

## **CURRICULUM VITAE**

**DJURO JOSIC**

### **EDUCATION**

- 1971 B. Sc. Degree in Biotechnology and Biochemistry at the University of Zagreb
- 1977 Master's Degree at the University of Zagreb, Croatia
- 1981 Ph.D. in Fermentation Technology and Biotechnology at the Technical University of Berlin, Germany

### **POSTGRADUATE TRAINING**

- 1981 - 1989 Scientific work at the Institute of Molecular Biology and Biochemistry of the Free University of Berlin, Germany. Significant contribution in setting up the Laboratory for analysis of glycoproteins. Main contribution was introduction of high resolution analytical methods, such as high performance liquid chromatography (HPLC), capillary electrophoresis, 2D-electrophoresis and protein sequencing. Involved in education of undergraduate students (Medicine and Biochemistry) and doctor students as lecturer and mentor. Involved in several projects founded by German Ministry of Science and Technology (BMFT). Group leader for the project "Development of chromatographic supports for separation of biopolymers" in cooperation with the industry (company, Bischoff Analysentechnik, Leonberg, Germany).
- 1984 - 1985 Post-doctoral training at the National Institutes of Health, Bethesda, Maryland, USA in the group of Dr. Gilbert Ashwell and Dr. Richard Klausner. Main topic was the investigation of iron uptake in K 562 human erythroleukemia cells.

### **EXPERIENCE**

- 1988 Senior Scientist.  
The most important results of the scientific work in this period are development of the methods for separation and identification of hydrophobic membrane proteins. Different distribution pattern of proteins from the annexin family in rat liver und Morris hepatomas was shown. These differences are dependent of the malignancy of the tumor ("an early proteomic work")
- 1990 - 1991 Head of Research and Development in the company „Dr. Herbert Knauer“ Berlin, Germany

1991 - present  
Head of Research and Development at OCTAPHARMA  
Pharmazeutika Produktionsges.m.b.H., Vienna, Austria  
Establishment of the research group and research laboratory in  
Vienna. Adaptation of work and organisation to new requirements  
for development of pharmaceuticals based on human plasma.  
Involved in development of several new products, such as new  
preparation of clotting factor VIII, clotting factor IX and  
antithrombin III. Application of high resolution methods for  
protein analysis, such as capillary electrophoresis, mass  
spectrometry, surface plasmon resonance etc. 1997 – founding of  
new research laboratory for alysis of plasma proteins in Berlin.

### **ACADEMIC APPOINTMENTS**

1995  
Honorary Professorship of Biochemistry at the Faculty of Human  
Medicine of the Free University of Berlin, Germany

2001  
Full Professorship of Analytical Biochemistry at the Faculty of  
Food Technology and Biotechnology, University of Zagreb,  
Croatia

### **PUBLICATIONS**

#### **Publications**

1. Reuss, M., Josic, Dj., Popovic, M., Bronn, W.K. (1979), Viscosity of Yeast Suspensions, Eur. J. Appl. Microbiol. Biotechnol. 8, 167-172.
2. Josic, Dj. (1980), Kriterien zur Qualitätsbestimmung der aktiven Trockenbackhefe, in "Getreide, Mehl und Brot" 34, 179-182.
3. Josic, Dj. (1980), Moderne Tendenzen in der Entwicklung der Backhefe- technologie (kroatisch), Kemija u industriji 29, 177-182.
4. Josic, Dj., Johanides, V. (1982), Die Rolle der Emulgatoren in der Backhefetechnologie (kroatisch), Kemija u industriji 30 (2), 69-75.
5. Josic, Dj. (1982), Optimization of Process Conditions for the Production of Active Dry Yeast, Lebensmittel-Wissenschaft und -Technologie 15, 5-14.
6. Josic, Dj., Reutter, W., Molnar, I. (1982), HPLC of Membrane Bound Proteins; Practical Aspects of Modern HPLC (I. Molnar, Ed.), 109-121, Walter de Gruyter, Berlin - New York.
7. Josic, Dj. (1982), Hochleistungsflüssigkeitschromatographie (kroatisch), Prehrambeno- tehnoloska revija 20 (2), 133-141.
8. Josic, Dj., Neumeier, R.; Reutter, W. (1983), Different Pattern of Membrane Components in Hepatocytes and Hepatoma Cells, Eur. J. Cell Biol., Suppl. 2, 20.

9. Neumeier, R., Josic, Dj., Reutter, W. (1984), Integral Membrane Antigens Involved in Cell-Substratum Adhesion of Hepatocytes and Hepatoma Cells, *Exp. Cell. Res.* 152, 402-414.
10. Josic, Dj., Hafermaas, R., Bauer, Ch., Reutter, W. (1984), Automatic Amino Acid and Sugar Analysis of Glycoproteins, *J. Chromatogr.* 317, 35-39.
11. Josic, Dj., Baumann, H., Reutter, W. (1984), Size-Exclusion High Performance Liquid Chromatography and Sodium Dodecyl Sulfate-Poly-Acrylamide Gel Electrophoresis of Proteins: A Comparison, *Anal. Biochem.* 142, 473-479.
12. Josic, Dj., Schütt, W., Neumeier, R., Reutter, W. (1985), Purification of Liver and Hepatoma Membrane Proteins by High Performance Liquid Chromatography, *FEBS Lett.* 185, 182-186.
13. Josic, Dj., Schütt, W., van Renswoude, J., Reutter, W. (1986), HPLC of Antibodies, Glycosidases and Membrane Proteins, *J. Chromatogr.* 353, 13-18.
14. Josic, Dj., Mattia, E., Ashwell, G., van Renswoude, J. (1986), Quantitative Determination of Intracellular, Ferritin-Associated Radio-active Iron by HPLC and Immunoprecipitation, *Anal. Biochem.* 152, 42-47.
15. Mattia, E., Josic, Dj., Ashwell, G., Klausner, R., van Renswoude, J., (1986), Regulation of Intracellular Iron Distribution in K 562 Human Erythroleukemia Cells, *J. Biol. Chem.* 261, 4587-4593.
16. Josic, Dj. (1986), Anionenaustausch-HPLC von Proteinen, *Labor-Praxis* 3.
17. Josic, Dj., Hofmann, W., Wieland, B., Nuck, R., Reutter, W. (1986), Anion-Exchange High Performance Liquid Chromatography of Membrane Proteins from Liver and Morris Hepatomas, *J. Chromatogr.* 359, 315-322.
18. Tauber, R., Schenk, I., Gross, V., Heinrich, P. C., Josic, Dj., Reutter, W. (1986), Different Oligosaccharide Processing of the Membrane-Integrated and the Secreted Form of GP 80 in Rat Liver, *EMBO J.* 5, 2109-2114.
19. Josic, Dj., Hofmann, W., Reutter, W. (1986), Ion-Exchange and Hydrophobic-Interaction High Performance Liquid Chromatography of Proteins - A Practical Study, *J. Chromatogr.* 371, 43-54.
20. Josic, Dj., Hofmann, W., Habermann, R., Reutter, W. (1987), High Performance Liquid Affinity Chromatography of Liver Membrane Proteins, *J. Chromatogr.* 397, 39-49.
21. Josic, Dj. (1987), Affinitäts-HPLC von Proteinen, *Labor-Praxis* 4,
22. Josic, Dj., Tauber, R., Hofmann, W., Mauck, J., Reutter, W. (1987), Half-Lives of L-[<sup>35</sup>S] Methionine and L-[<sup>3</sup>H] Fucose of Transferrin in the Serum of Rats, *J. Clin. Chem. Clin. Biochem.* 25, 869-871.
23. Josic, Dj., Hofmann, W., Habermann, R., Reutter, W. (1988), High Performance

Concanavalin A Affinity Chromatography of Liver and Hepatoma Membrane Proteins, *J. Chromatogr.* 444, 29-39.

24. Josic, Dj., Hofmann, W., Habermann, R., Reutter, W. (1988), Isolation of Immunoglobulins and Their Use in Immunoaffinity HPLC, *J. Clin. Chem. Clin. Biochem.* 26, 559-568.
25. Josic, Dj., Krämer, D., Reutter, W. (1989), The Application of Immobilized Affinity Ligands in HPLC, *Angew. Makromol. Chemie* 166/167, 249-256.
26. Josic, Dj., Zeilinger, K., Lim, Y.-P., Raps, M., Reutter, W. (1989), Preparative Isolation of Glycoproteins from Plasma Membranes of Different Rat Organs, *J. Chromatogr.* 484, 327-335.
27. Josic, Dj., Zeilinger, K. (1989), Hochleistungskapillarelektrophorese von Proteinen und Peptiden, *Labor-Praxis* 12, 1111-1114.
28. Josic, Dj., Lim, Y.-P., Zeilinger, K., Raps, M., Hofmann, W., Reutter, W., (1989), Anwendung präparativer und analytischer Hochleistungsflüssigkeitschromatographie für die Trennung von Membranproteinen, 10. Königsteiner Chromatographie-Tage, Nürnberg, Vortragsband, 122-138.
29. Josic, Dj., Reutter, W., Reusch, J. (1989), Crown Ethers as Ligands for High-Performance Liquid Chromatography of Proteins and Nucleic Acids, *J. Chromatogr.* 476, 309-318.
30. Josic, Dj., Gossrau, R., Habermann, R., Lim, Y.-P., Reutter, W. (1990), Calcium-binding Proteins 33 kDa, 35 kDa and 65/67 kDa in Normal Rat and Morris Hepatoma Tissues; a Biochemical and Immunohistochemical Study, *Histochemistry* 93, 389-395.
31. Josic, Dj., Böttcher, A., Schmitz, G. (1990), High Performance Capillary Isotachophoresis of Serum Lipoproteins and Membrane Proteins, *Chromatographia* 30, 703-706.
32. Josic, Dj., Zeilinger, K., Böttcher, A., Schmitz, G., Reutter, W. (1990), High Performance Capillary Electrophoresis of Hydrophobic Proteins, *J. Chromatogr.* 516, 89-98.
33. Nuck, R., Zimmermann, M., Sauvageot, D., Josić, Dj., Reutter, W., (1990), Optimized Deglycosylation of Glycoproteins by Peptide-N<sup>4</sup>-(N-acetyl-β-gluco-saminyl)-asparagine Amidase from *Flavobacterium Meningosepticum*, *Glycoconjugate J.* 7, 279-286.
34. Josic, Dj., Raps, M., Hartel-Schenk, S., Hofmann, W., Reutter, W. (1988), Semipräparative Isolierung von Dipeptidyl Peptidase IV aus Leberplasma-membranen, 3. Würzburger Chromatographie-Gespräche, Würzburg 1988, 3-8.
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36. Josic, Dj., Becker, A., Reutter, W. (1991), Application of HPA-Chromatographic Techniques, in "HPLC of Proteins, Peptides and Polynucleotides" (M. Hearn, ed.), VCh, Weinheim-New York, 469-494.

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41. Löster, K., Josic, Dj., Reusch, J. (1992), Nachweis verschiedener Isoformen monoklonaler Antikörper durch Hydroxylapatit-HPLC, *GIT Spezial, Chromatographie* 12, 104-106.
42. Josic, Dj. Reusch, J., Löster, K., Baum, O., Reutter, W. (1992), High Performance Membrane Chromatography of Serum and Plasma Membrane Proteins, *J. Chromatogr.* 590, 59-76.
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44. Reusch, J., Josic, Dj. (1991), Hochleistungs-Membranchromatographie und Affinitätsfiltration mit immobilisierten Enzymen, *11. Königsteiner Chromatographie-Tage, Vortragsband*, 158-165.
45. Josic, Dj. (1992), HPLC von Proteinen, Teil I und II, *BioTec* 4, Sept./Okt., 41-46.
46. Josic, Dj., Bal, F., Schwinn, H. (1993), Isolation of Plasma Proteins from the Clotting Cascade by Heparin Affinity Chromatography, *J. Chromatogr.* 632, 1-10.
47. Luksa, J., Menart, V., Milicic, S., Kus, B., Gaberc-Porekar, V., Josic Dj., (1994), Purification of Tumor Necrosis Factor by Membrane Chromatography, *J. Chromatogr.* 661, 161-168.
48. Strancar, A., Raspor, P., Schwinn, H., Schütz, R., Josic, Dj. (1994), Extraction of Triton X 100 and Its Determination in Virus-Inactivated Plasma by the Solvent-Detergent Method, *J. Chromatogr. A.* 658, 475-481.
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50. Josic, Dj., Schwinn, H., Stadler, M., Strancar, A. (1994), Purification of Factor VIII and von Willebrand Factor from Human Plasma by Anion Exchange Chromatography, *J. Chromatogr. B* 662, 181-190.
51. Josic, Dj., Lim, Y.-P., Strancar, A., Reutter, W. (1994), Application of High-Performance

- Membrane Chromatography for Separation of Annexins from the Plasma Membranes of Liver and Isolation of Monospecific Polyclonal Antibodies, *J. Chromatogr. B.* 662, 217-226.
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56. Josic, Dj., Zeilinger, K. (1996), Membrane Proteins, *Methods in Enzymology* 271, 113-134.
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58. Strancar, A., Koselj, P., Schwinn, H., Josic, Dj. (1996), Application of Compact Porous Disks for Fast Separation of Biopolymers and In-Process Control in Biotechnology, *Anal. Chem.* 68, 3483-3488.
59. Strancar, A., Barut, M., Podgornik, A., Koselj, P., Schwinn, H., Raspor, P., Josic, Dj. (1997), Application of Compact Porous Tubes for Preparative Isolation of Clotting Factor VIII from Human Plasma, *J. Chromatogr. A* 760, 117-123.
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61. Luksa, J., Josic, Dj., Podgornik, B., Furlan, B., Kremser, M. (1997), Semi-Preparative Chromatographic Purification of the Enantiomers S-(-)-Amlodipine and R-(+)-Amlodipine, *J. Chromatogr. B* 693, 367-375.
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65. Josic, Dj., Horn, H., Schulz, P., Schwinn, H., Britsch, L. (1998), Size Exclusion

Chromatography of Plasma Proteins with High Molecular Masses, *J. Chromatogr. A* 796, 289-298.

66. Josić, Dj., Schwinn, H., Štrancar, A., Podgornik, A., Barut, M., Lim, Y.-P., Vodopivec, M. (1998), Use of Compact, Porous Units with Immobilized Ligands with High Molecular Masses in Affinity Chromatography and Enzymatic Conversion of Substrates with High and Low Molecular Masses, *J. Chromatogr. A* 803, 61-71.
67. Pock, K., Jungbauer, A., Kannicht, Ch., Löster, K., Buchacher, A., Josic, Dj. (1998), Electrophoretic Analyses of Clotting Factor VIII Concentrates, *Analytica Chimica Acta* 372, 219-229.
68. Linnemayr, K., Rizzi, A., Josic, Dj., Allmaier, G. (1998), Comparison of Microscale Cleaning Procedures for (Glyco) Proteins Prior to Positive Ion Matrix-Assisted Laser Desorption Ionization Mass Spectrometry, *Analytica Chimica Acta* 372, 187-199.
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71. Josic, Dj., Strancar, A. (1999), Application of Membranes and Compact, Porous Units for the Separation of Biopolymers, *Ind. Eng. Chem. Res.* 38, 333-342.
72. Josic, Dj., Pock, K. (1999), Development of Medical Products Based on Human Plasma, *Food Technology and Biotechnology* 37 (1), 51-63.
73. Josic, Dj., Buchacher, A., Kannicht, Ch., Lim, Y.-P., Löster, K., Pock, K., Robinson, S., Schwinn, H., Stadler, M. (1999), Degradation Products of Factor VIII Which Can Lead to Increased Immunogenicity, *Vox Sang* 77, 90-99.
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and to Phosphatidylserine-Containing Membranes, *J Chromatogr. A* 852, 59-71.

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112. Josic, Dj., Hoffer, L., Buchacher, A. (2003), Production of vitamin K-dependent proteins such as clotting factors II, VII, IX and X and clotting inhibitor protein C, *J. Chromatogr. Special Issue on „Preparative Chromatography of Proteins“*, in press.

### **ACADEMIC COMMITEES**

Promotion committee at the University of Ljubljana, Slovenia

Promotion committee at the University of Zagreb, Croatia

### **MEMBERSHIP IN SCIENTIFIC SOCIETIES**

German Biochemical Society

German Proteomics Society

German Society of cell Biology

Croatian Biochemical Society

Croatian Chemical Society

European Federation of Biotechnology

New York Academy of Sciences

### **CHAIRMANSHIPS/ORGANIZER**

Chairman of International Symposium on the Separation of Proteins, Peptides and Polynucleotides 2000 (ISPPP'2000) in Ljubljana, Slovenia.

Member of Scientific Organizers of International Symposium on the Separation of Proteins, Peptides and Polynucleotides (ISPPP)1998, 2002 and 2004.

Member of Scientific Committee of the Central European Congress for Food Technology and Biotechnology, Opatia, Croatia, 2001.

### **INVITED LECTURES (last three years)**

Josic, Dj., Branovic, K., Buchacher, A., Schwinn, H., Barut, M., Podgornik, A., Strancar, A.: Compact, porous supports for fast Analytical and Preparative Separation of Biopolymers, ISPPP '99, Delray Beach, 1999. Invited speaker.

Amatschek, K., Gruber, G., Hahn, R., Schallaun, E., Schwinn, H., Jungbauer, A., Josic, Dj.; Affinity chromatography of human blood coagulation factor VIII on monoliths with peptides for a combinatorial library, Ruzicka's Tage Vukovar, 2000. Invited speaker, Croatian Chemical Society.

Branovic, K., Buchacher, A., Barut, A., Strancar, A.: Josic, Dj.; Application of Monoliths for downstream processing of clotting factor IX, ISPPP '00, Ljubljana, 2000, Chairman of Scientific committee ISPPP 2000, Ljubljana.

Josic, Dj.; Plasma Fractionation: Historical development and state of the art, HIC/RPC Bioseparation conference, Athens 2001. Invited Speaker Tosoh Biosep Company, Stuttgart.

Josic, Dj.; Issues in the development of medicinal products based on human plasma, EFB Bioprocess Engineering Course, Brac, 2001. Invited speaker by European Federation of Biotechnology.

Josic, Dj.; Use of combinatorial ligands for diagnostics and isolation of proteins for human plasma, 4<sup>th</sup> Croatia Congress of food Technologists, Biotechnologists and nutritionists (PBF) Opatija, 2001. Invited speaker, faculty of Food Technology and Biotechnology, Zagreb, Croatia Member of Scientific Committee.

Josic, Dj., Stadler, M., Gruber, G., Schwinn, H.; Process development of highly purified, native factor VIII/von Willebrand factor concentrate ISPPP '01, Orlando, 2001. Invited speaker, organizing committee.

Josic, Dj., Gruber, G., Stadler, M., Buchacher, A., Kannicht, C., Fletchner, A., Lim, Y-P., Saenko, E.,: Evaluation of the molecular integrity of therapeutic plasma proteins during production and storage, ISPPP '02, Heidelberg, 2002. Invited speaker, Organizing Committee.

### **TEACHING ACTIVITIES**

- 1981 – 1989 “Physiological Chemistry”, graduate and medical students at Free University Berlin, Germany
- 1993 - 2000 “Special Topics in Biochemistry” (Plasma Proteins), graduate students, Free University Berlin, Germany
- 1996 – 2002 “Analytical Biochemistry”, postgraduate students, University of Ljubljana, Slovenia
- 2001 – 2002 “Analytical Biochemistry”, graduate students, University of Zagreb, Croatia
- 2002 – 2003 “Proteomics”, graduate students, Bioinformatics, Free University Berlin, Germany

### **MENTORSHIP/GRADUATE STUDENT THESIS COMMITTEES**

#### **Postdoctoral Fellows**

1. Michael Raps (1989-1991) currently Staff Scientist at Schering AG, Berlin, Germany
2. Klemens Loester (1994-1995) currently Managing Director biotechnology company in Berlin, Germany
3. Christoph Kannicht (1996-1999) currently Senior Scientist, Octapharma Research Laboratory, Berlin, Germany
4. Ales Strancar (1996 – 1998) currently Asst. Professor at the University of Ljubljana, Slovenia and Managing Director, BIA Separations, Ljubljana, Slovenia
5. Milos Barut (2000-2002) currently Head of Application Dept., BIA Separations, Ljubljana, Slovenia
6. Karmen Branovic (2001-2002) currently Senior Scientist, Institute of Immunology, Zagreb and Lecturer at the Faculty of Science, University of Zagreb, Croatia

#### **Doctorate Students**

1. Wolfgang Schuett (1985 – 1988) – currently Physician in Kiel, Germany
2. Katrin Zailinger (1988- 1992) – currently Staff Biochemist at University Hospital Berlin,
3. Yow-Pin Lim (1987 – 1990) – currently Asst. Professor, Brown Medical School and

President/CSO of ProThera Biologics, East Providence, RI, USA

4. Klemens Loester (1990-1993) – currently Managing Director biotechnology company in Berlin, Germany
5. Katharina Poeck (1995-1998) – currently Senior Scientist, Octapharma Pharmazeutika, Vienna, Austria
6. Katharina Linnemayr (1997-1999) – currently Scientist, Austrian Food Administration
7. Roman Necina (1995-1998) – currently Director , R&D Boehringer Ingelheim, Vienna, Austria
8. Ales Strancar (1992 – 1996) – currently Asst. Professor at the University of Ljubljana, Slovenia and Managing Director, BIA Separations, Ljubljana, Slovenia
9. Ales Podgornik (1996-1999) - currently Asst. Professor at the University of Ljubljana, Slovenia and Head of R&D, BIA Separations, Ljubljana, Slovenia
10. Michaela Simonovska-Skrt (1999-2002) – currently Lecturer, Faculty of Biotechnology, University of Ljubljana, Slovenia
11. Milos Barut (1997-2000) – currently Head of Application Dept., BIA Separations, Ljubljana, Slovenia
12. Janja Luksa (1994-1997) – currently Head of Analytical Dept. Lek Pharmaceutical Company, Ljubljana, Slovenia (now part of Novartis, Basel, Switzerland).
13. Karmen Branovic (1998-2001) – currently Senior Scientist, Institute of Immunology, Zagreb and Lecturer a the Faculty of Science, University of Zagreb, Croatia

#### **Master/Bachelor-degree Students**

1. Jurij Meiller (1987) – Free University Berlin, Germany
2. Ralf Habermann (1988) - Free University Berlin, Germany
3. Katrin Zeilinger (1988) – Free University Berlin, Germany
4. Oliver Baum (1989) – Free University Berlin, Germany
5. Janja Luksa (1993) – University of Ljubljana, Slovenia
6. Rainer Hahn (1997) – University of Biotechnology and Agriculture, Vienna, Austria
7. Guenther Iberer (1998) - University of Biotechnology and Agriculture, Vienna, Austria
8. Karin Pfliegerl (1998) - University of Biotechnology and Agriculture, Vienna, Austria
9. Mihaela Simonovska-Skrt (1997) - University of Ljubljana, Slovenia

10. Tadej Cepelnik (2002) - University of Ljubljana, Slovenia

## **PATENTS**

1. Schuhmacher, W., Reusch, J., Kaleja, M. and Josic, D., 1991. "Probenverteiler". DE 4118501A1. Germany.
2. Josic, Dj., Strancar A and Schwinn H, 1993, "Verfahren zur Herstellung virusinaktivierter Vitamin K abhängiger Plasmakomponenten wie Protein C und Protein S erhaltender Mittel durch Membranchromatographie". DE 4342132, Germany.
3. Josic, D., Strancar, A. and Schwinn, H., 1993. "Verfahren zur Herstellung virusinaktivierter Vitamin K abhängiger Plasmakomponenten wie Protein C und Protein S erhaltender Mittel durch Membranchromatographie". DE 4342132. Germany.
4. Josic, D., Strancar, A. and Schwinn, H., 1993. "Verfahren zur Herstellung einer virusinaktivierten Faktor VIII enthaltenden Fraktion mittels chromatographischer Methoden". DE 4337573.1 Germany.
5. Stadler, M., Schwinn, H., Josic, D., Gehringer, W. and Bal, F., 1993. "Verfahren zur Inaktivierung von Viren, die nicht mit Lipidhüllen versehen sind". DE 4318435A1. Germany.
6. Josic, D., Strancar, A. and Nur, I., 1994. "Verfahren zur Gewinnung von hochreinem, virusinaktiviertem Alpha-1-Antitrypsin mittels Anionenaustauscherchromatographie". P 4407837.4 Germany.
7. Hoffer, L, Morfeld, F., Schwinn, H. and Josic, D., 1995. "Verfahren zur Herstellung von Faktor IX aus biologischen Quellen". DE 19506633.2. Germany.
8. Josic, D., Strancar, A., Koselj, P. and Podgornik, A., 1995. "Process device for the rapid separation and/or conversion of substrates". PCT/EP 95/03333. European Patent.
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11. Buchacher, A., Stadler, M., Josic, D. and Schwinn, H., 1997. "Process for testing suitability of protein fractions containing factor VIII". WO 97/33178. International Patent.
12. Buchacher, A., Josic, D., Gruber, G., Prior, A. and Wolfgang, J., 1999. "Method for separating and/or isolating plasma proteins by annularchromatography". WO 99/61475. International Patent.
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## **GRANT SUPPORTS**

- 01/86 – 12/1988      Research grant from the German Ministry of Research and Technology: "Development of chromatographic supports for separation of biopolymers" in collaboration with the company Bischoff Analysentechnik, Leonberg, Germany and University of Saarbrucken, Analytical Chemistry Dept. (Prof. Engelhardt). Djuro Josic, Group Leader.
- 01/97 – 12/2000      Research grant from the Austrian Chamber of Commerce: "New Process for isolation of enzymes from clotting cascade" (Project#802707). Djuro Josic, Principal Investigator.
- 03/98 – 02/2001      Research grant from the Austrian Chamber of Commerce and European Union (EUREKA Program): "Development of affinity support for isolation of therapeutic proteins" (Project#803172), Djuro Josic, Principal Investigator.
- 04/01 – 04/2004      Research grant from the Austrian Chamber of Commerce and European Union (EUREKA Program): "Combinatorial peptides for neutralization of inhibitors with specificity for clotting factor VIII" (Project#803690), Djuro Josic, Principal Investigator.