

## List of the applicant's original published scientific works

### 1. Books / Monographs

1 x AAA

**Paulen, R. [50%]** – Fikar, M. [50%]. Optimal Operation of Batch Membrane Processes, 978-3-319-20475-8, Springer, 2016

### 2. Journal papers

30 x ADC

1. Maidi, A. [70%] – **Paulen, R. [15%]** – Corriou, J. [15%]: Zeroing Dynamics-Based Stabilizing Controller Design of Diffusion-Reaction Systems. *International Journal of Robust and Nonlinear Control*, vol. 36, pp. 572–584, 2026. Impact Factor: 3.20
2. Wadinger, M. [50%] – Fáber, R. [20%] – Pavlovičová, E. [20%] – **Paulen, R. [10%]**: Carbon neutral greenhouse: Economic model predictive control framework for education. *European Journal of Control*, vol. 83, pp. 101297, 2025. Impact Factor: 2.97
3. Ahmad, A. [55%] – **Paulen, R. [20%]** – Valo, R. [5%] – Fikar, M. [10%] – Engell, S. [10%]: Iterative real-time optimization of a membrane pilot plant. *Control Engineering Practice*, vol. 147, pp. 105907, 2024. Impact Factor: 4.6
4. Maidi, A. [70%] – **Paulen, R. [15%]** – Corriou, J. [15%]: Velocity control design of hyperbolic distributed parameter systems using zeroing dynamics and zeroing-gradient dynamics methods. *Journal of Process Control*, vol. 138, pp. 103210, 2024. Impact Factor: 3.9
5. Mojto, M. [40%] – Lubušký, K. [10%] – Fikar, M. [10%] – **Paulen, R. [40%]**: Data-Based Design of Multi-Model Inferential Sensors. *Computers & Chemical Engineering*, vol. 178, 2023. Impact Factor: 4.0
6. Subramanian, S. [40%] – Lucia, S. [30%] – **Paulen, R. [20%]** – Engell, S. [10%]: Tube-enhanced multi-stage model predictive control for flexible robust control of constrained linear systems with additive and parametric uncertainties. *International Journal of Robust and Nonlinear Control*, no. 9, vol. 31, pp. 4458–4487, 2021. Impact Factor: 3.20
7. Mojto, M. [40%] – Lubušký, K. [10%] – Fikar, M. [20%] – **Paulen, R. [30%]**: Data-based design of inferential sensors for petrochemical industry. *Computers & Chemical Engineering*, vol. 153, pp. 107437, 2021. Impact Factor: 4.0
8. Gottu Mukkula, A. R. [20%] – Mateáš, M. [5%] – Fikar, M. [5%] – **Paulen, R. [70%]**: Robust multi-stage model-based design of optimal experiments for nonlinear estimation. *Computers & Chemical Engineering*, vol. 155, pp. 107499, 2021. Impact Factor: 4.0
9. Kusumo, K. [30%] – Gomoescu, L. [25%] – **Paulen, R. [15%]** – García Muñoz, S. [5%] – Pantelides, C. C. [5%] – Shah, N. [5%] – Chachuat, B. [15%]: Bayesian Approach to Probabilistic Design Space Characterization: A Nested Sampling Strategy. *Industrial & Engineering Chemistry Research*, no. 6, vol. 59, pp. 2396–2408, 2020. Impact Factor: 3.9
10. Thangavel, S. [75%] – **Paulen, R. [15%]** – Engell, S. [10%]: Robust Multi-Stage Nonlinear Model Predictive Control Using Sigma Points. *Processes*, no. 7, vol. 8, pp. 0851, 2020. Impact Factor: 3.5
11. Sharma, A. [60%] – Valo, R. [5%] – Kalúz, M. [5%] – **Paulen, R. [10%]** – Fikar, M. [20%]: Implementation of optimal strategy to economically improve batch membrane separation. *Journal of Process Control*, vol. 76, pp. 155–164, 2019. Impact Factor: 3.9
12. **Paulen, R. [95%]** – Fikar, M. [5%]: Dynamic real-time optimization of batch processes using Pontryagin's minimum principle and set-membership adaptation. *Computers & Chemical Engineering*, vol. 128, pp. 488–495, 2019. Impact Factor: 4.0
13. **Paulen, R. [95%]** – Fikar, M. [5%]: Dual-Control-Based Approach to Batch Process Operation under Uncertainty Based on Optimality-Conditions Parametrization. *Industrial & Engineering Chemistry Research*, no. 30, vol. 58, pp. 13508–13516, 2019. Impact Factor: 3.9

14. Gottu Mukkula, A. R. [50%] – **Paulen, R. [50%]**: Optimal experiment design in nonlinear parameter estimation with exact confidence regions. *Journal of Process Control*, vol. 83, pp. 187–195, 2019. Impact Factor: 3.9
15. Peric, N. [20%] – **Paulen, R. [30%]** – Villanueva, M. [10%] – Chachuat, B. [40%]: Set-membership nonlinear regression approach to parameter estimation. *Journal of Process Control*, vol. 70, pp. 80–95, 2018. Impact Factor: 3.9
16. Thangavel, S. [30%] – Lucia, S. [30%] – **Paulen, R. [30%]** – Engell, S. [10%]: Dual robust nonlinear model predictive control: A multi-stage approach. *Journal of Process Control*, vol. 72, pp. 39–51, 2018. Impact Factor: 3.9
17. Sharma, A. [30%] – Jelemenský, M. [20%] – **Paulen, R. [20%]** – Fikar, M. [30%]: Modeling and optimal operation of batch closed-loop diafiltration processes. *Chemical Engineering Research and Design*, vol. 122, pp. 198–210, 2017. Impact Factor: 3.9
18. Gottu Mukkula, A. R. [35%] – **Paulen, R. [65%]**: Model-based design of optimal experiments for nonlinear systems in the context of guaranteed parameter estimation. *Computers & Chemical Engineering*, vol. 99, pp. 198–213, 2017. Impact Factor: 4.0
19. Wenzel, S. [55%] – **Paulen, R. [25%]** – Beisheim, B. [5%] – Krämer, S. [5%] – Engell, S. [10%]: Market-Based Coordination of Shared Resources in Cyber-physical Production Sites. *Chemie Ingenieur Technik*, no. 5, vol. 89, pp. 636–644, 2017. Impact Factor: 2.7
20. Jelemenský, M. [40%] – Sharma, A. [25%] – **Paulen, R. [25%]** – Fikar, M. [10%]: Time-optimal control of diafiltration processes in the presence of membrane fouling. *Computers & Chemical Engineering*, vol. 91, pp. 343–351, 2016. Impact Factor: 4.0
21. **Paulen, R. [50%]** – Villanueva, M. [10%] – Chachuat, B. [40%]: Guaranteed parameter estimation of non-linear dynamic systems using high-order bounding techniques with domain and CPU-time reduction strategies. *IMA Journal of Mathematical Control and Information*, no. 3, vol. 33, pp. 563–587, 2016. Impact Factor: 1.9
22. **Paulen, R. [40%]** – Jelemenský, M. [25%] – Kovacs, Z. [10%] – Fikar, M. [25%]: Economically optimal batch diafiltration via analytical multi-objective optimal control. *Journal of Process Control*, vol. 28, pp. 73–82, 2015. Impact Factor: 3.9
23. Martí, R. [35%] – Lucia, S. [25%] – Sarabia, D. [10%] – **Paulen, R. [20%]** – Engell, S. [5%] – de Prada, C. [5%]: Improving scenario decomposition algorithms for robust nonlinear model predictive control. *Computers & Chemical Engineering*, vol. 79, pp. 30–45, 2015. Impact Factor: 4.0
24. Jelemenský, M. [40%] – **Paulen, R. [25%]** – Fikar, M. [25%] – Kovacs, Z. [10%]: Time-Optimal Operation of Multi-Component Batch Diafiltration. *Computers & Chemical Engineering*, vol. 83, pp. 131–138, 2015. Impact Factor: 4.0
25. **Paulen, R. [70%]** – Benyahia, B. [10%] – Latifi, M. A. [10%] – Fikar, M. [10%]: Analysis of optimal operation of a fed-batch emulsion copolymerization reactor used for production of particles with core-shell morphology. *Computers & Chemical Engineering*, vol. 66, pp. 233–243, 2014. Impact Factor: 4.0
26. **Paulen, R. [40%]** – Jelemenský, M. [30%] – Fikar, M. [15%] – Kovacs, Z. [15%]: Optimal balancing of temporal and buffer costs for ultrafiltration/diafiltration processes under limiting flux conditions. *Journal of Membrane Science*, vol. 444, pp. 87–95, 2013. Impact Factor: 6.4
27. Foley, G. [20%] – **Paulen, R. [20%]** – Fikar, M. [20%] – Kovacs, Z. [20%] – Czermak, P. [20%]: Comments on “Diafiltration under condition of quasi-constant membrane surface concentration” by R. Field [*J. Membr. Sci.* 383 (1–2) (2011) 301–302]. *Journal of Membrane Science*, vol. 390–391, pp. 285–285, 2012. Impact Factor: 6.4
28. **Paulen, R. [35%]** – Fikar, M. [20%] – Foley, G. [20%] – Kovacs, Z. [20%] – Czermak, P. [5%]: Optimal feeding strategy of diafiltration buffer in batch membrane processes. *Journal of Membrane Science*, vol. 411–412, pp. 160–172, 2012. Impact Factor: 6.4
29. **Paulen, R. [25%]** – Foley, G. [25%] – Fikar, M. [25%] – Kovacs, Z. [15%] – Czermak, P. [10%]: Minimizing the process time for ultrafiltration/diafiltration under gel polarization

conditions. *Journal of Membrane Science*, no. 1-2, vol. 380, pp. 148–154, 2011. Impact Factor: 6.4

30. **Paulen, R. [30%]** – Fikar, M. [30%] – Kovacs, Z. [30%] – Czermak, P. [10%]: Process optimization of diafiltration with time-dependent water adding for albumin production. *Chemical Engineering and Processing: Process Intensification*, no. 8, vol. 50, pp. 815–821, 2011. Impact Factor: 4.2

2 x ADM

1. Wenzel, S. [50%] – **Paulen, R. [25%]** – Stojanovski, G. [5%] – Krämer, S. [5%] – Beisheim, B. [5%] – Engell, S. [10%]: Optimal resource allocation in industrial complexes by distributed optimization and dynamic pricing. *at - Automatisierungstechnik*, no. 6, vol. 64, pp. 428–442, 2016.
2. Tran, T. B. L. [60%] – Törnngren, M. [10%] – Nguyen, H. D. [5%] – **Paulen, R. [10%]** – Gleason, N. W. [10%] – Duong, T. H. [5%]: Trends in preparing cyber-physical systems engineers. *Cyber-Physical Systems*, no. 2, vol. 5, pp. 65–91, 2019.

### 3. Article from a proceedings and monographs

67 x AFC

1. Fáber, R. [50%] – Vaccari, M. [8%] – Bacci di Capaci, R. [8%] – Ľubušký, K. [2%] – Pannocchia, G. [8%] – **Paulen, R. [24%]**: Soft-Sensor-Enhanced Monitoring of an Alkylation Unit via Multi-Fidelity Model Correction. *V Systems and Control Transactions*, vol. 4, pp. 1389–1395, 2025.
2. Fáber, R. [50%] – Mojto, M. [5%] – Ľubušký, K. [5%] – **Paulen, R. [40%]**: From Data to Alarms: Data-driven Anomaly Detection Techniques in Industrial Settings. Editor(i): Flavio Manenti, G.V. Rex Reklaitis, *V 34th European Symposium on Computer Aided Process Engineering /15th International Symposium on Process Systems Engineering*, vol. 53, pp. 2857–2862, 2024.
3. Fáber, R. [50%] – Mojto, M. [5%] – Ľubušký, K. [5%] – **Paulen, R. [40%]**: Integrated Data Analytics and Regression Techniques for Real-time Anomaly Detection in Industrial Processes. *V 12th IFAC Symposium on Advanced Control of Chemical Processes*, pp. 320–325, 2024.
4. Ružička, M. [35%] – Helgeland, I. [5%] – **Paulen, R. [60%]**: Modelling and Simulation of a Forward Osmosis Process. Editor(i): Flavio Manenti, G.V. Rex Reklaitis, *V 34th European Symposium on Computer Aided Process Engineering /15th International Symposium on Process Systems Engineering*, vol. 53, pp. 319–324, 2024.
5. Mojto, M. [45%] – Ľubušký, K. [5%] – Fikar, M. [10%] – **Paulen, R. [40%]**: Data-Driven Indication of Flooding in an Industrial Debutanizer Column. Editor(i): Antonis Kokossis, Michael C. Georgiadis, Efstratios N. Pistikopoulos, *V 33rd European Symposium on Computer Aided Process Engineering*, Elsevier, no. 1, vol. 33, pp. 1001–1006, 2023.
6. Mojto, M. [45%] – Ľubušký, K. [5%] – Fikar, M. [10%] – **Paulen, R. [40%]**: Design of Multi-Model Linear Inferential Sensors with SVM-based Switching Logic. *V IFAC World Congress 2023, Yokohama, Japan*, pp. 2545–2550, 2023.
7. Valero, C. E. [50%] – **Paulen, R. [50%]**: Zonotope Order Reduction in Robust Estimation. *V 23rd International Carpathian Control Conference, IEEE*, vol. 23, pp. 392–397, 2022.
8. Gottu Mukkula, A. R. [40%] – **Paulen, R. [60%]**: Robust Design of Optimal Experiments Considering Consecutive Re-Designs. Editor(i): Luis Ricardez-Sandoval, Jesus Pico, *V 13th IFAC Symposium on Dynamics and Control of Process Systems, including Biosystems, IFAC*, pp. 14–19, 2022.
9. Mojto, M. [40%] – Ľubušký, K. [5%] – Fikar, M. [20%] – **Paulen, R. [35%]**: Support Vector Machine-based Design of Multi-model Inferential Sensors. Editor(i): Ludovic Montastruc, Stephane Negny, *V 32nd European Symposium on Computer Aided Process Engineering*, Elsevier, no. 1, vol. 32, pp. 1045–1050, 2022.

10. Fábér, R. [30%] – Valo, R. [25%] – Roman, M. [15%] – **Paulen, R. [30%]**: Towards Temperature Monitoring in Long-Term Grain Storage. V 2022 Cybernetics & Informatics (K&I), pp. 1–6, 2022.
11. Mojto, M. [40%] – Ľubušký, K. [10%] – Fikar, M. [20%] – **Paulen, R. [30%]**: Data-based Industrial Soft-sensor Design via Optimal Subset Selection. Editor(i): Metin Türkay, Rafiqul Gani, V 31st European Symposium on Computer Aided Process Engineering, Elsevier, vol. 31, pp. 1247–1252, 2021.
12. Valiauga, P. [25%] – Feng, X. [25%] – Villanueva, M. [20%] – **Paulen, R. [20%]** – Houska, B. [10%]: Set-membership Estimation using Ellipsoidal Ensembles. Editor(i): Jong Min Lee, V 16th IFAC Symposium on Advanced Control of Chemical Processes ADCHEM 2021, Elsevier, pp. 596–601, 2021.
13. Valero, C. E. [50%] – **Paulen, R. [50%]**: Set-membership State Estimation for a Continuous Stirred-Tank Reactor. V 9th International Conference on Systems and Control, 2021.
14. Thangavel, S. [60%] – **Paulen, R. [30%]** – Engell, S. [10%]: Adaptive multi-stage NMPC using sigma point principles. V European Control Conference 2020, pp. 196–201, 2020.
15. Thangavel, S. [60%] – Paulen, R. [30%] – Engell, S. [10%]: Multi-stage NMPC using sigma point principles. V 6th Conference on Advances in Control and Optimization of Dynamical Systems ACODS 2020, Elsevier, vol. 53, pp. 386–391, 2020.
16. Thangavel, S. [60%] – **Paulen, R. [30%]** – Engell, S. [10%]: Dual multi-stage NMPC using sigma point principles. Editor(i): Rolf Findeisen, Sandra Hirche, Klaus Janschek, Martin Mönnigmann, V Preprints of the 21st IFAC World Congress (Virtual), Berlin, Germany, July 12-17, 2020, vol. 21, pp. 11394–11401, 2020.
17. **Paulen, R. [40%]** – Gomoescu, L. [30%] – Chachuat, B. [30%]: Nested Sampling Approach to Set-membership Estimation. Editor(i): Rolf Findeisen, Sandra Hirche, Klaus Janschek, Martin Mönnigmann, V Preprints of the 21st IFAC World Congress (Virtual), Berlin, Germany, July 12-17, 2020, vol. 21, pp. 7318–7323, 2020.
18. Gottu Mukkula, A. R. [50%] – Valiauga, P. [10%] – Fikar, M. [5%] – **Paulen, R. [30%]** – Engell, S. [5%]: Experimental Real Time Optimization of a Continuous Membrane Separation Plant. Editor(i): Rolf Findeisen, Sandra Hirche, Klaus Janschek, Martin Mönnigmann, V Preprints of the 21st IFAC World Congress (Virtual), Berlin, Germany, July 12-17, 2020, vol. 21, pp. 11967–11974, 2020.
19. Valero, C. E. [25%] – Villanueva, M. [25%] – Houska, B. [25%] – **Paulen, R. [25%]**: Set-Based State Estimation: A Polytopic Approach. Editor(i): Rolf Findeisen, Sandra Hirche, Klaus Janschek, Martin Mönnigmann, V Preprints of the 21st IFAC World Congress (Virtual), Berlin, Germany, July 12-17, 2020, vol. 21, pp. 11428–11433, 2020.
20. Mojto, M. [40%] – Ľubušký, K. [10%] – Fikar, M. [20%] – **Paulen, R. [30%]**: Advanced Process Control of an Industrial Depropanizer Column using Data-based Inferential Sensors. Editor(i): Sauro Pierucci, Flavio Manenti, Giulia Luisa Bozzano, Davide Manca, V 30th European Symposium on Computer Aided Process Engineering, Elsevier, vol. 30, pp. 1213–1218, 2020.
21. Kusumo, K. [25%] – Gomoescu, L. [25%] – **Paulen, R. [15%]** – García Muñoz, S. [5%] – Pantelides, C. C. [5%] – Shah, N. [5%] – Chachuat, B. [20%]: Nested Sampling Strategy for Bayesian Design Space Characterization. Editor(i): Sauro Pierucci, Flavio Manenti, Giulia Luisa Bozzano, Davide Manca, V 30th European Symposium on Computer Aided Process Engineering, Elsevier, vol. 30, pp. 1957–1962, 2020.
22. Daosud, W. [40%] – Kittisupakorn, P. [5%] – Fikar, M. [5%] – Lucia, S. [10%] – **Paulen, R. [40%]**: Efficient robust nonlinear model predictive control via approximate multi-stage programming: A neural networks based approach. Editor(i): Anton A. Kiss, Edwin Zondervan, Richard Lakerveld, Leyla Özkan, V 29th European Symposium on Computer Aided Process Engineering, Elsevier, vol. 29, pp. 571–576, 2019.
23. Su, J. [25%] – Zha, Y. [15%] – Wang, K. [15%] – Villanueva, M. [15%] – **Paulen, R. [10%]** – Houska, B. [20%]: Interval Superposition Arithmetic for Guaranteed Parameter Estimation. V

- 12th IFAC Symposium on Dynamics and Control of Process Systems, including Biosystems DYCOPS 2019, Elsevier, pp. 574–579, 2019.
24. Villanueva, M. [40%] – Feng, X. [30%] – **Paulen, R. [5%]** – Chachuat, B. [5%] – Houska, B. [20%]: Convex Enclosures for Constrained Reachability Tubes. V 12th IFAC Symposium on Dynamics and Control of Process Systems, including Biosystems DYCOPS 2019, Elsevier, pp. 118–123, 2019.
  25. Valiauga, P. [50%] – **Paulen, R. [50%]**: Moving-horizon Guaranteed Parameter Estimation. V 12th IFAC Symposium on Dynamics and Control of Process Systems, including Biosystems DYCOPS 2019, Elsevier, pp. 112–117, 2019.
  26. Valero, C. E. [50%] – **Paulen, R. [50%]**: Effective Recursive Set-membership State Estimation for Robust Linear MPC. V 12th IFAC Symposium on Dynamics and Control of Process Systems, including Biosystems DYCOPS 2019, Elsevier, pp. 486–491, 2019.
  27. Thangavel, S. [50%] – Subramanian, S. [20%] – **Paulen, R. [15%]** – Engell, S. [15%]: Robust Multi-Stage NMPC under Structural Plant-Model Mismatch without Full-State Measurements. V European Control Conference 2019, IEEE, pp. 781–786, 2019.
  28. Sharma, A. [40%] – Valo, R. [10%] – Kalúz, M. [10%] – **Paulen, R. [20%]** – Fikar, M. [20%]: Experimental validation and comparison of time-optimal and industrial strategy for membrane separation process. V Preprints of the 9th Vienna International Conference on Mathematical Modelling, Vienna, Austria, February 21–23, 2018, pp. 869–874, 2018.
  29. **Paulen, R. [85%]** – Sharma, A. [10%] – Fikar, M. [5%]: Dynamic Real-time Optimization of Batch Membrane Processes using Pontryagin’s Minimum Principle. Editor(i): Anton Friedl, Jiří J. Klemeš, Stefan Radl, Petar S. Varbanov, Thomas Wallek, V 28th European Symposium on Computer Aided Process Engineering, Elsevier, vol. 28, pp. 1045–1050, 2018.
  30. Sharma, U. [40%] – Thangavel, S. [15%] – Gottu Mukkula, A. R. [15%] – **Paulen, R. [30%]**: Effective Recursive Parallelotopic Bounding for Robust Output-Feedback Control. V 18th IFAC Symposium on System Identification, IFAC, pp. 1032–1035, 2018.
  31. **Paulen, R. [95%]** – Fikar, M. [5%]: Dual robust control of batch processes based on optimality-conditions parameterization. V Preprints, 10th IFAC International Symposium on Advanced Control of Chemical Processes Shenyang, Liaoning, China, July 25–27, 2018, Elsevier, pp. 768–773, 2018.
  32. Thangavel, S. [40%] – Aboelnour, M. [20%] – Lucia, S. [15%] – **Paulen, R. [15%]** – Engell, S. [10%]: Robust Dual Multi-stage NMPC using Guaranteed Parameter Estimation. V Preprints of the 6th IFAC Conference on Nonlinear Model Predictive Control, Madison, Wisconsin, USA, pp. 74–79, 2018.
  33. Subramanian, S. [40%] – Lucia, S. [30%] – Baradaran Birjandi, S. A. [10%] – **Paulen, R. [10%]** – Engell, S. [10%]: A Combined Multi-stage and Tube-based MPC Scheme for Constrained Linear Systems. V Preprints of the 6th IFAC Conference on Nonlinear Model Predictive Control, Madison, Wisconsin, USA, pp. 577–582, 2018.
  34. Gottu Mukkula, A. R. [40%] – **Paulen, R. [60%]**: Model-Based Optimal Experiment Design for Nonlinear Parameter Estimation Using Exact Confidence Regions. V Preprints of the 20th IFAC World Congress, Toulouse, France, vol. 20, pp. 14324–14329, 2017.
  35. Jelemenský, M. [55%] – Fikar, M. [15%] – **Paulen, R. [30%]**: Time-Optimal Operation of Membrane Processes in the Presence of Fouling with Set-Membership Parameter Estimation. V Preprints of the 20th IFAC World Congress, Toulouse, France, vol. 20, pp. 4776–4781, 2017.
  36. Wenzel, S. [50%] – **Paulen, R. [30%]** – Beisheim, B. [5%] – Krämer, S. [5%] – Engell, S. [10%]: Adaptive Pricing for Optimal Resource Allocation in Industrial Production Sites. V Preprints of the 20th IFAC World Congress, Toulouse, France, vol. 20, pp. 12957–12962, 2017.
  37. Gottu Mukkula, A. R. [35%] – **Paulen, R. [65%]**: Robust model-based design of experiments for guaranteed parameter estimation. Editor(i): Antonio Espuña, Moisès Graells and Luis Puigjaner, V 27th European Symposium on Computer-Aided Process Engineering, Elsevier, pp. 1639–1644, 2017.

38. Jelemenský, M. [25%] – Klaučo, M. [25%] – **Paulen, R. [25%]** – Lauwers, J. [5%] – Logist, F. [5%] – Van Impe, J. [1%] – Fikar, M. [14%]: Time-Optimal Control and Parameter Estimation of Diafiltration Processes in the Presence of Membrane Fouling. V 11th IFAC Symposium on Dynamics and Control of Process Systems, including Biosystems, vol. 11, pp. 242–247, 2016.
39. Sharma, A. [45%] – Jelemenský, M. [25%] – **Paulen, R. [15%]** – Fikar, M. [15%]: Estimation of membrane fouling parameters for concentrating lactose using nanofiltration. Editor(i): Zdravko Kravanja, Miloš Bogataj, V 26th European Symposium on Computer Aided Process Engineering, Elsevier B.V, Portorož, Slovenia, vol. 26, pp. 151–156, 2016.
40. Gottu Mukkula, A. R. [40%] – **Paulen, R. [60%]**: Optimal dynamic experiment design for guaranteed parameter estimation. Editor(i): Zdravko Kravanja, Miloš Bogataj, V 26th European Symposium on Computer Aided Process Engineering, Elsevier B.V, Portorož, Slovenia, vol. 26, pp. 757–762, 2016.
41. Gottu Mukkula, A. R. [40%] – **Paulen, R. [60%]**: Optimal Design of Dynamic Experiments for Guaranteed Parameter Estimation. V American Control Conference, Boston, Massachusetts, USA, pp. 1826–1831, 2016.
42. **Paulen, R. [40%]** – Nazari, S. [25%] – Shahidi, S. [15%] – Sonntag, C. [10%] – Engell, S. [10%]: Primal and Dual Decomposition for Distributed MPC – Theory, Implementation, and Comparison in a SoS Simulation Framework. V 24th Mediterranean Conference on Control and Automation (MED'16), IEEE, Athens, Greece, vol. 24, pp. 286–291, 2016.
43. Wenzel, S. [60%] – **Paulen, R. [25%]** – Krämer, S. [5%] – Beisheim, B. [5%] – Engell, S. [5%]: Shared Resource Allocation in an Integrated Petrochemical Site by Price-based Coordination Using Quadratic Approximation. V European Control Conference 2016, Aalborg, Denmark, pp. 1045–1050, 2016.
44. Wenzel, S. [60%] – **Paulen, R. [25%]** – Krämer, S. [5%] – Beisheim, B. [5%] – Engell, S. [5%]: Price Adjustment in Price-based Coordination Using Quadratic Approximation. Editor(i): Zdravko Kravanja, Miloš Bogataj, V 26th European Symposium on Computer Aided Process Engineering, Elsevier B.V, Portorož, Slovenia, vol. 26, pp. 193–198, 2016.
45. Shamim, F. [30%] – Hernández, R. [30%] – **Paulen, R. [30%]** – Engell, S. [10%]: A hierarchical coordination approach to the optimal operation of a sugar crystallization process. Editor(i): Zdravko Kravanja, Miloš Bogataj, V 26th European Symposium on Computer Aided Process Engineering, Elsevier B.V, Portorož, Slovenia, vol. 26, pp. 703–708, 2016.
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In Bratislava, on 31. 1. 2026

prof. Ing. Miroslav Fikar, DrSc.

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name and signature of the institute director

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signature of the applicant

prof. Ing. Milan Polakovič, CSc.

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name and signature of the vice-dean  
for research activities