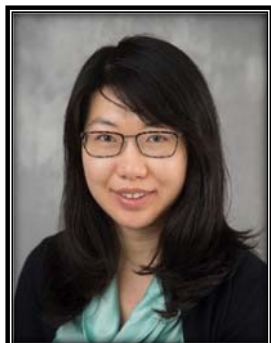


Dairy Protein Structure, Functionalities, and Applications in Food Systems



Dr Du Juan

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Singapore Institute of Technology

**14 May 2019, Tuesday
10.00am**

**BTI Boardroom
Level 6, Centros**

Hosted by Dr Kelvin Ng

Seminar Abstract

Dairy proteins are playing many roles in food applications. Dairy protein functions in food systems are mainly determined by its structures. In this seminar, we will discuss the structural and functional properties of major dairy proteins, and their application in food systems such as emulsions, foams, and gels. And we will also discuss structural and functional changes of dairy proteins during processing conditions such as heating and acidification. In comparison, a few selected plant proteins functional properties will be discussed in this seminar to understand the challenges of replacing milk protein by plant proteins in functionality, texture and sensory perception.

About the Speaker

Juan Du obtained her Ph.D. degree in food science from Purdue University, USA in 2016. She then joined Nestlé global Process Technology Centre for ice cream in Bakersfield, California, USA as a project manager and carbohydrate specialist where she conducted her research in the field of ice cream innovation and non-dairy ice cream. In 2019, she moved to Singapore and became an Assistant Professor in the Department of Food Technology at Singapore Institute of Technology.

Juan has research experience in dairy protein chemistry, dairy processing, interactions between proteins and ionic polysaccharide. Currently, Juan Du is also serving in Food Innovation Center project, a shared facility for small batch production to be set up at JTC food hub.