on the other hand, the interaction between participants and experts was missing. We are planning to do a second version of the school and we hope that we can do it presential.

An eBook is being prepared with the presentations we had during the school. This eBook will be published in May and we invite all CAS members to read it and contact me if you want more details. Please do not hesitate to write me an email, my address is [victor.grimblatt@synopsys.com](mailto:victor.grimblatt@synopsys.com).