

## LIST OF SELECTED PUBLICATIONS<sup>1</sup>

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The publications are listed in the reversed chronological order. The prefixes in the numbers are introduced to distinguish publication types: B – a book or a book chapter; J – a journal paper; C – a conference paper; W – a workshop paper; I – invited paper or talk; E – electronic publication; R – a technical report; T – a tutorial; M – a manual.

### BOOKS

- B1. **Ermolayev, V., Mayr, H.C., Nikitchenko, M., Spivakovsky, A., Zholtkevych, G., Zavileysky, M. and Kobets, V.** (eds.): ICT in Education, Research and Industrial Applications: Integration, Harmonization and Knowledge Transfer. Proc. 8-th Int. Conf. ICTERI 2012, Kherson, Ukraine, June 6-10, 2012, [CEUR-WS.org/Vol-848](http://CEUR-WS.org/Vol-848), ISSN 1613-0073, urn:nbn:de:0074-848
- B2. **Ermolayev, V., Mayr, H.C., Nikitchenko, M., Spivakovsky, A., Zavileysky, M. and Zholtkevych, G.** (eds.): ICT in Education, Research and Industrial Applications: Integration, Harmonization and Knowledge Transfer. Proc. 7-th Int. Conf. ICTERI 2011, Kherson, Ukraine, May 4-7, 2011, [CEUR-WS.org/Vol-716](http://CEUR-WS.org/Vol-716), ISSN 1613-0073, urn:nbn:de:0074-716-8
- B3. **Ermolayev, V., Gomez-Perez, J. M., Haase, P., Warren, P.** (Eds.): Proceedings of the Second Workshop on Context, Information and Ontologies (CIAO 2010). [CEUR Workshop Proceedings, vol. 626](http://CEUR-WS.org/Vol-626), CEUR-WS.org, 2010

### BOOK CHAPTERS

- B4. **Ermolayev, V., Dengler, F., Fortuna, C., Stajner, T., Bosser, T., Melchior, E.-M.**: Chapter 10: Increasing predictability and sharing tacit knowledge in electronic design. In: Warren, P., Davies, J., Simperl, E. (Eds.) Context and Semantics for Knowledge Management. Technologies for Personal Productivity. 1st Edition, Springer Verlag, Berlin-Heidelberg, 2011, 189-212, ISBN 978-3-642-19509-9
- B5. **Ermolayev, V., Keberle, N., Kononenko, O., Terziyan, V.**: Chapter XI. Proactively Composing Web Services as Tasks by Semantic Web Agents. In: Zang, L.J. (Ed.) Modern Technologies in Web Services Research. IGI Publishing, Hershey New-York., 2006, 217-246, ISBN: 978-1-59904-280-0.
- B6. **Ermolayev, V., Jentsch, E., Karsayev, O., Keberle, N., Matzke, W.-E., Samoylov, V., Sohnius, R.**: An Agent-Oriented Model of a Dynamic Engineering Design Process. In: Kolp, M., Bresciani, P., Hendersen-Sellers, B., and Winikoff, M. (Eds.): Agent-Oriented Information Systems III. 7th International Bi-Conference Workshop, AOIS 2005, Utrecht, Netherlands, July 26, 2005, and Klagenfurt, Austria, October 27, 2005. Revised Selected Papers, 168-183, 2006, LNCS Vol. 3529
- B7. **Ermolayev, V., Terziyan, V., Kaykova, H.**: SW@Ukraine. Semantic Web Factbook, 2005, Lytras M. (eds), Preliminary edition, AIS SIGSEMIS and OPEN RESEARCH SOCIETY publications, ISSN: 1556-2301, May 2006.
- B8. **V. A. Tolok, V. A. Ermolayev**: IT-Enabled Teaching and Learning in Today's Higher School In V. P. Andruschenko, M. I. Mikhailichenko, V. G. Kremen (Eds.) "Higher Education in Ukraine: Methodological and Socio-Pedagogical Problems of Modernization", Kiev, 2001, 440 p., ISBN 966-000-000-4, 221-247 (Ukrainian)
- B9. **V. A. Ermolayev, V. A. Tolok**: Modelling Distant Learning Activities by Agent Task Coalitions. In: Q. Jin, J. Li, J. Cheng, C. Yu and S. Noguchi (Eds.) Enabling Society with Information Technology, Springer-Verlag, Tokyo, 2002, ISBN 4431703276, 316-326

### JOURNAL/MAGAZINE ARTICLES

- J1. **Davidovsky, M., Ermolayev, V., Tolok, V.**: Instance Migration between Ontologies Having Structural Differences. International Journal on Artificial Intelligence Tools. Vol. 20, No. 6 (2011) 1127–1156, DOI: [10.1142/S0218213011000553](https://doi.org/10.1142/S0218213011000553)
- J2. **Ermolayev, V., Jentsch, E., Dengler, F., Warren, P., Matzke, W.-E.**: ACTIVE Technologies for Knowledge Management in Microelectronic Engineering Design. Newsletter Edacentrum, 2, 2010, 12-15
- J3. **Ermolayev, V., Tatarintseva, O.**: Applied Research and Development in Cooperation with Industry. Information Technologies in Education 5, 2010, 16-26 (in Russian)
- J4. **Keberle, N., Ermolayev, V., Matzke, W.-E.**: Application of Logical Means to Ontology Change Analysis. Control, Navigation, and Communication Systems Journal, (11)3, Nov. 2009, p. 105-110 (in Russian)
- J5. **Warren, P., Kings, N., Thurlow, I., Davies, J., Burger, T., Simperl, E., Ruiz, C., Gomez-Perez, J.M., Ermolayev, V., Ghani, R., Tilly, M., Bosser, T., Imiaz, A.**: Improving Knowledge Worker Productivity – the ACTIVE Integrated Approach. BT Technology Journal, (26)2, April 2009, p. 165-176

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<sup>1</sup> Some papers are not included. The drafts of some selected papers are available on-line at [http://ermolayev.com/eva\\_personal/evapubs.htm](http://ermolayev.com/eva_personal/evapubs.htm).

- J6. **Ermolayev, V., Spivakovsky, A., Zholtkevych, G., Bulat, A., Keberle, N.**: UnIT-Net IEDI: an Infrastructure for Electronic Data Interchange. *Information Technologies in Education* 1(1), 2008, 26-42
- J7. **Vladimirov, V., Sohnius, R., Ermolayev, V., Matzke, W.-E.**: Semi-Automated Instance Migration between Evolving Ontologies. *Herald of NTU KhPI. Special Issue: System Analysis, Management, and IT. No 7*, 2007, 130-144
- J8. **Keberle, N., Ermolayev, V., Vladimirov, V., Dzhurinsky, E.**: Visual Semantic Query Formulation and Execution in UnIT-NET IEDI. "Mathematical Modeling, IT, Automated Control Systems" series of the Herald of Kharkiv National University, No 703, ISSN 0453-8048, p. 95-108
- J9. **Ermolayev, V., Plaksin, S.**: Workflow Management by Multi-Agent Systems. "Mathematical Modeling, IT, Automated Control Systems" series of the Herald of Kharkiv National University, No 629, 2004(Issue 3), ISSN 0453-8048, p. 132-143
- J10. **Ermolayev, V., Keberle, N., Shapar, V., Vladimirov, V.**: Semantically Reinforced Web Services for Wrapping Autonomous Information Resources. "Mathematical Modeling, IT, Automated Control Systems" series of the Herald of Kharkiv National University, No 629, 2004(Issue 3), ISSN 0453-8048, p. 56-69
- J11. **Ermolayev, V., Keberle, N., Kononenko, O., Plaksin, S., Terziyan, V.**: Towards a framework for agent-enabled semantic web service composition. *Int. J. of Web Services Research*, 1(3), 63-87, Jul.-Sept. 2004
- J12. **Ermolayev, V., Keberle, N., Plaksin, S., Vladimirov, V.**: Ontology-Driven Query Transformation in Agent-based Intelligent Information Retrieval. *Herald NTU KhPI, Sp. Issue "System Analysis, Control, and IT"*, No 1, 2004, 57-72
- J13. **Ermolayev, V. A., Tolok, V. A.** Unified Information Space for Microeconomic Systems Modeling and Control. In: Ju. G. Lysenko (Ed.) *Control Models for Market Economy. Special Issue. DonNU, Donetsk, 2002*, p. 66-88
- J14. **Ermolayev, V., Tolok, V.** Academic E-editions in the Information Space of Ukraine. *Novyj Kolegium. Scientific and Information Journal*, ISSN 1562-529X, pp. 38-45
- J15. **Ermolayev, V. A., Keberle, N. G., Malyar, E. N., Plaksin, S. L.** Algebraic Approach to Ontology Translation *Lecture Notes of Zaporozhye State University*, ISBN 966-599-142-6, Vol. 5, No 2, 2002
- J16. **V. A. Ermolayev, S. L. Plaksin** Coordination of Work Placement in Agents' Task Coalitions. *Lecture Notes of Zaporozhye State University*, ISBN 966-599-142-6, Vol. 4, No 1, pp. 30-35, 2001
- J17. **V. A. Ermolayev, N. G. Keberle**, Active Data Dictionary: a Method and a Tool for Data Model Driven Information System Design. *Lecture Notes of Zaporozhye State University*, ISBN 966-599-058-4, Vol. 3, No 2, 2000. pp. 68-78.
- J18. **V. A. Ermolayev, S. U. Borue, V. A. Tolok, N. G. Keberle**, Use of Diakoptics and Finite Automata for Modelling Virtual Information Space Agent Societies. *Lecture Notes of Zaporozhye State University*, ISBN 966-599-058-4, Vol. 3, No 1, 2000, pp.34-44.
- J19. **S. U. Borue, V. A. Ermolayev, V. A. Tolok**: Application of Diakoptical MAS Framework to Planning Process Modelling --in: "Problems of Programming" *Scientific Journal №1-2*, 2000, ISBN 966-02-1244-5, Special Issue: the Proc. of the 2-nd Intl. Scientific - Practical Conference on Programming (UkrPROG'2000), Kiev, 23-26 May 2000, p. 488-500
- J20. **S. U. Borue, V. A. Ermolayev, V. A. Tolok**: On Diakoptical Approach to Process Modelling in Multifunctional Information Systems. *Artificial Intelligence. Scientific Theoretical Journal №2*, 1999, ISSN 1561-5359, Special Issue: Proceedings of International Conference Knowledge - Dialog - Solution (KDS'99). Katsiveli, 13-18.09.1999, pp. 211-219
- J21. **Ermolayev, V. A., Pletsyky, S. U., Tolok, V. A.**, Architecture of Unified Information Space of a Virtual University. *Lecture Notes of Zaporozhye State University*, ISBN 966-599-058-4, Vol. 1, No 2, 1998, p. 44-53.(Russian)
- J22. **V. A. Ermolayev, N. G. Keberle**, On Possibilities to Enhance Relational Attributes with the Property of Computability. *Lecture Notes of Zaporozhye State University*, ISBN 966-599-058-4, Vol. 1, No 2, 1998, p. 38-44. (Russian)
- J23. **V. A. Ermolayev**, Object Oriented Dynamic Data Modelling and Active Data Dictionaries - Some Crosspoints . *Lecture Notes of Zaporozhye State University*, ISBN 966-599-058-4, Vol. 1, No 2, 1998, p. 53-63.
- J24. **N. G. Keberle, V.A. Ermolayev**, On Boolean Operations upon Relationships Containing Computable Attributes. *Lecture Notes of Zaporozhye State University*, ISBN 966-599-058-4, Vol 1, No 1, 1998, p.40 - 41 (Russian)
- J25. **V. A. Ermolayev, A. S. Kontsur, V. A. Tolok**, On Perspectives of Further Development of University-Wide Computational Infrastructure at ZSU. *Lecture Notes of Zaporozhye State University*, ISBN 966-599-058-4, Vol. 1, No 1, 1998, p. 46-49. (Russian)
- J26. **S. U. Borue, V. A. Ermolayev, A. V. Tolok** On an Integral approach to the design of adaptable mathematical models of complex systems In: *Mathematics, Physics. Collection of Scientific Papers Dedicated to the 10-th Anniversary of Zaporozhye State Univ., Zaporozhye, ZSU, 1995*, p. 5-9. (Russian)
- J27. **V. A. Ermolayev, S. G. Kononov**, A Method of Design and Projection of 3-dimensional Objects Having Complex Geometrical Shape. In: *Mathematics, Physics. Collection of Scientific Papers Dedicated to the 10-th Anniversary of Zaporozhye State Univ., Zaporozhye State University, Zaporozhye, Ukraine, 1995*, pp 35-38. (Russian)

## REFEREED CONFERENCE PAPERS

- C1. **Ermolayev, V., Davidovsky, M.**: Agent-Based Ontology Alignment: Basics, Applications, Theoretical Foundations, and Demonstration. Tutorial Paper. In: Dan Burdescu, D., Akerkar, R., and Badica, C. (eds.) *Proc. Int*

- Conf on Web Intelligence, Mining and Semantics (WIMS 2012), Craiova, Romania, 13-15 Jun. 2012, pp. 11-22, ACM, 2012, doi>[10.1145/2254129.2254136](https://doi.org/10.1145/2254129.2254136)
- C2. **Ermolayev, V., Keberle, N., Borue, S.:** Motivating Students and Improving Quality of Learning Using Peer-Reviews. In: Ermolayev, V. et al. (eds.) Proc. 8-th Int. Conf. ICTERI 2011, Kherson, Ukraine, June 6-10, 2012, [CEUR-WS.org/Vol-848](https://ceur-ws.org/Vol-848), ISSN 1613-0073, pp.164-175
- C3. **Tatarintseva, O., Borue, Yu., Ermolayev, V.:** OntoElect Approach for Iterative Ontology Refinement: a Case Study with ICTERI Scope Ontology. In: Proc. 4th International United Information Systems Conference, Yalta, Ukraine, June 1-3, 2012, to appear
- C4. **Davidovsky, M., Ermolayev, V., Tolok, V.:** An Implementation of Agent-Based Ontology Alignment. In: Proc. 4th International United Information Systems Conference, Yalta, Ukraine, June 1-3, 2012, to appear
- C5. **Davidovsky, M., Ermolayev, V., Tolok, V.:** A Survey on Agent-Based Ontology Alignment. In: Proc. Int Conf on Agents and Artificial Intelligence (ICAART 2012), Vilamoura, Algarve, Portugal, 6-8 Feb. 2012, pp. 355-361
- C6. **Tatarintseva, O., Ermolayev, V., Fensel, A.:** Is Your Ontology a Burden or a Gem? - Towards Xtreme Ontology Engineering. In: Ermolayev, V. et al. (eds.) Proc. 7-th Int. Conf. ICTERI 2011, Kherson, Ukraine, May 4-7, 2011, [CEUR-WS.org/Vol-716](https://ceur-ws.org/Vol-716), ISSN 1613-0073, pp. 65-81, online
- C7. **Davidovsky, M., Ermolayev, V., Jentzsch, E., Matzke, W.-E.:** Evaluation of Semi-Automated Ontology Instance Migration. In: M. Essaïdi et al. (Eds.): Intelligent Distributed Computing IV, SCI 315, pp. 179–190, Springer-Verlag Berlin Heidelberg (2010)
- C8. **Ermolayev, V., Dengler, F., Jentzsch, E., Matzke, W.-E.:** Articulation and Sharing of Distributed Design Project and Process Knowledge. In: M. Essaïdi et al. (Eds.): Intelligent Distributed Computing IV, SCI 315, pp. 209–216, Springer-Verlag Berlin Heidelberg (2010)
- C9. **Ermolayev, V., Keberle, N., Jentzsch, E., Sohnius, R., Matzke, W.-E.:** Modeling Actions in Dynamic Engineering Design Processes. In: J. Yang et al. (Eds.): Proc. 3<sup>d</sup> Int. Conf. UNISCON 2009, Apr. 21 – 24, 2009, Sydney, Australia, LNBIP 20, pp. 127–141, 2009
- C10. **Ermolayev, V., Keberle, N., Matzke, W.-E.:** An Upper-Level Ontological Model for Engineering Design Performance Domain. In: Li, Q., Spaccapietra, S., and Yu, E. (Eds.) Proc 27<sup>th</sup> Int. Conference on Conceptual Modeling ([ER 2008](https://er2008.org)), Barcelona, Spain, Oct. 20-23, LNCS 5231, pp. 98–113, 2008.
- C11. **Ermolayev, V., Keberle, N., Matzke, W.-E., Sohnius, R.:** Fuzzy Time Intervals for Simulating Actions. In: Kaschek, R., Kop, C., Steinberger, C. and Fliedl, G. (Eds.) Information Systems and Business Technologies. Proc. 2<sup>nd</sup> Int. Conf. UNISCON 2008, Apr. 22 – 25, 2008, Klagenfurt, Austria, LNBIP Vol. 5, 429-444
- C12. **Ermolayev, V., Matzke, W.-E.:** Towards Industrial Strength Business Performance Management. In: Marik, V., Colombo, A.W., Vyatkin, V. (Eds.) Proc. 3rd Int. Conf. on Industrial Applications of Holonic and Multi-Agent Systems ([HoloMAS 2007](https://holomas.org)), Sept. 3-5, 2007, Regensburg, Germany, pp 387-400
- C13. **Sohnius, R., Ermolayev, V., Jentzsch, E., Matzke, W.-E.:** An Approach for Assessing Design Systems: Design System Simulation and Analysis for Performance Assessment. In: Cordoso, J. Cordeiro, J., and Filippé, J. (eds.): Proc. 9th Int Conf on Enterprise Information Systems. Vol. 2: Artificial Intelligence and Decision Support Systems, 12-16 June, 2007, Funchal, Madeira - Portugal, pp 231-236.
- C14. **Keberle, N., Ermolayev, V., Matzke, W.-E.:** Evaluating PSI Ontologies by Mapping to the Common Sense. In: Mayr, H. C, Karagiannis, D. (Eds.): Information Systems Technology and its Applications Proc. 6th Int. Conf. [ISTA 2007](https://ista2007.org), May 23-25, Kharkiv, Ukraine, 2007, GI LNI Vol 107 , pp 91-104.
- C15. **Gorodetsky, V., Ermolayev, V., Jentzsch, E., Karsayev, O., Konushy, V., Matzke, W.-E.:** Multi-agent Software Tool for Management of Design Processes in Microelectronics. In: Nishida, T., Klusch, M., Sycara, K., Yokoo, M. (Eds.): Proc. IEEE/WIC/ACM Int. Conf. on Intelligent Agent Technology ([IAT-06](https://iat06.org)), 20-22 Dec., 2006, Hong Kong, pp. 773-776
- C16. **Sohnius, R., Ermolayev, V., Jentzsch, E., Keberle, N., Matzke, W.-E., Samoylov, V.:** Managing Concurrent Engineering Design Processes and Associated Knowledge. In: Ghodous, P., Dieng-Kuntz, R., and Loureiro, G. (Eds.): Leading the Web in Concurrent Engineering. Proc. 13th ISPE Int Conf on Concurrent Engineering: Research and Applications, 18 - 22 Sept., Antibes, French Riviera, IOS Press, Series: Frontiers in AI and Applications, Vol. 143, pp. 198-205, 2006
- C17. **Ermolayev, V., Keberle, N.:** A Generic Ontology of Rational Negotiation. In: Karagiannis, D., Mayr, H.C. (Eds.): Information Systems Technology and its Applications. 5-th Int Conf ISTA'2006, May 30 – 31, Klagenfurt, Austria, LNI, Vol. 84, pp. 51-66, 2006
- C18. **Ermolayev, V., Keberle, N., Matzke, W.-E., Vladimirov, V.:** A Strategy for Automated Meaning Negotiation in Distributed Information Retrieval. In: Y. Gil et al. (Eds.): ISWC 2005 Proc. 4th Int. Semantic Web Conference ([ISWC'05](https://iswc05.org)), 6-10 November, Galway, Ireland, LNCS 3729, pp. 201 – 215, 2005.
- C19. **Gorodetsky, V., Ermolayev, V., Matzke, W.-E., Jentzsch, E., Karsayev, O., Keberle, N., Samoylov, V.:** Agent-Based Framework for Simulation and Support of Dynamic Engineering Design Processes in PSI. In: Pechouchek, M., Petta, P., Varga, L. Z. (Eds.) Proc. 4th Int. Central and Eastern European Conf. on Multi-Agent Systems ([CEEMAS'05](https://ceemas05.org)), 15-17 September 2005, Budapest, Hungary, LNAI 3690, pp. 511-520, 2005.
- C20. **Ermolayev, V., Keberle, N., Shapar, V., Vladimirov, V. (2004):** Ontology-Driven Sub-Query Extraction for Distributed Autonomous Information Resources in UnIT-Net IEDI. In: A. Doroshenko, T. Halpin, S. W. Liddle, H. C. Mayr (eds.) Information Systems Technology and its Applications. Proc. 3-d Int. Conf ISTA'2004, July 15-17, 2004, Salt Lake City, Utah, USA, p. 137-150, GI LNI Vol P-48

- C21. **Ermolayev, V., Keberle, N., Plaksin, S.** (2003) Towards Agent-Based Rational Service Composition -- RACING Approach. In: M. Jeckle and L.-J. Zang (Eds.) Web Services -- ICWS-Europe 2003. Proc. of the Int. Conf. on Web Services Europe, Sept., 23-25, 2003, Erfurt, Germany, LNCS Vol. 2853, p. 167-182
- C22. **Ermolayev, V., Keberle, N., Plaksin, S., Vladimirov, V.** (2003) Capturing Semantics from Search Phrases: Incremental User Personalization and Ontology-Driven Query Transformation In: Proc. 2-nd Int. Conf. on Information Systems Technology and its Applications (ISTA'2003), Kharkiv, Ukraine, June 19-21, 2003, pp. 9-20, ISBN 3-88579-359-8, Series: LNI, German Informatics Society
- C23. **V. A. Ermolayev, S. L. Plaksin** (2002) Cooperation Layers in Agent-Enabled Business Process Management. In: Proc. of The 3-d Intl. Scientific-Practical Conference on Programming (UkrPROG'2002), May, 21-24, 2002, Kiev, Ukraine, p. 354-368
- C24. **N. G. Keberle, V. A. Ermolayev** (2001) An Approach to Dynamic Ontology Modification in Mediator Service-Oriented Information Systems. In: Godlevsky, M., Mayr, H. C. (Eds.) Information Systems Technology and its Applications. Proc. of Intl. Conf. ISTA'2001 June 13-15, 2001, Kharkiv, Ukraine. GI-Edition 'Lecture Notes in Informatics', pp 247-260.
- C25. **Ermolayev, V.** Dynamic Agent Communities Facilitating to Distant Learning in a Virtual University Information Space. In: Proc. of Intl. Conf. IS2000, Special Session on Virtual Universities and Distance Education, Japan, November 5-8, 2000, pp. 488-495.
- C26. **Ermolayev, V. A., Tolok, V. A.**: The Cyberspace of ZSU in the Information Society of the XXI Century. Proc. of Intl Congress "Information Society in Ukraine", Kiev, Sept. 2000, 10 pp. (Russian)
- C27. **S. U. Borue, V. A. Ermolayev, V. A. Tolok**: Application of Diakoptical MAS Framework to Planning Process Modelling --in: Proc. of the 2-nd Intl. Scientific - Practical Conference on Programming (UkrPROG'2000), Kiev, 23-26 May 2000, p. 488-500
- C28. **V. A. Ermolayev**, Visual Intranet Interfaces and Architecture of Unified Information Space in the Concept of Virtual University at ZSU -- ENCOM'98, Atlanta, June 1998
- C29. **V. A. Ermolayev, A. S. Kontsur, V. A. Tolok**, On a Concept of ZSU Computational Media Enhancement. in: Proc. of the Annual Scientific Conference of Zaporozhye State University, Zaporozhye State University, Zaporozhye, Ukraine, 1997, Vol 7, Part 1, 4p (Russian)
- C30. **V. A. Ermolayev, V. V. Shapar**: Using Data Dictionary System for Data Model Design and Verification. In Proc. of the Annual Scientific Conference of Zaporozhye State University, Zaporozhye State University, Zaporozhye, Ukraine, 1996, Vol 6, Part 1, p 84-85. (Russian)
- C31. **V. A. Ermolayev, A. P. Filobok**: Design of the Federated Data Model for the Integrated University Entrant Information System. In Proc. of the Annual Scientific Conference of Zaporozhye State University, Zaporozhye State University, Zaporozhye, Ukraine, 1996, Vol 6, Part 1, p 51-57. (Russian)
- C32. **V. A. Ermolayev**: Relational Data Model Enhancement Using Computable Attribute Technique. in Proc. of the Annual Scientific Conference of Zaporozhye State University, Zaporozhye State University, Zaporozhye, Ukraine, 1995, Vol 5, Part 1, p 69. (Russian)
- C33. **V. A. Ermolayev, V. V. Mukhin** Principles of Active Data Dictionary System Design In: Proc. Of the Annual Scientific Conference of Zaporozhye State Univ., Zaporozhye, ZSU, May, 1993 (Russian)

## REFEREED WORKSHOP PAPERS

- W1. **Ermolayev, V., Copylov, A., Keberle, N., Jentsch, E., Matzke, W.-E.**. Using Contexts in Ontology Structural Change Analysis.. In: Ermolayev, V., Gomez-Perez, J.-M., Haase, P., Warren, P, (eds.) CIAO 2010, CEUR-WS, vol. 626 (2010)
- W2. **Ermolayev, V., Ruiz, C., Tilly, M., Jentsch, E., Gomez-Perez, G. M., Matzke, W.-E.**: A Context Model for Knowledge Workers. In: Ermolayev, V., Gomez-Perez, J.-M., Haase, P., Warren, P, (eds.) CIAO 2010, CEUR-WS, vol. 626 (2010)
- W3. **Ermolayev, V., Keberle, N., Matzke, W.-E.**: An Ontology of Environments, Events, and Happenings. In: Proc 31<sup>st</sup> IEEE Annual International Computer Software and Applications Conference (COMPSAC 2008), Turku, Finland, Jul. 28 - Aug. 1, 2008, 539-546
- W4. **Keberle, N., Litvinenko, Yu., Gordeyev, Yu., Ermolayev, V.**: Ontology Evolution Analysis with OWL-MeT. In: Flouris, G., d'Aquin, M. (Eds.): Proc of the Int Workshop on Ontology Dynamics (IWOD'2007) at European Semantic Web Conference (ESWC), June 7, 2007, Innsbruck, Austria, pp 1-12.
- W5. **Ermolayev, V., Jentsch, E., Karsayev, O., Keberle, N., Matzke, W.-E., Samoylov, V.**: Modeling Dynamic Engineering Design Processes in PSI. In: J. Akoka et al. (Eds.): ER Workshops 2005, Proc. Seventh International Bi-Conference Workshop on Agent-Oriented Information Systems (AOIS-2005), Klagenfurt, Austria, October 24-28, Springer LNCS 3770, pp. 119 – 130, 2005.
- W6. **Ermolayev, V. Keberle, N., Tolok, V.** (2002). OIL Ontologies for Collaborative Task Performance in Coalitions of Self-Interested Actors. In: H. Arisawa, Y. Kambayashi, V. Kumar, H.C. Mayr, I. Hunt (Eds.): Conceptual Modeling for New Information Systems Technologies ER 2001 Workshops, HUMACS, DASWIS, ECOMO, and DAMA, Yokohama Japan, November 27-30, 2001. Revised Papers - LNCS vol. 2465, p. 390-402

## INVITED PAPERS/TALKS

11. **Ermolayev, V., Matzke, W.-E., Sohnius, R.:** Engineering Design Performance (Extended Abstract). Invited Talk. In: Kaschek, R., Kop, C., Steinberger, C. and Fliedl, G. (Eds.) Information Systems and Business Technologies. Proc. 2nd Int. Conf. UNISCON 2008, Apr. 22 – 25, 2008, Klagenfurt, Austria, LNBIP Vol. 5, 108-110.
12. **Ermolayev, V., Spivakovsky, A., Zholtkevych, G.** (2004) UnIT-NET IIDE : Infrastructure nationale ukrainienne pour l'intraechange de donnees electroniques. Institut Universitaire de Technologie Nice-Cote d'Azur. Universite Nice-Sophia Antipolis. Colloque National de la Recherche Universitaire dans les I. U. T. Actes de Colloque, Tome 1. Sciences et Techniques de l' Ingenieur, Nice, May, 6-7, 2004, p. 113-121.
13. **Ermolayev, V. A., Tolok, V. A., Maksishko, N. G.** On Opportunities to IT Research Integration and IT Curriculum Improvement in European Frameworks. In: Proc. of the 5-th Scientific-Methodological Conference “Economical Cybernetics: the Problems of Methodology”, Kiev, Dec. 1999, 14 pp. (Ukrainian)
14. **S. U. Borue, V. A. Ermolayev, V. A. Tolok:** On Diacoptical Approach to Process Modelling in Multifunctional Information Systems. in: Proc.of International Conference Knowledge - Dialog - Solution (KDS'99). Katsiveli, 13-18.09.1999, pp. 211-219, (Russian)

## TUTORIALS

- T1. **Ermolayev, V., Davidovsky, M.:** Agent-Based Ontology Alignment: Basics, Applications, Theoretical Foundations, and Demonstration. Tutorial Paper. In: Dan Burdescu, D., Akerkar, R., and Badica, C. (eds.) Proc. Int Conf on Web Intelligence, Mining and Semantics (WIMS 2012), Craiova, Romania, 13-15 Jun. 2012, pp. 11-22, ACM, 2012, doi>10.1145/2254129.2254136
- T2. **Ermolayev, V., Gorodetski, V., Jentzsch, E., Matzke, W.-E.:** Modeling and Simulation of Dynamic Engineering Design Processes. Tutorial at ER 2005. In: J. Akoka et al. (Eds.): ER Workshops 2005, Klagenfurt, Austria, October 24-28, Springer LNCS 3770, pp. 470 – 472, 2005.

## e-ARTICLES

- E1. **Ermolayev, V.** (2003) RACING: Agent-Mediated Web Service Composition for Rational Information Retrieval. e-Article on [KTweb Community Portal](http://www.kept.lu/doc/article11.pdf), May 2003, 5 p. URL: <http://www.kept.lu/doc/article11.pdf>

## SELECTED PROJECT DELIVERABLES/TECHNICAL REPORTS

- R1. **Ermolayev, V., Jentzsch, E., Keberle, N., and Sohnius, R.:** Performance Simulation Initiative. The Suite of PSI Ontologies v.2.0. Reference Specification. Technical Report PSI-ONTO-TR-2006-1, 17.05.2007, VCAD EMEA Cadence Design Systems, GmbH, 84p.
- R2. **Ermolayev, V., Jentzsch, E., Keberle, N., and Sohnius, R.:** Performance Simulation Initiative. The Family of PSI Ontologies v.1.6. Reference Specification. Technical Report PSI-ONTO-TR-2006-4, 26.07.2006, VCAD EMEA Cadence Design Systems, GmbH, 77p.
- R3. **Ermolayev, V., Jentzsch, E., Keberle, N., Samoylov, V., and Sohnius, R.:** Performance Simulation Initiative. The Family of PSI Ontologies v.1.5. Reference Specification. Technical Report PSI-ONTO-TR-2006-3, 14.04.2006, Cadence Design Systems, GmbH, 56 p.
- R4. **Ermolayev, V., Jentzsch, E., Keberle, N., Samoylov, V., Sohnius, R.:** The Family of PSI Ontologies v.1.4. Reference Specification. Technical Report PSI-ONTO-TR-2006-2. Cadence Design Systems, GmbH, 47 p., 2006
- R5. **Ermolayev, V., et al:** PSI: Conceptual Ability Framework Specification. Draft. Internal Report No: TR-PSI-2-2006 Version 0.1. January, 2006
- R6. **Ermolayev, V., Jentzsch, E., Matzke, W.-E., Schmidt, J., Schroeder, G., Weber, S., Werner, J.:** Agent-Based Dynamic Engineering Design Process Modeling Framework. Technical Report. Cadence Design Systems, GmbH, 29 p., 2004.
- R7. **Ermolayev, V.:** State of the Art in Agent-Based Modeling and Simulation of Design Processes. Technical Report. Cadence Design Systems, GmbH, Mozartstr. 2 D.85622 Feldkirchen, Germany, 2004, 25 p
- R8. **Ermolayev, V., Bulat, A., Gray, E., Keberle, N., Plaksin, S., Shapar, V., Vladimirov, V., Zholtkevich, G.:** The Infrastructure for Electronic Data Interchange. Reference Architecture Specification. Version 1.0. UNIT-NET Project Deliverable No D2.2.D.1.
- R9. **Borue, S. U., Ermolayev, V. A., Keberle, N. G., Plaksin, S. L., Tolok, V. A.** (2002) Formal and Algorithmic Framework for a Rational Information Retrieval Agency. Technical Report on Research Project (Grant No 0102Y005339 of Ministry of Education and Science of Ukraine), Zaporozhye State Univ., Zaporozhye, 2002, 50 p.
- R10. **Ermolayev, V. A., Borue, S. U., Tolok, V. A., Keberle, N. G., Plaksin, S. L.** (2002) Arranging Cooperative Business Activities in Dynamic Coalitions of Rational Actors. Tech. Report: Zaporozhye State University, Zhukovskogo, 66, 69063, Zaporozhye, Ukraine, May, 2002, 33 pp.
- R11. **S. R. Lyakh, V. A. Ermolayev, F. G. Turchenko, V. O. Maslennikov, E. N. Goloschapov, A. V. Bilay, A. I. Korobov, I. A. Ogneva:** Electronic Encyclopedia “History of Ukrainian Cossacks..Final Report on Research Project (Grant No 0100Y001735 of Ministry of Education and Science of Ukraine), Zaporozhye State Univ., Zaporozhye, 2001, 201p.(Ukrainian)
- R12. **S. U. Borue, V. A. Ermolayev, N. G. Keberle, V. V., Mikhailichenko, S. L. Plaksin, V. A. Tolok** Formal Principles and Methods of Interaction of the Models of the Functional Objects in the Unified University



- Information Space. Intermediate Report on Research Project (Grant No 0197y012776 of Ministry of Education and Science of Ukraine), Zaporozhye State Univ., Zaporozhye, 2000, 49 p. (Ukrainian)
- R13. **V. A. Ermolayev, V. A. Tolok, S. U. Borue**: Decomposition, Projection Models and Design Framework for the Components of Unified University Information Space. Tech. Report on Research Project (Grant No 0197y012776 of Ministry of Education of Ukraine), Zaporozhye State Univ., Zaporozhye, 1999, 48 p. (Russian)
- R14. **V. A. Tolok, S. U. Borue, V.A. Ermolayev**: Design of the Architecture of University Unified Information Space and the Concept of Regional Inter-University Network. Tech. Report on Research Project (Grant No 0197y012776 of Ministry of Education of Ukraine), Zaporozhye State Univ., Zaporozhye, 1998, 48 p. (Ukrainian)
- R15. **V. A. Tolok, S. U. Borue, V.A. Ermolayev**: Design of the Concept and Implementation of the First Phase of ZSU Integrated Network. Tech. Report on Research Project (Grant No 0197y012776 of Ministry of Education of Ukraine), Zaporozhye State Univ., Zaporozhye, 1997, 28 p. (Ukrainian)
- R16. **V.A. Ermolayev**: CT technology information Data Model. Project Development Report, Charmilles Technologies SA, CH-1217 Meyrin Geneve Switzerland, 1995.
- R17. **V.A. Ermolayev**: Active Meta-Data Repository System for Adaptable Data Base Application Design. PhD Thesis. Zaporozhye State University, 1994

## SOFTWARE MANUALS

- M1. **V. A. Ermolayev**, CT Techno Cookee. CT technologies DB Management System. User's Guide. Charmilles Technologies SA, CH-1217 Meyrin Geneve Switzerland, 1995, 84 p.
- M2. **V. A. Ermolayev**, CT Techno Cookee. CT technologies DB Management System. Maintenance Manual. Charmilles Technologies SA, CH-1217 Meyrin Geneve Switzerland, 1996, 196 p.

## TEXTBOOKS AND TEACHING MATERIALS

1. **V. A. Ermolayev, O. R. Onischuk**: Computer Software. Data Structures and Algorithms. Zaporozhye, ZNU, 2005, 60p.
2. **V. A. Ermolayev** Agent Technologies on the Semantic Web. Electronic teaching materials. Zaporozhye, ZSU, Jyvaskyla, Univ. of Jyvaskyla, 2005, e-Book URL: <http://ermolayev.com/asw/>
3. **V. A. Ermolayev** Knowledge Bases and Expert Systems. Electronic teaching materials. Zaporozhye, ZHUSMG, 2005, e-Book URL: <http://virtuni.education.zp.ua/lib/program/eva/OKB/e-book/>
4. **V. A. Ermolayev** Agent-Enabled e-Business Technologies. Electronic teaching materials. Zaporozhye, ZSU, Klagenfurt, Univ. of Klagenfurt, 2003, e-Book URL: <http://www.zsu.zp.ua/ameb/>
5. **V. A. Ermolayev** Computer Software. Algorithms for Sorting and Search. Zaporozhye, ZSU, 2000, 154 p. (Russian). e-Book URL: <http://www.znu.edu.ua/lab/MathDep/ApMath/SWPCII/kurs.html>
6. **V. A. Ermolayev** Computer Software. Basic Algorithms and Data Structures. Zaporozhye, ZSU, 1999, 119 p. (Russian). e-Book URL: <http://www.znu.edu.ua/lab/MathDep/ApMath/SWPCI/kurs.html>
7. **V. A. Ermolayev** Architectures of OS and DBMS. Zaporozhye, ZSU, 1998, 76 p. (Russian). e-Book URL: <http://www.znu.edu.ua/lab/mathdep/apmath/arcsosdbms/>
8. **V. A. Ermolayev** Programming Technology. Zaporozhye, ZSU, 1997, 76 p. (Russian). e-Book URL:
9. **V. A. Ermolayev** Contemporary Software Systems. Part IV: Contemporary DBMS. Zaporozhye, ZSU, 1997, 32 p. (Russian)
10. **V. A. Ermolayev** Contemporary Software Systems. Part III: Operation Shells APIs and Interfaces. Zaporozhye, ZSU, 1997, 48 p. (Russian)
11. **V. A. Ermolayev** Contemporary Software Systems. Part II: Decktop Publishing and WWW. Zaporozhye, ZSU, 1997, 45 p. (Russian)
12. **V. A. Ermolayev** Contemporary Software Systems. Part I: Basics of Architectures. Zaporozhye, ZSU, 1997, 30 p. (Russian)