Summary of the Curriculum vitae - Adalberto Pessoa Junior (Full Professor)

1) Education/Training

Year	Title or Activity	Institution
2000	Pos-Doc	Massachusetts Institute of Technology – MIT - (USA)
1995	PhD	University of São Paulo/Brazil and *Geselshaft für Biotechnologische Forschung*/Germany (Sandwich PhD).
1991	MsC	University of São Paulo/Brazil
1984	BsC – Food Engineering	Federal University of Viçosa/Brazil

2) Professional History

Full Professor	Nov. 2006 – in action	University of São Paulo
Associate Professor	Nov. 2002 – Nov. 2006	University of São Paulo
Professor Dr.	May 1995 – Nov. 2001	University of São Paulo
Assistant Professor	Mar. 1991 – Sep. 1995	University of São Paulo
Auxiliary Professor	Mar. 1989 - Feb. 1991	University of São Paulo
Industrial Manager	Jan. 1985 – Mar. 1989	Alcohol and Sugar Industry

3) Some Recent Relevant Research Results – Last Five Years

3.1 - Articles

Johansson, H. et al. Plasmid DNA partitioning and separation using poly(ethyleneglycol)/ poly(acrylate)/salt aqueous two-phase systems. **Journal of Chromatography A,** v.1233, p.30-35, 2012.

Soares, P. et al. Purification of bromelain from pineapple wastes by ethanol precipitation. **Separation and Purification Technology**, v. 1, p. 1-7, 2012.

Jozala, A. F. et al. Aqueous Two-Phase Micellar System for Nisin Extraction in the Presence of Electrolytes. **Food and Bioprocess Technology**, v. 1, p. 23, 2012.

Rosso, B. et al. Partitioning and extraction of collagenase from Penicillium aurantiogriseum in poly (ethylene glycol)/phosphate aqueous two-phase system. **Fluid Phase Equilibria**, v. 335, p. 20-25, 2012.

Coelho, D. F. et al. Bromelain purification through unconventional aqueous two-phase system (PEG/ammonium sulphate). **Bioprocess and Biosystems Engineering**, v. 35, p. 1-5, 2012.

Haga, R. B. et al. Clavulanic Acid Partitioning in Charged Aqueous Two-Phase Micellar Systems. **Separation and Purification Technology**, v. 103, p. 273-278, 2013.

Pereira, J. et al. Extraction of Tetracycline from Fermentation Broth using Aqueous Two-Phase Systems composed of Polyethylene Glycol and Cholinium-based Salts. **Process Biochemistry**. p.1 - 8, 2013.

Ventura, S.P, et al. Isolation of Natural Red Colorants from Fermented Broth Using Ionic Liquid-based Aqueous Two-Phase Systems. **Journal of Industrial Microbiology & Biotechnology**. v.40, p.507-516, 2013.

Lopes, A. M. et. Al. LPS-protein aggregation influences protein partitioning in aqueous two-phase micellar systems. **Applied Microbiology and Biotechnology**. v.97, p.1 - 5, 2013

Santos-Ebinuma, V. C. et al. Submerged culture conditions for the production of alternative natural colorants by a new isolated *Penicillium purpurogenum* DPUA 1275. **Journal of Microbiology and Biotechnology**, 23(6):802-810, 2013.

Santos-Ebinuma, V. C. et al. Improving of red colorants production by a new Penicillium purpurogenum strain in submerged culture and the effect of diferente parameters in their stability. **Biotechnology Progress**, 29(3):778-785, 2013.

Pellegrini, LM, et al. Single-Chain Antibody Fragments: Purification methodologies. **Process Biochemistry**. 48:1242-1251, 2013.

Jozala, A. F., Lopes, a.m., Novaes, l. C. L., Mazzola, p.g., Penna, t. C. V., jr, Adalberto pessoa**.** Aqueous Two-Phase Micellar System for Nisin Extraction in the Presence of Electrolytes. **Food and Bioprocess Technology.** 6:3456 - 3461, 2013.

Ebinuma, v.c.s., Lopes, a. M., Converti, a., Pessoa, A., Yagui, c. O. R. Behavior of Triton X-114 cloud point in the presence of inorganic electrolytes. **Fluid Phase Equilibria**. 360:435 - 438, 2013.

Molino, J. V., Marques, D. A. V., Pessoa, A., Mazzola, P.G., Gatti, M. S. Different types of aqueous two-phase systems for biomolecule and bioparticle extraction and purification. **Biotechnology Progress**, 29:1343 - 1353, 2013.

Beltran, M. et al. Singlet molecular oxygen generation by light-activated DHN-melanin of the fungal pathogen Mycosphaerella fijiensis in black Sigatoka disease of bananas. **Plos One**. 9(3):1-15, 2014

Pellegrini, LM, Nerli, b. b., Abdalla, d. s. p., Pessoa A. Assessment of the effect of triton X-114 on the physicochemical properties of an antibody fragment. **Biotechnol. Prog.**, v.30, 2014.

Soares, P. S. M., Bourbon, A. I., Vicente, a. a., Andrade, c. a. s., Barros jr, w., Correa, m. t. s., Pessoa a., Carneiro-da-Cunha, M. G. Development and characterization of hydrogels based on natural polysaccharides: Policaju and chitosan. **Materials Science & Engineering. C, Biomimetic Materials, Sensors and Systems**, v.42, p.219 - 226, 2014.

Lopes, a. m., Ebinuma, v.c.s., Apolinario, a., Mendonca, f. j. b., Damasceno, b. p. g. l., Pessoa A., Silva, J. A. 5CN05 partitioning in an aqueous two-phase system: a new approach to the solubilization of hydrophobic drugs. **Process Biochemistry,** v.49, p.1217 - , 2014.

Pellegrini, LM; Nerli, B. B.; Abdalla, D. S. P.; Pessoa A. Assessment of the effect of triton X-114 on the physicochemical properties of an antibody fragment. **Biotechnology Progress**, v. 30, p. n/a-n/a, 2014.

Ebinuma, V.C.S.; Apolinario, A.; Mendonca, F. J. B.; Damasceno, B. P. G. L.; PESSOA A.; Silva, J. A. 5CN05 partitioning in an aqueous two-phase system: a new approach to the solubilization of hydrophobic drugs. **Process Biochemistry**, v. 49, p. 1217, 2014.

Spir, Livia Genovez; Ataide, Janaina Artem; De Lencastre Novaes, Leticia Celia; et al. Application of an aqueous two-phase micellar system to extract bromelain from pineapple (Ananas comosus) peel waste and analysis of bromelain stability in cosmetic formulations. **Biotechnol. Prog.** 31(4):937-945, 2015.

Gurpilhares, Daniela B.; Pessoa, Adalberto; Roberto, Ines C. Process Integration for the Disruption of Candida guilliermondii Cultivated in Rice Straw Hydrolysate and Recovery of Glucose-6-Phosphate Dehydrogenase by Aqueous Two-Phase Systems. APPLIED **Biochem. Biotechnol.** 176(6):1596-1612, 2015.

Malpiedi, Luciana P.; Nerli, Bibiana B.; Taqueda, Maria E. S.; et al. Optimized extraction of a single-chain variable fragment of antibody by using aqueous micellar two-phase systems. **Prot. Expres. Purif.** 111:53-60, 2015.

Bonugli-Santos, Rafaella C.; dos Santos Vasconcelos, Maria R.; Passarini, Michel R. Z.; et al. Marine-derived fungi: diversity of enzymes and biotechnological applications. **Front. Microbiol.** 6(269): 2015.

Santos, Joao H. P. M.; Silva, Francisca A. e; Coutinho, Joao A. P.; et al. Ionic liquids as a novel class of electrolytes in polymeric aqueous biphasic systems. **Proc. Biochem.** 50(4):661-668, 2015.

Jozala, Angela Faustino; Nedel Pertile, Renata Aparecida; dos Santos, Carolina Alves; et al. Bacterial cellulose production by Gluconacetobacter xylinus by employing alternative culture media. **App. Microbiol. Biotechnol.** 99(3):1181-1190. 2015

Jozala, Angela Faustino; de Lencastre Nouaes, Leticia Celia; Mazzola, Priscila Gaya; et al.Low-cost purification of nisin from milk whey to a highly active product. **Food Bioprod. Proc.** 93:115-121, 2015.

Lopes, A. M.; Pachioni, J. A.; Apolinario, A.; Nascimento, L. O.; Oses, J.; Pessoa A.; Yagui, C. O. R.. Nanostructures for protein drug delivery. **Biomater Sci-UK**, v. 4, p. 205-218, 2016.

Jozala, A. F.; Chaud, M.; Pessoa, A.; Grotto, D.; Generuti, M.; Mazzola, P.G.; Novaes, L.C.L.; Lopes, A. M.; Ebinuma, V.C.S. . Bacterial nanocellulose production and application: a 10-year overview. **App. Microbiol. Biotechnol**. (1):1-10, 2016.

3.2 - Patents

1. Pessoa-Jr, A.; Rangel-Yagui, C. O. **Pyrogen removal present in media containing biomolecules by Aqueous Two-Phase Micellar Liquid-Liquid Extraction.** 2007.
2. Costa, S. A., Costa, S. M., Pessoa, A. **Fiber obtained from agro-industrial residures, process for its preparation, and product containing such fiber**. 2008.
3. Penna, T. C. V.; Josala, A.; Mazzola, P. G.; Pessoa-Jr, A. **Production process of bacteriocins, and process of bacteriocins purification**. 2008.

3.3 – Book and Chapter

19. Pessoa-Jr, A.; Kilikian, B. V. Purification of Biotechnological Products. Editora Manole Ltda, Brasil. 2005, 444p.
20. Magalhães, P. O. E., Pessoa A. In: **Encyclopedia of Industrial Biotechnology: Bioprocess, Bioseparation, and Cell Technology**. Ed. John Wiley & Sons, Inc., 2010, p. 1-6.

4) List of Current Research Grants with Funding

1. Application and evaluation of the antimicrobial peptide, nisin. Supported by Fapesp (The State of S. Paulo Research Foundation) and CNPq (Braz. Council Sci. Technol.);

2 – Extraction and concentration of Adenovirus in polymeric and micellar aqueous two-phase systems. Supported by Fapesp;

3 – Production of colorants by *Penicillium purpurogenum*. Supported by Fapesp;

4 – Production of antibodies by recombinant *P. pastoris*. CNPq (INCT) and FAPESP.

5) List of Ongoing Supervisions

1. **Post-Doc**; Production of extracellular L-asparaginase by *Aspergillus terreus*. Tales Alexandre da Costa e Silva.
2. **Post-Doc**; Purification of proteases by the psicrotrophic yeast Rhodotorula mucilaginosa by aqueous two phase system. Luciana Lario.
3. **PhD**; Produção de L-Asparaginase de Interesse Farmacêutico a partir de cultivo de Fungos Isolados do Continente Antárctico. Ignacio Sánchez Moguel. FCF/USP. Início: Setembro 2013. Bolsa: CONECYT-México.
4. **PhD**; Production of extracellular L-asparaginase by *Saccharomyces cerevisiae* (ASP3) by *Pichia pastoris*. Rominne Karla Barros Freire.
5. **PhD**; Fermentative process: study of the L-asparaginase production by *E. coli*. Hércules Otacílio Santos.

6) Academic Quantitative Indicators

1. Published Books: 02
2. ISI indexed articles: 140 (Index H = 20; Total of Citations = 1940)
3. Published Chapters: 07
4. Supervised and Concluded Master's Dissertations: 15
5. Supervised and Concluded PhD's Thesis: 18
6. Supervised Pos-Docs: 13

7) Other Relevant Biographical Information

- Vice-Dean of the Faculty of Pharmaceutical Sciences/University of São Paulo, since 2014
- Associate Editor of the *Brazilian Journal of Microbiology* (Impact Factor = 0.622);
- PhD Supervisor at Genoa University – Italy;
- Visiting Professor at Autonom University of Guadalajara, Mexico;
- Visiting Professor at University of La Frontera, Chile;
- Coordinator of the Brazilian Network of Pharmaceutical Biotechnology;
- CNPq Grant – Level 1D.