

Publications

SEPAREX, February 2005

I.- List of recent publications related to pharmaceuticals/nutraceuticals :

- [1] BOUZIDI A., MAJEWSKI W., HOBER D. and PERRUT M., "Supercritical fluids improve tolerance and viral safety of fresh frozen plasma", Proc. of the 5th Meeting on Supercritical Fluids, Nice, France, March 1998, Perrut M. & Reverchon E. (Edts)., ISBN 2-905-267-33-10, pp. 717-722.
- [2] PERRUT M., "Supercritical fluids applications : Industrial developments and economic issues", Ind. Eng. Chem. Res., 39, 2000, pp. 4531-4535.
- [3] REVERCHON E., PERRUT M., "Particle Design Using Supercritical Fluids: Review and Examples", Plenary lecture, Proc. of the 7th Meeting on Supercritical Fluids, Antibes, 6-8 December 2000, Perrut M. & Reverchon E. (Edts)., ISBN 2-905-267-33-10, pp. 779-780.
- [4] MAJEWSKI, W. , PERRUT, M., "On-line impregnation of natural extracts", Proc. of the 7th Meeting on Supercritical Fluids, Antibes, 6-8 December 2000, Perrut M. & Reverchon E. (Edts)., ISBN 2-905-267-33-10, pp. 779-780.
- [5] PERRUT M., "Supercritical fluid applications : Industrial development and economic issues", Proc. of the 2nd International Meeting on High Pressure Chemical Engineering, Hamburg (Germany), March 2001.
- [6] JUNG J., LEBOEUF F., FRANCAIS E., PERRUT M., "Drug Delivery systems : Manufacture using Supercritical Fluids", 20th Conference on Pharmaceutical technology, Liverpool (UK), April 2001.
- [7] JUNG J., PERRUT M., "Particle design using supercritical fluids ", J. of Supercritical Fluids, 20, 2001, pp. 179-219.
- [8] PERRUT M., "Future trends for supercritical fluids applications in the pharmaceutical industry", Innovations in Pharmaceutical Technology, 1(9), 2001, pp. 118-122.
- [9] JUNG J., LEBOEUF F., PERRUT M., "Bio-molecules micro-encapsulation by a process using a compressed gas", Proc. 13th Int. Symp. on Microencapsulation, Angers (France), 5-7 Sept. 2001, p. O-01.
- [10] JUNG J., LEBOEUF F., PERRUT M., "Controlled release of bio-molecules micro-encapsulated by a process using a compressed gas", 13th Int. Symp. on Microencapsulation, Angers (France), 5-7 Sept. 2001, p. P-033.
- [11] PERRUT M., "Future trends for supercritical fluids applications in the pharmaceutical industry", Proc. of the Conference on Supercritical Fluids, Maiori (Italy), 10-12 Sept. 2001.
- [12] PERRUT M., FRANCAIS E., CLAVIER J.-Y., "Supercritical crystallization : Scale-up issues and industrial aspects", BIWIC, Delft (The Netherlands), 19-20 September 2001.

- [13] PERRUT M., "Scale-up and industrial aspects", Invited lecture at IBC's 2nd International Conference on Formulation Strategies for Biopharmaceuticals, Pre-Conference Symposium, February 4, 2002, on Supercritical Fluid Technology for Formulating Biopharmaceuticals, Miami, Florida.
- [14] PERRUT M., "Pharmaceutical applications of Supercritical Fluids", Proc. of the 8th Meeting on Supercritical Fluids, Bordeaux (France), 14-17 April 2002, Besnard M. & Cansell F. (Edts), ISBN 2-905267-34-8, pp. 41-46.
- [15] JUNG J., LEOEUF F., PERRUT M., "Supercritical Fluid Micro-encapsulation", Proceedings of the 8th Meeting on Supercritical Fluids, Bordeaux (France), 14-17 April 2002, Besnard M. & Cansell F. (Edts), ISBN 2-905267-34-8, pp. 805-812.
- [16] PERRUT M., JUNG J., LEOEUF F., "Solid state morphology of particles prepared by a supercritical fluid process", In: Proceedings of the Fourth International Symposium on High Pressure process technology & Chemical engineering, Venice (Italy), Bertucco A. (Edt), 2002, pp. 711-716.
- [17] JUNG J., LEOEUF F., FRANCAIS E., CLAVIER J.-Y., PERRUT M., "Equipment design for Supercritical Fluid micronization in compliance with GMP for pharmaceutical applications", Proceedings of the Fourth International Symposium on High Pressure process technology & Chemical engineering, Venice (Italy), Bertucco A. (edt), 2002, pp. 459-464.
- [18] PERRUT M., "Supercritical fluid applications in the pharmaceutical industry". STP Pharma, 13(2), 2003, pp. 83-89.
- [19] CLAVIER J.-Y., PERRUT M., "Scale-up Issues for Supercritical Fluid Processing". In: Drug Delivery and Supercritical Fluid technology. P York, UB Kompella, BY Shekunov (Edt), New-York: Marcel Dekker, 2004, pp. 615-651.
- [20] PERRUT M., "Applications of supercritical fluid solvents in the pharmaceutical industry". In: Ion Exchange & Solvent Extraction Volume 17, Marcus Y. (Edt), New-York: Marcel Dekker, 2004, pp. 1-35.
- [21] JUNG J., CLAVIER J.-Y., PERRUT M., "Gram to kilogram scale-up of supercritical anti-solvent process". Proceedings of the 6th International Symposium on Supercritical Fluids, Versailles (France), Brunner G., Kikic I., Perrut M. (edts), 2003, pp. 1683-1688.
- [22] JUNG J., CLAVIER J.-Y., PERRUT M., "Preparation of inhalable protein particles by SCF emulsion drying". Proceedings of the 6th International Symposium on Supercritical Fluids, Versailles (France), Brunner G., Kikic I., Perrut M. (edts), 2003, pp. 1837-1842.
- [23] CLAVIER J.-Y., "Equipment for SCF processing of hazardous biologically-active powders". Proceedings of the 6th International Symposium on Supercritical Fluids, Versailles (France), Brunner G., Kikic I., Perrut M. (edts), 2003, pp. 1843-1848.
- [24] PERRUT M., CLAVIER J.-Y., "Supercritical Fluid formulation : Process choice and scale-up". Ind. Eng. Chem. Res., 42, 2003, pp. 6375-6383.
- [25] PERRUT M., JUNG J., LEOEUF F., "Is it possible to enhance the dissolution rate of poorly-soluble active ingredients by supercritical fluid processes ?". Proceedings of the 9th Meeting on Supercritical Fluids, Trieste (Italy), Kikic I., Perrut M. (edts), 2004.
- [26] PERRUT M., JUNG J., LEOEUF F., "Enhancement of dissolution rate of poorly-soluble active ingredients by Supercritical Fluid processes. Part I: Micronization of neat particles". Proceedings of the 9th Meeting on Supercritical

Fluids, Trieste (Italy), Kikic I., Perrut M. (eds), 2004.

[27] PERRUT M., JUNG J., LEOEUF F., "Enhancement of dissolution rate of poorly-soluble active ingredients by Supercritical Fluid processes. Part II: Preparation of composite particles". Proceedings of the 9th Meeting on Supercritical Fluids, Trieste (Italy), Kikic I., Perrut M. (eds), 2004.

[28] PERRUT M., JUNG J., LEOEUF F., "Supercritical Fluid Applications in the Pharmaceutical industry: From Particle Design to Drug Formulation". Proceedings of the 11th international Symposium on Supercritical Fluid Chromatography, Extraction & Processing, Pittsburgh (USA), 2004.

[29] PERRUT M., "Applications of Supercritical Fluids in Health Sciences". Preprints of the International Symposium on Innovative Reaction Fields: Towards Sustainable Chemical Processes, Tokyo (Japan), 2004.

[30] PERRUT M., JUNG J., LEOEUF F., TARRET A. "Dissolution rate improvement of a poorly-soluble drug by particle collection on an excipient bed". International Rencontres in Pharmaceutical Engineering, Albi (France), 2004.

[31] PERRUT M., JUNG J., LEOEUF F., "Enhancement of dissolution rate of poorly-soluble active ingredients by Supercritical Fluid processes. Part I: Micronization of neat particles". Int. J. Pharmaceut., 288, 2005, pp. 3-10.

[32] PERRUT M., JUNG J., LEOEUF F., "Enhancement of dissolution rate of poorly-soluble active ingredients by Supercritical Fluid processes. Part II: Preparation of composite particles". Int. J. Pharmaceut., 288, 2005, pp. 11-16.

II.- List of recent publications in other domains :

[101] PERRUT M., CLAVIER J.-Y., POLETO M., REVERCHON E., « Mathematical Modeling of Sunflower Seed Extraction by Supercritical CO₂ », Ind. Eng. Chem. Res., 36, 1997, pp. 430-435.

[102] PERRUT M. "New challenges for Supercritical Fluids", Proc. of the 5th Meeting on Supercritical Fluids, Nice, 23-25 march 1998, Perrut M. & Subra P. (Edts), ISBN 2-905-267-28-3, pp. 1-4.

[103] PERRUT M., PERRUT V., "Equipment for liquid CO₂ cleaning", Proc. of the 5th Meeting on Supercritical Fluids, Nice, 23-25 march 1998, Perrut M. & Subra P. (Edts), ISBN 2-905-267-28-3, pp. 171-174.

[104] FRANCAIS E., MAJEWSKI W., PERRUT M. "Deacidification and strengthening of paper by supercritical processing", Proc. of the 5th Meeting on Supercritical Fluids, Nice, 23-25 march 1998, Perrut M. & Subra P. (Edts), ISBN 2-905-267-28-3, pp. 367-372.

[105] MAJEWSKI W., PERRUT M. "Versatile multi-fluid pilot plant for slurry and viscous feed treatment", Proc. of the 5th Meeting on Supercritical Fluids, NICE, 23-25 march 1998, Perrut M. & Subra P. (Edts), ISBN 2-905-267-28-3, pp. 1021-1026.

[106] PERRUT M., PERRUT V., "Supercritical Fractionation of High-Performance Hard-Disk Lubricants", Proc. of the 6th Meeting on Supercritical Fluids, Nottingham (UK), April 1999, Poliakoff M. et al. (Edts), ISBN 2-905267-30-5, pp. 141-144.

[107] PERRUT M., PERRUT V., "Natural and Forced Convection in precision cleaning autoclaves", Proc. of the 6th Meeting on Supercritical Fluids, Nottingham (UK), April 1999, Poliakoff M. et al. (Edts), ISBN 2-905267-30-5, pp. 727-732.

[108] MAJEWSKI W. , PERRUT, M., DEVITTORI C., "Treatment and Recycling of

used vegetable oils by supercritical CO₂", Proc. of the 7th Meeting on Supercritical Fluids, Antibes, 6-8 December 2000, Perrut M. & Reverchon E. (Edts)., ISBN 2-905-267-33-10, pp. 381-384.

[109] PERRUT V., PERRUT, M., VANDENBURG H., BARTLE K., "Carboneous materials from oil pitch by Supercritical fluid Fractionation", Proc. of the 7th Meeting on Supercritical Fluids, Antibes, 6-8 December 2000, Perrut M. & Reverchon E. (Edts)., ISBN 2-905-267-33-10, pp. 409-414.

[110] DESCHAMPS F., MAJEWSKI W., CHAMINADE P., LAIMAY F., BAILLET A., PERRUT, M., "A new concept in continuous Supercritical Fluid Fractionation of lipids", Proc. of the 7th Meeting on Supercritical Fluids, Antibes, 6-8 December 2000, Perrut M. & Reverchon E. (Edts)., ISBN 2-905-267-33-10, pp. 573-578.

[111] MAJEWSKI W., PERRUT, M., "Treatment and Recycling of the wastes from metallurgical processes", Proc. of the 7th Meeting on Supercritical Fluids, Antibes, 6-8 December 2000, Perrut M. & Reverchon E. (Edts)., ISBN 2-905-267-33-10, pp. 723-730.

[112] VALDERAMMA J.O., PERRUT M., MAJEWSKI W., "Extraction of Astaxantine and Phycocyanine from Microalgae with Supercritical Carbon Dioxide", J. Chem. Eng. Data, 48(4), 2003, pp. 827-830.

[113] PERRUT M., "New polymers for packaging", In: State of the art book on Supercritical Fluids, Valencia:AINIA, 2004, pp. 139-143.

[114] PERRUT M., FRANCAIS E., "Aerogels", In: State of the art book on Supercritical Fluids, Valencia:AINIA, 2004, pp. 129-134.

[115] PERRUT M., "Supercritical fluid extraction/fractionation: industrial Development and economic issues", In: State of the art book on Supercritical Fluids, Valencia:AINIA, 2004, pp. 171-178.

Symposium Organization and Proceedings :

Dr. Michel PERRUT has been organizing several symposia on SCF technology, on behalf of the International Society for Advancement of Supercritical Fluids (ISASF) he founded several years ago. Among the most recent symposia he chaired :

[P1] Proceedings of the 5th Meeting on Supercritical Fluids, NICE, 23-25 march 1998, Perrut M. & Subra P. (Edts), ISBN 2-905-267-28-3.

[P2] Proceedings of the 7th Meeting on Supercritical Fluids, ANTIBES, 6-8 december 2000, Perrut M. & Reverchon E. (Edts)., ISBN 2-905-267-33-10.

[P3] Proceedings of the 6th International Symposium on Supercritical Fluids, VERSAILLES, 28-30 April 2003, Brunner G., Kikic I., Perrut M., ISBN 2-905267-37-02 and CD-ROM.

[P4] Proceedings of the 9th Meeting on Supercritical Fluids, TRIESTE (Italy), 13-16 June 2004, Kikic I., Perrut M. Abstracts in ISBN 2-905267-42-9. Full communications on CD-ROM.