

# Extruded Products Workshop Food

26<sup>th</sup> – 29<sup>th</sup> of October 2020

With emphasis on Machine and Process technology this food extrusion workshop consists of theoretical lessons followed by practical demonstrations in Buhler's newly installed extrusion pilot plant.

## The program will include:

### Principles of Extrusion Technology.

- Single Screw versus Twin Screw Extrusion Technology.
- Function of Screw Elements.
- Die Design and impact on Expansion.
- Understanding the effect of mechanical and thermal energy input.
- Presentation of different screw configurations for various direct and indirect expanded food products.

### Extrusion process related equipment.

- Steam addition into extruder and preconditioning as a means of thermal energy addition.
- De-gassing and application of vacuum as a means of thermal energy removal.
- Co-extrusion process and remote-cut technology.
- Coloring and coating of extruded products.
- Drying and toasting technology.

### Presentation of various extruded food products.

- Direct and indirect expanded RTE Breakfast cereals and Snacks.
- Dry and Wet texturized plant based proteins.
- Modified Flours and Extruded Breadcrumbs.

### Analytical Methods to analyse raw materials and final products.

- Conversion of starch and proteins during extrusion cooking process.
- Presentation of standard methods as applied in the food industry including visit/demonstration in Buhler's Central Analytical Laboratory.

Between the lectures there will be live demonstrations of various extruded products in Buhler's newly installed extrusion pilot plant.

### General information.

#### Date / Duration.

Monday, October 26th – Thursday October 29th 2020.

#### Target group.

This workshop is intended for operation supervisors, engineering or R&D personnel, etc. (i.e. persons, which are actively involved in technological aspects and feasibility considerations of extrusion).

#### Language.

English

#### No. of participants.

Min. 10 participants. Max. 20 participants.

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## Course fee and location.

Extrusion Pilot Plant of Bühler AG, Uzwil, Switzerland

Rate: CHF 3'900.-

The course fee includes:

Four day course, course documentation and all meals during the workshop, including two dinners.

Not included is hotel accommodation, travelling costs, and transportation back from hotel to airport.

## Payment, terms and conditions, application.

Please send the application form with payment confirmation to: Bühler AG, VNMS12, 9240 Uzwil-Switzerland Tel: +41 71 955 21 38  
[sabrina.vinale@buhlergroup.com](mailto:sabrina.vinale@buhlergroup.com)

After receiving your application form an invoice will be sent to you.

The application shall only be valid after invoice is fully settled.

## Accommodation.

Hotel accommodations from October 25th onward are already booked by Bühler. Costs, however, are the responsibility of the participant.

Hotel Uzwil  
CHF 165 CHF per person and night including breakfast

For more information refer to  
<https://www.hotel-uzwil.ch/en/> or contact us.

**Note:** Bühler AG reserves the right to restrict admission.

## Bank data

Bühler AG, Business Unit Nutrition  
UBS AG, CH-8098 Zürich / Switzerland  
Acc. No. 230-266.943.20 R;  
IBAN No. CH33 0023 0230 2669 4320 R  
Swift/ BIC No. UBSWCHZH80A  
Please state "Workshop Products Workshop Food"