

Schriftenreihe Mechanische Verfahrenstechnik

Band 2

**Peter Walzel (Ed.)**

**Conference**

**Spray  
Drying '01**

**and Related Processes**

08<sup>th</sup> to 10<sup>th</sup> of October 2001

Universität Dortmund

**Proceedings**

Shaker Verlag  
Aachen 2002

Die Deutsche Bibliothek - CIP-Einheitsaufnahme

**Conference Spray Drying '01** and Related Processes 08<sup>th</sup> to 10<sup>th</sup> of October  
2001 Universität Dortmund Proceedings / Peter Walzel (Ed.).  
Aachen : Shaker, 2002  
(Schriftenreihe Mechanische Verfahrenstechnik ; Bd. 2)  
ISBN 3-8265-9922-5

Copyright Shaker Verlag 2002

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the publishers.

Printed in Germany.

ISBN 3-8265-9922-5  
ISSN 1618-2855

Shaker Verlag GmbH • P.O. BOX 1290 • D-52013 Aachen  
Phone: 0049/2407/9596-0 • Telefax: 0049/2407/9596-9  
Internet: [www.shaker.de](http://www.shaker.de) • eMail: [info@shaker.de](mailto:info@shaker.de)

## **Summery**

The chair of mechanical process engineering of the University in Dortmund invited to the symposium "Spray Drying '01" to treat the various applications, techniques, and modern developments concerning spray drying and related processes.

## **Objectives of the conference**

Spray dryers are used in industry in various applications to produce solid particles from liquid feeds such as suspensions, solutions, or even melts.

In recent years the basic knowledge in describing and modelling of spray towers has significantly increased. Improvements on spraying systems and air flow distributors contribute to better performance of the process.

It was the objective of the conference to exchange information on the following fundamental topics:

- Spraying and formation of liquid particles,
- Heat and mass transfer between gas and particles,
- Transition to the solid state and particle morphology,
- Agglomeration of fine particles.

Depending on the customer requirements different particle sizes and specifications are desirable. The operation parameters therefore vary over wide ranges. The meeting also had to deal with operational conditions such as

- Co or countercurrent flow
- Heat recovery
- Secondary drying and agglomeration
- Dust removal and waste gas treatment
- Product separation and discharge
- Process and moisture control.

## **Resume of the conference**

The conference " Spray Drying" was held in Dortmund from October 8 to 10. In total 39 participants from outside Dortmund and about 8 participants from the university attended this workshop. After the last session, a questionnaire was collected. The evaluation found the majority would suggest to have another meeting within 2 years.

For those who intend to give a lecture in 2003, there is a large catalogue of issues to be covered in the future.