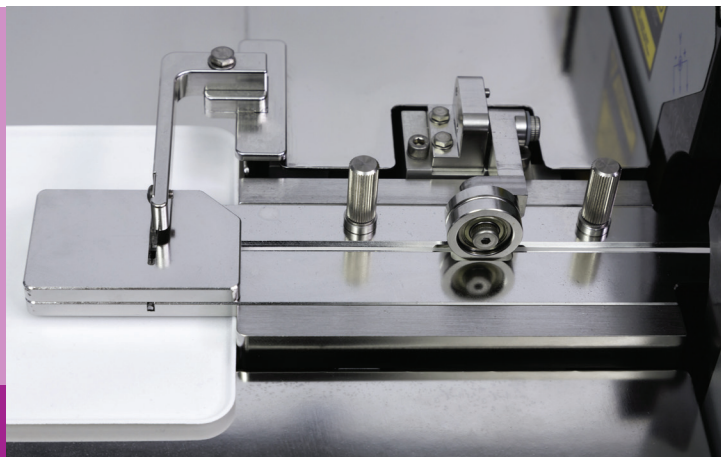


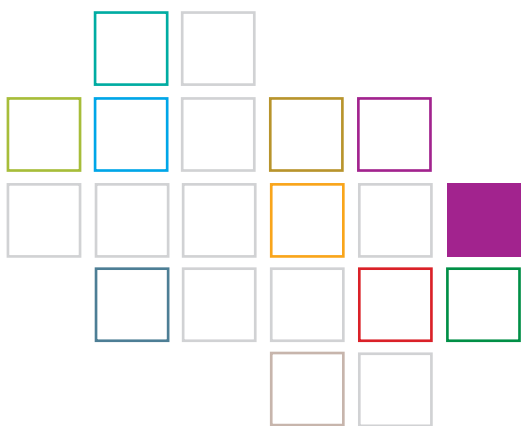
# APV master class on Hot Melt Extrusion (HME)

- Drug development using Hot Melt Extrusion in the pharmaceutical industry
- Hands-on workshop on
  - different extruders and downstream equipment
  - workshops on 3D printing
  - workshops on implants



18 - 19 June 2024  
Karlsruhe, Germany

Course no. 7004



## Research and Development

### Target group

The HME hands-on workshop provides scientific and technical staff from pharmaceutical development, clinical trial supplies and process or technology transfer a good introduction to the establishment and application of this new technology. For colleagues, without any prior knowledge, this hands-on workshop provides a comprehensive introduction to the technology, while for colleagues who already have experience with HME, the workshop offers the opportunity to deepen their knowledge in relation to specific procedures and methods. For employees from the production department, the workshop offers the opportunity to acquire the essential knowledge for the establishment of this new technology.

In cooperation with

**ThermoFisher**  
SCIENTIFIC





## Objectives

Hot Melt Extrusion (HME), which is a manufacturing technique, successfully used by the plastic and food industry since decades, gains increasing relevance for the development and production of pharmaceuticals. Due to its advantages for formulation and the continuous and easily controllable process, this technology offers many advantages to realize a modern production of pharmaceuticals.

Next to the learning about understanding and using of Hot Melt Extrusion, this hands-on workshop will also offer support for implementations in the context of development projects of new pharmaceuticals – from early stage until scale-up, transfer and production for the market. The focus is not only on technology, process parameters, formulation and development concepts, but also on practical implementation. In the context of a hands-on workshop, participants will learn how to use the technology and the machine and they will follow 4 workshop stations; all theoretically learned topics can be transferred into praxis. During these labs, extensive knowledge of successful screening for the appropriate process and formulation concepts, for the analysis of critical quality factors, for the determination and definition of relevant process parameters, will be communicated, as well as scale-up concepts.

Delegates will highly benefit from the panel discussions as well as from the discussions in their workshop groups. This set-up will guarantee an interactive and interdisciplinary exchange between delegates and speakers. This hands-on workshop will happen in cooperation with Thermo Fisher Scientific and all sessions and workshops will take place in laboratories run by Thermo Fisher Scientific in Karlsruhe, Germany. All workshop speakers are well-known experts from industry and academia, and all are acknowledged experts on HME. They will communicate the technology and its utilization, and also demonstrate advantages and disadvantages of different devices, methods and processes. Workshops will happen in small groups of 5; therefore, we need to limit the overall participant number. To make sure you will get the best out of this hands-on workshop, we cannot accept more than 25 participants.

## Moderator



**Dirk Leister, Leader Technical Marketing**  
Thermo Fisher Scientific

## Programme

**Tuesday, 18 June 2024**

**11:00 - 18:00 h**

[Registration and finger food](#)

### Welcome address

Dirk Leister, Thermo Fisher Scientific

### Advancements in HME Process Development

Andreas Gryczke, Abbvie

### Overview Twin-screw processes

Margarethe Richter, Thermo Fisher Scientific

### 3D printing - From Development to GMP

Ansgar Bögershausen, Losan Pharma

### Downstream considerations of ASD extrudates

Dominika Czernik-Schulz, Shin-Etsu

### Lipid excipients in hot melt extrusion: a gateway to innovation

Lolie Cheron, Gattefossé

### 3D printed ASD formulations

Anna Lechanteur, University of Liège

### Wrap-up

Transfer to Hotel

[Networking dinner at the Schloßhotel Karlsruhe](#)

**Wednesday, 19 June 2024**

**08:30 - 13:00 h**

### Welcome back

Dirk Leister, Thermo Fisher Scientific

### Workshop sessions

- Workshop 1 - Pharma 16/Chill Roll
- Workshop 2 - Pharma 11 / 3D printing
- Workshop 3 - Pharma Mini / Implants
- Workshop 4 - Rheology
- Workshop 5 - Lipid extrusion

### Final discussion

[Farewell, networking and finger food](#)

Programme subject to changes.

| Location  | Registration fee   | Registration   | Hotel reservation  |
|---|--|--|--|
| ThermoFisherScientific<br>Pfannkuchstr. 10-12<br>76185 Karlsruhe            | Industry 1290 EUR<br>Authority/University 645 EUR<br>Students* 200 EUR<br><br>(free of VAT according to § 4,22 UStG)<br>Coffee breaks, luncheon, dinner and electronic proceedings included.<br>* Limited places for full time students available; written evidence must be submitted. | APV-Geschäftsstelle<br>Kurfürstenstraße 59<br>55118 Mainz/Germany<br>Phone: 0049 6131 97 69 0<br>E-mail: <a href="mailto:apv@apv-mainz.de">apv@apv-mainz.de</a><br>Web: <a href="http://www.apv-mainz.de">www.apv-mainz.de</a><br><br>You will receive a confirmation of your registration with the invoice. | Schlosshotel Karlsruhe<br>Bahnhofplatz 2<br>D-76137 Karlsruhe<br>Tel: +49(0) 721 / 38 32 134<br>mail <a href="mailto:info@schlosshotelkarlsruhe.de">info@schlosshotelkarlsruhe.de</a><br><a href="http://www.schlosshotelkarlsruhe.de">www.schlosshotelkarlsruhe.de</a><br><br>We kindly ask you to book your hotel yourself. We have blocked a contingent on the special rate of 138,00 € incl. breakfast. Rates available until 07 Mai 2024. Please mention „Abruf Thermo Fisher“ during in the booking request. |
| <b>Date</b><br><br>Course no.: 7004<br>from 18 June 2024<br>to 19 June 2024 | 11:00 h<br>13:00 h   |  |  |

## APV master class on HME, 18 - 19 June 2024, Karlsruhe, Germany, Course no. 7004

### Registration

As soon as you have found a seminar of your interest, it is very easy to register for it via e-mail or online. We will process your registration promptly and certainly are available for any questions that may arise.

### Registration confirmation

After your registration was successfully processed, you will receive a confirmation.

### Before the event

A few days before the event starts, you will receive important information about the seminar, such as time, date, addresses etc.

### After the event

You will receive a certificate confirming your participation. Furthermore, we would like to ask you to fill-in our evaluation sheet to make sure we get better every time.

### Follow-up

After the event, we are open to receive any suggestions and critique that might arise during the seminar and will certainly help you with further questions you may have.

### Declaration of consent in respect of data protection

☐ By registering for this seminar, I agree that the APV uses my data for the purpose of processing the order and provides me with all relevant information.

☐ I also agree that APV may contact me for the purpose of exchanging similar information by email or post.

Your data will not be shared with third parties. You have a right of withdrawal at any time without giving reasons.

All other information can be found in our privacy policy ([www.apv-mainz.de/en/imprint/data-protection-statement/](http://www.apv-mainz.de/en/imprint/data-protection-statement/)).

Title, first name, last name \*

Company name \*

Street/no. or P.O. box \*

Location

Zip-code and city \*

Phone

E-mail-address participant \*

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☐ pay via credit card (Visa, MasterCard, Amex)

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Date \*

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Verfahrenstechnik e.V.

Gemeinnütziger wissenschaftlicher Verein  
International Association for Pharmaceutical Technology

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