Food

Technology is playing an increasingly important role in food production and advances are required from across the full spectrum of food research. For that, CERIC Partner Facilities can provide support from molecular and microstructural definition and novel processing methods, to quality control, microbiological safety issues and advances in preservation.

- Composition, microstructure characterisation and behaviour of food
- Proteins
- Defects and damages
Composition, microstructure characterisation and behaviour of food

CERIC can provide very specific information about the relative concentration of components (e.g., in edible fats and oils) and it is able to determine trace element composition, and map molecular groups and structures on the nanoscale. CERIC Partner Facilities are able to define the pore structure of samples, for example in freeze-dried vegetables, and the diffusion behaviour of molecules in microporous materials.

Proteins

CERIC provides support in defining protein size and agglomeration, and specific interactions of proteins embedded in matrixes (e.g., glassy sugar matrices).

Defects and damages

CERIC can monitor radiation damage in various materials, including food.