

## Curriculum Vitae et Studiorum of Alberto Schiraldi

Alberto Schiraldi was born on October 9<sup>th</sup>, 1946

- 1969 graduated in Chemistry at the University of Pavia (Italy);
- 1971 assistant professor in Physical Chemistry at the University of Pavia;
- 1975 - 1987 professor of Theoretical Chemistry the University of Pavia;
- 1981 graduated in Medicine,
- 1985 MD in Endocrinology
- since 1987 full professor of Physical Chemistry the University of Milan, at DISTAM
- 1994-95 Head of the Dept Food Sci. Technol. (DISTAM) of the University of Milan;
- 1998 - 2001 Chairman of Italian Association of Calorimetry and Thermal Analysis;
- Since 1999 Associate Member of the IUPAC Commission I.2 for Chemical Thermodynamics;
- 1998-2000 Member of the Editorial Board of the J. Thermal Analysis and Calorimetry
- Since 1999 Member of the Editorial Board of J. Chemical Thermodynamics;
- Since 2000 Member of Am. Ass. Cereal Chemistry;
- Chairman of the 13<sup>th</sup> Conference of the International Confederation of Calorimetry and Thermal Analysis (Chia Laguna, Italy, 2004).
- 2009 recipient of the AICAT-SETARAM Award for Calorimetry and Thermal Analysis

### Research Activity:

- 1970-1987. Thermodynamics and transport properties of solid, molten and glassy ionic systems;
- 1980-1987. Polymerization kinetics in thermosetting systems;
- since 1987. Phase transitions and thermal treatment of starch foods and proteins,  
Use of super critical solvents in food and related systems;  
Study of growth and metabolism of microbial cultures by isothermal calorimetry;
- Coordinator of the European Project FAIR CT97-3069 "USE OF WHEAT WATER EXTRACTABLE ARABINOXYLANS (WEA) TO IMPROVE STABILITY OF FROZEN DOUGHS AND QUALITY OF BREAD";
- Partner of the national project on "THERMODYNAMIC AND RHEOLOGICAL ASPECTS OF THE MICRO AND MACROSCOPIC BEHAVIOUR OF FOOD MODEL SYSTEMS WITH A POLYMERIC MATRIX: SOFT WHEAT DOUGH ".
- Partner of the national project on "PULLULANS AND GLUCOMANNANS: FROM BIODIVERSITY TO INDUSTRY"
- Coordinator of the Russian-Italian project "CONTROL OF IONIZING RADIATION DAMAGES ON BIOPOLYMERS OF FOODS AND RELATED SYSTEMS"

### Recent Publications

1. E. Mascheronia, C.A. Fuenmayora, M. S. Cosio, G. Di Silvestro, L. Piergiovanni, S. Mannino, A. Schiraldi  
Encapsulation of volatiles in nanofibrous polysaccharide membranes for humidity-triggered release, *Carbohydrate Polymers*, 98 (2013) 17– 25
2. A.Schiraldi, M.Signorelli and D. Fessas, Knudsen thermogravimetry approach to the thermodynamics of aqueous solutions. *J. Chem. Thermodyn.* 62 (2013) 79-85.
3. A.Ausili , A. Pennacchio, M. Staiano J.D. Dattelbaum , D. Fessas, A. Schiraldi, S. D’Auria. Amino acid transport in thermophiles: Characterization of an arginine-binding protein from *Thermotoga maritima*. 3. Conformational dynamics and stability. *J Photochem. Photobiol. B: Biology*, 118 (2013) 66–73.
4. L. Introzzi, T. O. J. Blomfeldt, S. Trabattoni, Si.Tavazzi, N. Santo, A. Schiraldi, L. Piergiovanni, S. Farris, Ultrasound-assisted pullulan/Na<sup>+</sup>-montmorillonite oxygen barrier nanocomposite coatings for food packaging applications *Langmuir*, 28 (2012) 11206–11214 .
5. l. Introzzi, J.M. Fuentes-Alventosa, C. Cozzolino, S. Trabattoni, S. Tavazzi, C.Bianchi, A. Schiraldi, L. Piergiovanni, S. Farris, Wetting enhancer’ pullulan coating for anti-fog packaging applications. *ACS Applied Materials & Interfaces*, ACS Appl. Mater. Interfaces , 4 (2012) 3692–3700.
6. A.Schiraldi, D. Fessas, M. Signorelli Water activity in biological systems. A review. *Polish J. Food Nutr. Sci.*, 62:1(2012) 5-13.
7. S. Farris, L. Introzzi, P. Biagioni, T. Holz, A. Schiraldi, L. Piergiovanni. Wetting of Biopolymer Coatings: Contact Angle Kinetics and Image Analysis Investigation. *Langmuir*. 27 (2011 May) 7563-7574.
8. P. Pani, A. Schiraldi, M. Signorelli, D. Fessas. Thermodynamic Approach to Osmo-dehydration. *Food biophysics*, 5:3(2010) 177-185.
9. K. Gardikis, S. Hatziantoniou, M. Signorelli, M. Pusceddu, A. Schiraldi, C. Demetzos, and D. Fessas. Thermodynamic characterization of Liposomal-Locked in-Dendrimers as drug carriers. *Colloids and Surfaces B: Biointerfaces*. 81:1(2010) 11-19.