



## **INTERNATIONAL MEETING PRESENTATIONS:**

"IDS 2010" - <u>Bruttini R</u>., Session Chairman of Drying of pharmaceuticals and biomaterials, -Magdeburg, Germany.

## "IDS 2010" – R. Bruttini and A. I. Liapis

"Fundamentals of modeling and analysis of spray freeze drying: the drying of frozen pharmaceutical and food particles in packed beds", "IDS 2010", Magdeburg, Germany.

**"Lyophilization: Principles, Technology and Applications",** 2009, course organized by Pharma Education Center, Milan, Italy

"IDS 2006" - R. Bruttini, G. N. Panagopoulos, and A. I. Liapis

"A molecular dynamics modeling and simulation study on determining the molecular mechanism by which formulations based on trehalose could stabilize biomolecules during freeze drying", Budapest, Hungary.

"V WORLD CONGRESS ON MUMMY STUDIES", 2004 - <u>Bruttini R.</u> and Samadelli M., 2004 - "The effects of energy sources on the Iceman's low temperature storage conditions in the South Tyrol Museum of Archaeology", Turin, Italy.

"**IDS 2004**" - <u>Bruttini R.</u> and Samadelli M., - "Conservation condition of the mummy of Similaun in the museum: influence and limitation of the energy sources at low temperature storage condition able to avoid long term atmospheric freeze drying process of the iceman", San Paulo, Brazil.

"IDS 2004" - <u>Bruttini R.</u> – Session Chairman on "Industrial Processes and Equipment", San Paulo, Brazil.

"International Meeting on Pharmaceuticals, Biopharmaceutics and Pharmaceutical Technology 2004 and EFCE Working Party on Drying", - <u>Bruttini R</u>., A.I.Liapis, O. K. Crosser, K.H. Gan, - "The effects of tray side and drying chamber wall temperature on the performance of freeze drying in vials arranged in clusters of square and hexagonal arrays on trays for different heat input control policies", Nuremberg, Germany

"Course on Freeze Drying and GMP for the Pharmaceutical Industry", 2004, AFI (Associazione Farmaceutica Industrie), Milan, Italy

"IDS 2002" - Bruttini R., Session Chairman on Freeze Drying, - Beijing, P.R. China.



"**IDS 2002**"- <u>Bruttini R</u>. and A.I. Liapis, "Lyophilization of Skim Milk in a Container of Cylindrical Geometry", - Beijing, P.R. China.

"**IDS 2000**"- <u>Bruttini R</u>. and A.I. Liapis, "Optimal Control Of The Primary And Secondary Drying Stages Of The Freeze Drying Of Pharmaceuticals In Vials", - Noordwijkerhout, The Netherlands.

"IDS '2000"- <u>Bruttini R</u>. Session Chairman, "Industrial Processes & Equipment", Noordwijkerhout, The Netherlands.

"Best Distinguished Young Alumnus Award" 2000 - MSM-URM ALUMNI Association University of Missouri Rolla, USA

"Freeze-Drying of Pharmaceuticals and Biologicals", 1998 - A.I. Liapis and <u>Bruttini R.</u> "Scale-up Considerations: Manometric Temperature Measurement and Design of a Scaleable Laboratory Dryer", Vermont, U.S.A.

**"IDS '98"-** <u>Bruttini R</u>., "Dynamic Multi-Dimensional Models of the Atmospheric Freeze-Drying Process that can occur during the low temperature Archaeological find storage in the Museum: a Study on the Conservation Conditions of the man of Similaun", Thessaloniki - Halkidiki, Greece

"IDS '98"- <u>Bruttini R</u>. Session Co-Chairman , "Miscellaneous Drying Process", Thessaloniki - Halkidiki, Greece 1998

"IDS '96"- <u>Bruttini R</u>. Session Chairman, "Drying of Pharmaceuticals and Biomaterial", Kracow, Poland.

"**IDS** '96"- <u>Bruttini</u> R., "Development of Validation Protocol for Freeze-Drying Process and Equipments from advanced theoretical model, Kracow, Poland.

"Pharmaceutical Science and Technology" 1995 - <u>Bruttini R.</u> "Analytical, Modelling, and Experimental Studies of the Primary and Secondary Drying Stages of the Freeze-Drying of Pharmaceutical and Foods", Chicago, Illinois, U.S.A.

**"Food Science and Technology"** 1995 - <u>Bruttini R.</u>, "Analytical, Modelling, and Experimental Studies of the Primary and Secondary Drying Stages of the Freeze-Drying of Pharmaceutical and Foods", Chicago, Illinois, U.S.A.

"**IDS** '**92**" 1992 - <u>Bruttini R.</u> "The Modelling of the Primary and secondary drying stages of pharmaceutical lyophilization: theoretical calculations and comparisons with experimental data" - Montreal, CANADA

"C.I.E.C. 3" 1991 - Bruttini R. "Lyophilization experiences on sol and gel alumina-zirconia-yttria suspensions", Lion, FRANCE