

CONFERENCE REPORT

Workshop on Industrial Drying: Principles and Practice

December 10-11, 2001

Mumbai, India

Principal Lecturer

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Professor Arun S. Mujumdar, Department of Mechanical Engineering, National University of Singapore, conducted a Workshop on Industrial Drying: Principles and Practice on the campus of University of Mumbai, Department of Chemical Technology (UDCT) on December 10-11, 2001. Dr. B.N. Thorat and his associates at the Chemical Engineering Division of UDCT organized this workshop, which was attended by over 70 participants including the guest lecturers from various companies who manufacture drying equipment in India. The workshop was held under the aegis of UDCT Alumni Association and the Chemical Engineering Division, UDCT and sponsored by Mojj Industries, Pune. All proceeds were donated to the UDCT Alumni Association Fund.

The following topics were covered with emphasis on Industrial Practice:

1. Introduction to Drying, its economic significance (Professor A.S. Mujumdar)
2. Fundamental Principles of Drying (Professor A.S. Mujumdar)
3. Classification and Selection of Industrial Dryers ((Professor A.S. Mujumdar)
4. Commonly Used Industrial Dryers (Professor A.S. Mujumdar)
 - ❖ Particulate solids
 - ❖ Slurries, solutions and suspensions
 - ❖ Continuous sheets
 - ❖ Others, e.g., heat sensitive materials
5. Innovative New Technologies for Drying, e.g., superheated steam dryers, heat pump dryers, intermittent batch dryers, etc. (Professor A.S. Mujumdar)
6. Industrial Drying in the Polymer Industry – Case Studies (Mr. P.K. Arora, Kilburn Eng., Mumbai)
7. Drying of Tea Leaves and Desiccated Coconut (Dr. Rohit Shah, Vinci Technology, Mumbai)
8. Microwave-Assisted drying (Dr. K.P. Ray, Hi-Tek Engineers, Mumbai)
9. Fluidized Bed Spray Drying (Mr. D.W. Oke, Mojj Engineering Systems, Pune)
10. Recent Developments in Spray Drying (Mr. P.N. Shah, L&T, Niro, Baroda)
11. Adsorption Drying of Gases and Liquids (Dr. Deepak Seth, Consultant, Multifab, Mumbai)

Participants included process engineers, consultants, design engineers as well as senior managers from various industries along with some faculty members from

UDCT and doctoral students as well. This Workshop was instrumental in stimulating interest in drying R&D in general.

The Workshop stimulated lively discussion on problems of industrial drying and demonstrated the need to increase the awareness in the Indian industry as well as academia of the importance of drying as a unit operation. In spite of the short time that was available for the planning of this workshop, participants poured in from all quarters of the industrial community around Mumbai and it was a great success. All participants received a copy of Mujumdar's Practical Guide to Industrial Drying and a set of 250-page Course Notes.

As a result of the success of this workshop it is proposed to hold the First International Symposium on Non-thermal and Thermal Dehydration (ISNTD) in Mumbai in late December 2003. Exact dates and the further details will be announced soon. This University Department of Chemical Technology has also requested Professor Mujumdar to act as the Chairman of the Scientific Committee for ISNTD to which he has kindly agreed.

Dr. B.N. Thorat
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