



LEHRSTUHL FÜR CHEMISCHE VERFAHRENSTECHNIK

Publikationen

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7 Monographien und Buchkapitel
72 Begutachtete Veröffentlichungen
231 Konferenzbeiträge

Arbeiten mit wissenschaftlicher Qualitätssicherung

Hamel, C.

Experimentelle und modellbasierte Studien zur Herstellung kurzkettiger Alkene sowie von Synthesegas unter Verwendung poröser und dichter Membranen, docupoint, ISBN-13: 978-3939665731, 2008

Hamel, C.

Beeinflussung der Produktselektivität homogener und heterogener katalysierter Reaktionen,

> https://pure.mpg.de/rest/items/item_2253046/component/file_2463605/content

(https://pure.mpg.de/rest/items/item_2253046/component/file_2463605/content), 2015

Membrane Reactors: Distributing reactants to Improve Selectivity and Yield, Wiley-VCH, ISBN-13: 978-3527320394, 2010

Hamel, C., et al.

Chapter 1: Basic Problems of Chemical Reaction Engineering and Potential of Membrane Reactors

Chapter 5: Packed-Bed Membrane Reactors

Chapter 9: Comparison of different membrane reactors

Chemische Verfahrenstechnik: Berechnung, Auslegung und Betrieb chemischer Reaktoren

Hertwig, K., Martens, L., Hamel, C.

DE GRUYTER Verlag, ISBN-13: 978-3110500998, 2018

Integrated Chemical Processes in Liquid Multiphase Systems - From chemical reaction to process design, De Gruyter, under review, 2021

Chapter 3.2: Kinetic Modelling of Complex Catalytic Reactions in Multiphase Systems

Begutachtete Artikel (72)

- ▶ 1. Hamel, C., Thomas S., Schädlich, K., Seidel-Morgenstern A.: Theoretical analysis of reactant dosing concepts to perform parallel-series reactions. *Chemical Engineering Science* 58, 4483-4492, 2003
- ▶ 2. Hamel, C., Joshi, M., Tsotsas, E., Seidel-Morgenstern, A.: Aspects of describing stagewise dosing of reactants into fixed-bed and membrane reactors using 2D models. *ECCE 4th European Congress of Chemical Engineering – Topic 7, Seq. No.: P7.2-049*, 2003
- ▶ 3. Klose, F., Seidel-Morgenstern, A., Tóta, Á., Joshi, M., Weiss, H., Hamel, C., Wolff, T., Alandjiyska, M.: Partial oxidation of ethane: the potential of membrane reactors. *Journal of the University of Chemical Technology and Metallurgy* 38, 631-638, 2003
- ▶ 4. Tóta, Á., Hamel, C., Thomas, S., Joshi, M., Klose, F., Seidel-Morgenstern, A.: Theoretical and Experimental Investigation of Concentration and Contact Time Effects in Membrane Reactors. *Chemical Engineering Research and Design* 82, 236-244, 2004
- ▶ 5. Klose, F., Joshi, M., Hamel, C., Seidel-Morgenstern, A.: Selective oxidation of ethane over a VOx/gamma-Al₂O₃ catalyst: investigation of the reaction network. *Applied Catalysis A* 260, 1, 101-110, 2004
- ▶ 6. Hamel, C., Bron, M., Claus, P., Seidel-Morgenstern, A.: Experimental and model-based study of the hydrogenation of acrolein to allyl alcohol in fixed-bed and membrane reactors. *International Journal of Chemical Reactor Engineering* 3, Seq. No.: A10, 2005
- ▶ 7. Kleinert, A., Grubert, G., Pan, X., Hamel, C., Seidel-Morgenstern, A., Caro, J.: Compatibility of hydrogen transfer via Pd-membranes with the rates of heterogeneously catalysed steam reforming. *Catalysis Today* 104, 2-4, 267-273, 2005
- ▶ 8. Yang, J., Čermáková, J., Uchytíl, P., Hamel, C., Seidel-Morgenstern, A.: Gas phase transport, adsorption and surface diffusion in a porous glass membrane. *Catalysis Today* 104, 2-4, 344-351, 2005
- ▶ 9. Tóta, Á., Hamel, C., Seidel-Morgenstern, A.: Experimentelle Untersuchung der mehrstufig verteilten Reaktandendosierung in Festbett-Membranreaktoren. *Chemie Ingenieur Technik* 77, 8, 980, 2005
- ▶ 10. Hamel, C., Seidel-Morgenstern, A., Schiestel, T., Werth, S., Wang, H., Tablet, C., Caro, J.: Experimental and modeling study of the O₂-enrichment by perovskite fibers. *AIChE Journal* 52, 9, 3118-3125, 2006
- ▶ 11. Weyd, M., Richter, H., Voigt, I., Hamel, C., Seidel-Morgenstern, A.: Transport and separation properties of asymmetrically structured zeolite membranes in pervaporation. *Desalination* 199, 1-3, 308-309, 2006
- ▶ 12. Hamel, C., Seidel-Morgenstern, A.: Selectivity and yield improvement by optimised reactant dosing. *CHISA 2006 – 17th International Congress of Chemical and Process Engineering: CD-ROM of Full Texts, Seq. No.: H3.3*, 2006
- ▶ 13. Joshi, M., Tóta, Á., Hamel, C., Wolff, T., Klose, F., Seidel-Morgenstern, A.: Statistische Analyse von Festbettreaktorexperimenten für die Abschätzung von kinetischen Parametern. *Chemie Ingenieur Technik* 78, 9, 2006
- ▶ 14. Caro, J., Caspary, K. J., Hamel, C., Hoting, B., Kölsch, P., Langanke, B., Nassauer, K., Schiestel, T., Schmidt, A., Schomäcker, R., Seidel-Morgenstern, A., Tsotsas, E., Voigt, I., Wang, H., Warsitz, R., Werth, S., Wolf, A.: Catalytic Membrane Reactors for Partial Oxidation Using Perovskite Hollow Fiber Membranes and for Partial Hydrogenation Using a Catalytic Membrane Contactor. *Industrial & Engineering Chemistry Research* 46, 8, 2286-2294, 2007
- ▶ 15. Hamel, C., Tóta, Á., Klose, F., Tsotsas, E., Seidel-Morgenstern, A.: Experimental and model-based analysis of single and multi-stage membrane reactors for the oxidation of short-chain hydrocarbons in a pilot scale. *ECCE-6 – 6th European Congress of Chemical Engineering, Seq. No.: T2-2b / 3386*, 2007
- ▶ 16. Hamel, C., Wang, H., Caro, J., Tsotsas, E., Seidel-Morgenstern, A.: Simulation study of membrane supported oxidation of methane with simultaneous steam reforming using O₂-selective Perovskite hollow fibres. *ECCE-6 – 6th European Congress of Chemical Engineering, Seq. No.: EPIC-1/3412*, 2007
- ▶ 17. Caro, J., Caspary, K. J., Hamel, C., Hoting, B., Kölsch, P., Langanke, B., Nassauer, K., Noack, M., Schiestel, T., Schroeder, M., Byun, Y. C., Seidel-Morgenstern, A., Tsotsas, E., Wang, H., Werth, S.: Perovskit-Hohlfasermembranen für die katalytische Partialoxidation von Methan zu Synthesegas. *Chemie Ingenieur Technik* 79, 6, 831-842, 2007
- ▶ 18. Weyd, M., Richter, H., Puhlfürß, P., Voigt, I., Hamel, C., Seidel-Morgenstern, A.: Transport of binary water-ethanol mixture through a multilayer hydrophobic zeolite membrane. *Journal of Membrane Science* 307, 2, 239-248, 2008
- ▶ 19. Hamel, C., Tóta, Á., Klose, F., Tsotsas, E., Seidel-Morgenstern, A.: Analysis of single and multi-stage membrane reactor for the oxidation of short-chain alkanes – simulation study and pilot scale experiments. *Chemical Engineering Research & Design* 86, 7, 753-764, 2008
- ▶ 20. Marín, P., Hamel, C., Ordóñez, S., Díez, F. V., Tsotsas, E., Seidel-Morgenstern, A.: Analysis of a fluidized bed membrane reactor for butane partial oxidation to maleic anhydride: 2D modelling. *Chemical Engineering Science* 65, 11, 3538-3548, 2010
- ▶ 21. Lehmann, T., Wolff, T., Zahn, V. M., Veit, P., Hamel, C., Seidel-Morgenstern, A.: Preparation of Ni-MCM-41 by equilibrium adsorption - Catalytic evaluation for the direct conversion of ethene to propene. *Catalysis Communications* 12, 5, 368-374, 2011
- ▶ 22. Hamel, C., Wolff, T., Seidel-Morgenstern, A.: Compatibility of Transport and Reaction in Membrane Reactors Used for the Oxidative Dehydrogenation of Short-Chain Hydrocarbons. *International Journal of Chemical Reactor Engineering* 9, Seq. No. A12, 2011
- ▶ 23. Hamel, C., Wolff, T., Pushpavanam, S., Seidel-Morgenstern, A.: Multi-component Dosing in Membrane Reactors Including Recycling – Concept and Demonstration for the Oxidative Dehydrogenation of Propane. *Industrial & Engineering Chemistry Research*, 50, 12895–12903, 2011
- ▶ 24. Gao, K., Yang, J., Hamel, C., Seidel-Morgenstern, A.: Kinetic Analysis of Methane Dehydro-Aromatization Reaction in Fixed Bed Reactor and Membrane, *Network Journal of Graduate School of DUT*, 2011
- ▶ 25. Lehmann, T., Wolff, T., Hamel, C., Veit, P., Garke, B., Seidel-Morgenstern, A.: Physico-chemical characterization of

- Ni/MCM-41 synthesized by a template ion exchange approach, *Microporous and Mesoporous Materials* 151, 113–125, 2012
- ▶ 26. Hoang, M. D., Wozny, G., Markert, J., Hamel, C., Seidel-Morgenstern, A., Arellano-Garcia, H., Brunsch, Y., Behr, A.: Model-Based Optimal Design of Experiments for Determining Reaction Network Structures Computer Aided Chemical Engineering, Volume 31, Elsevier, 705-709, ISBN:978-0-444-59505-8, 2012
 - ▶ 27. Markert, J., Brunsch, Y., Munkelt, T., Kiedorf, G., Behr, A., Hamel, C., Seidel-Morgenstern A.: Analysis of the reaction network for the Rh-catalyzed hydroformylation of 1-dodecene in a thermomorphic multicomponent solvent system, *Applied Catalysis A*, 462–463, 287–295, 2013
 - ▶ 28. Alvarado Perea, L., Wolff, T., Veit, P., Hamel, C., Seidel-Morgenstern, A.: Alumino-mesostructured Ni catalysts for the direct conversion of ethene to propene, *Journal of Catalysis* 305, 154–168, 2013
 - ▶ 29. Munkelt, T., Küster, C., Hamel, C., Enke, D., Seidel-Morgenstern, A.: Rückgewinnung und Enantiomentrennung chiraler Anästhetika mittels modifizierter poröser Gläser, *Chemie Ingenieur Technik*, 01/2013; 85(11). DOI: 10.1002/cite.201300076, 2013
 - ▶ 30. Kiedorf, G., Hoang, M. D., Markert, J., Müller, A., Jörke, A., Arellano-Garcia, H., Seidel-Morgenstern, A., Hamel, C.: Kinetic description of the hydroformylation of 1-dodecene in a thermomorphic solvent system by using rhodium-biphenylphosphine catalyst, *Chemical Engineering Science*, 115, 31–48, 2014
 - ▶ 31. Jörke, A., Seidel-Morgenstern, A., Hamel, C.: Isomerization of 1-decene: Estimation of thermodynamic properties, equilibrium composition calculation and experimental validation using a Rh-BiPhePhos catalyst, *Chemical Engineering Journal* 260, 513–523, 2015
 - ▶ 32. Hentschel, B., Kiedorf, G., Gerlach, M., Markert, J., Hamel, C., Seidel-Morgenstern, A., Freund, H.-J., Sundmacher, K.: Experimental validation and optimal reaction route of the hydroformylation of 1-dodecene in a thermomorphic solvent system *Chemical Engineering Science*, 54, 6, 1755–1765, 2015
 - ▶ 33. Jörke, A., Triemer, S., Seidel-Morgenstern, A., Hamel, C.: Kinetic Investigation Exploiting Local Parameter Subset Selection: Isomerization of 1-Decene using a Rh-Biphenylphosphine Catalyst, *Chemie Ingenieur Technik*, 87, 6, 713–725, 2015
 - ▶ 34. Jörke, A., Kohls, E., Triemer, S., Seidel-Morgenstern, A., Hamel, C., Stein, M.: Resolution of Structural Isomers of Complex Reaction Mixtures in Homogeneous Catalysis, *Chemical Engineering and Processing: Process Intensification*, 102 229–237, 2016
 - ▶ 35. Gao, K., Yang, J., Seidel-Morgenstern, A., Hamel, C.: Methane Dehydro-Aromatization: Potential of a Mo/MCM-22 Catalyst and Hydrogen-Selective Membranes: *Chem. Ing. Tech.* 2016, 88, No. 1–2, 168–176, 2016
 - ▶ 36. Kiedorf, G., Moreno Garcia, M., Wolff, T., Seidel-Morgenstern, A., Hamel, C.: Adsorption measurements of reactants at a CrOx/γ-Al₂O₃ catalyst, *CES*, 149, 266–276, 2016
 - ▶ 37. Kiedorf, G., Wolff, T., Seidel-Morgenstern, A., Hamel, C.: Reaction kinetic analysis of the total oxidation of C₂H₄, C₃H₆ and CO on a Cr_xO₃ / γ-Al₂O₃ catalyst using separately measured adsorption isotherm data, *CIT*, 88, 1746–1760, 2016
 - ▶ 38. Jörke, A., Triemer, S., Seidel-Morgenstern, A., Hamel, C.: Rhodium-BiPhePhos catalyzed hydroformylation studied by operando FTIR spectroscopy: Catalyst activation and rate determining step, *Journal of Molecular Catalysis A: Chemical*, DOI 10.1016/j.molcata.2016.10.028, 2016
 - ▶ 39. Jörke, A., Gaide, T., Behr, A., Vorholt, A., Seidel-Morgenstern, A., Hamel, C.: Hydroformylation and tandem isomerization of n-decenes using a rhodium-BiPhePhos catalyst: Kinetic modeling, reaction network analysis and optimal reaction control, *Chemical Engineering Journal*, DOI: 10.1016/j.cej.2016.12.070, 313, 382–397, 2017
 - ▶ 40. Gaide, T., Jörke, A., Schlipköter, K. E., Seidel-Morgenstern, A., Hamel, C., Behr, A., Vorholt, A.: Isomerization / hydroformylation tandem reaction of a decene isomeric mixture with subsequent catalyst recycling in thermomorphic solvent systems, *Applied Catalysis A*, DOI: 10.1016/j.apcata.2016.12.011, 532, 50–56, 2017
 - ▶ 41. Alvarado Perea, L., Wolff, T., Hamel, C., Seidel-Morgenstern, A.: Experimental study of the deactivation of Ni/AlMCM-41 catalyst in the direct conversion of ethene to propene, *Applied Catalysis: A* 533, 121–131, 2017
 - ▶ 42. Alvarado Perea, L., Wolff, T., Felischak, M., Hamel, C., Seidel-Morgenstern, A.: Experimental reaction network investigation of the ethene to propene reaction on Ni/AlMCM-41, *Chemie Ingenieur Technik*, 89, 7, 903–914, 2017
 - ▶ 43. Gerlach, M., Abdul Wajid, D., Hilfert, L., Edelmann, F. T., Seidel-Morgenstern, A., Hamel, C.: Impact of minor amounts of hydroperoxides on rhodiumcatalyzed hydroformylation of long-chain olefins, *Catalysis Science & Technology*, 7, 1465–1469, 2017
 - ▶ 44. Lemberg, M., Gerlach, M., Kohls, E., Hamel, C., Seidel-Morgenstern, A., Stein, M., Sadowski, G.: Solvent effects on the reaction equilibrium of the 1-dodecene hydroformylation, *AIChE Journal*, DOI: 10.1002/aic.15782, 63, 10, 4576–4585, 2017
 - ▶ 45. Mueller, I., Kiedorf, G., Runne, E., Seidel-Morgenstern, A., Hamel, C.: Synthesis, Kinetic Analysis and Modeling of Galactooligosaccharides Formation, *Chemical Engineering Research and Design*, 130, 154–166, 2018
 - ▶ 46. Mueller, I., Kiedorf, G., Runne, E., Pottratz, I., Seidel-Morgenstern, A., Hamel, C.: Process Control and Yield Enhancement of the Galactooligosaccharide Formation, *Chemie Ingenieur Technik*, DOI: 10.1002/cite.201700152, 2018
 - ▶ 47. Gerlach, M., Kirschtowski, S., Seidel-Morgenstern, A., Hamel, C.: Kinetic Modeling of the Palladium-Catalyzed Isomerization and Methoxycarbonylation of 1-Decene, *Chemie Ingenieur Technik*, DOI: 10.1002/cite.201700162, 2018
 - ▶ 48. Brune, A., Wolff, T., Seidel-Morgenstern, A., Hamel, C.: Analysis of Membrane Reactors for Integrated Coupling of Oxidative and Thermal Dehydrogenation of Propane, *Chemie Ingenieur Technik*, 91, 5, 645–650, 2019
 - ▶ 49. Felischak, M., Wolff, T., Alvarado-Perea, L., Seidel-Morgenstern, A., Hamel, C.: Influence of process parameters on single bed Ni/(Al)MCM-41 for the production of propene from ethene feedstock, *Chemical Engineering Science*, D-19-01631R1, 2019
 - ▶ 50. Kirschtowski, S., Kadar, C., Seidel-Morgenstern, A., Hamel, C.: Kinetic Modeling of the Rhodium-Catalyzed Reductive Amination of 1-Undecanal in different solvent systems, *Chemie Ingenieur Technik*, DOI: 10.1002/cite.201900135, 2020
 - ▶ 51. Felischak, M., Wolff, T., Alvarado-Perea, L., Seidel-Morgenstern, A., Hamel, C.: Detailed kinetic model for the reaction of ethene to propene on Ni aluminized mesoporous MCM-41, *CIT*, DOI: 10.1002/cite.201900139, 2020
 - ▶ 52. Alvarado Perea, L., Felischak, M., Wolff, T., López Gaona, J. A., Hamel, C., Seidel-Morgenstern, A.: Propene production at low temperature by bimetallic Ni-Mo and Ni-Re catalysts on mesoporous MCM-41 prepared using template ion exchange, *Fuel*, 284, JFUE-D-20-01797R2, 2021
 - ▶ 53. Kirschtowski, S., Jameel, F., Stein, M., Seidel-Morgenstern, A., Hamel, C.: Kinetics of the Reductive Amination of 1-

Undecanal in Thermomorphic Multicomponent System, *Chemical Engineering Science*, 230, 116187, doi:10.1016/j.ces.2020.116187, 2021

- ▶ 54. Brune, A., Seidel-Morgenstern, A., Hamel, C.: Analysis and Model-Based Description of Deactivation and Regeneration of VOx Catalyst for Selective Dehydrogenation of Propane, *Journal Catalysis – Special Issue: Design of Heterogeneous Catalysts and Adsorbents*, DOI: 10.3390/catal10121374, 2020
- ▶ 55. Walter, J. P., Brune, A., Wolff, T., Seidel-Morgenstern, A., Hamel, C.: Model-based analysis of fixed-bed and membrane reactors of various scale, *Chemie Ingenieur Technik*, DOI: 10.1002/cite.202000227, 2021
- ▶ 56. Pottratz, I., Schmidt, C., Mueller, I., Hamel, C.: Immobilization of β -galactosidase on monolithic membrane discs for the continuous production of the prebiotics galacto oligosaccharides, *Chemie Ingenieur Technik*, DOI: 10.1002/cite.202000231, 2021
- ▶ 57. Mueller, I., Seidel-Morgenstern, A., Hamel, C.: Simulated-Moving-Bed Technology for Purification of Galacto-Oligosaccharides, *Separation and Purification Technology*, doi.org/10.1016/j.seppur.2021.118829, 2021
- ▶ 58. Walter, J.P., Brune, A., Seidel-Morgenstern, A., Hamel, C.: Process Intensification of the Propane Dehydrogenation Considering Coke Formation, Catalyst Deactivation and Regeneration—Transient Modelling and Analysis of a Heat-Integrate Membrane Reactor, doi.org/10.3390/catal11091056, 2021
- ▶ 59. A. Brune, A. Geschke, A. Seidel-Morgenstern, C. Hamel: Modelling and Simulation of Catalyst Deactivation during Propane Dehydrogenation - Comparison of Different Modelling Approaches. *Chemical Engineering and Processing: Process Intensification*, doi.org/10.1016/j.cep.2021.108689, 2021
- ▶ 60. Hamel, C., Seidel-Morgenstern, A.: Potential of membranes for process intensification of selective oxidations on catalyst reactor and total process level, *Chemie Ingenieur Technik, Special Issue Caro*, doi.org/10.1002/cite.202100130, 94, 1-2, 1-15 2022
- ▶ 61. Felischak, M., Kaps, L., Hamel, C., Nikolic, D., Petkovska, M., Seidel-Morgenstern, A.: Analysis and experimental demonstration of forced periodic operation of an adiabatic stirred tank reactor: Simultaneous modulation of inlet concentration and total flow-rate, *Chemical Engineering Journal*, DOI: 10.1016/j.cej.2021.132930, 430, 2022, 132930
- ▶ 62. Pottratz, I., Mueller, I., Hamel, C.: Potential and Scale-Up of Pore-Through-Flow Membrane Reactors for the Production of Prebiotic Galacto-Oligosaccharides with Immobilized β -Galactosidase, *Catalysis – Special Issue “Enzyme Bioreactor Design”*, 12, 7. DOI: 10.3390/catal12010007, 2022
- ▶ 63. Felischak, M., Wolff, T., Alvarado Perea, L., Seidel-Morgenstern, A., Hamel, C.: Evaluation of catalysts for the metathesis of ethene and 2-butene to propene, *Catalysis*, 12, 188. <https://doi.org/10.3390/catal12020188>, 2022
- ▶ 64. Kortuz, W., Kirschtowski, S., Seidel-Morgenstern, A., Hamel, C.: Kinetics of Rhodium-catalyzed Hydroaminomethylation of 1-Decene in a thermomorphic solvent system, *Chemie Ingenieur Technik*, doi.org/10.1002/cite.202100180, 2022
- ▶ 65. Mueller, I., Runne, E., Hamel, C.: Comparative study on mechanistic kinetic modeling of the biocatalysed synthesis of prebiotics, *Chemie Ingenieur Technik*, DOI: 10.1002/cite.202100190, 94, No. 5, 1–7, 2022
- ▶ 66. Gerlach, M., Forze, J., Seidel-Morgenstern, A., Stein, M., Hamel, C.: Operando Characterization of Rhodium Catalyst Degradation in Hydroformylation, *Catalysis, Science and Technology*, DOI: 10.1039/d2cy01807a, 2023
- ▶ 67. Walter, J.P., Hamel, C.: Selective oxidation of methanol to green oxygenates-feasibility study of fixed-bed and membrane reactor, *Chemie Ingenieur Technik*, DOI: 10.1002/cite.202200202, 2023
- ▶ 68. Walter, J.P., Hamel, C.: Selective Methanol Oxidation to Green Oxygenates - Catalyst Screening, Reaction Kinetics and Simulation Studies of a Fixed-bed Reactor and a Membrane Distributor, *Catalysis*, submitted
- ▶ 69. Hofmann, K., Hamel, C.: Screening and Scale-up of Commercial Nanofiltration Membranes for Concentration of Lactose and Real Whey Permeate, *Chemie Ingenieur Technik*, DOI: 10.1002/cite.202200203, 2023
- ▶ 70. Hofmann, K., Hamel, C.: Potential of Integrated Semi-continuous Fermentation and Filtration Processes for Efficiency Enhancement, *Membranes*, DOI: 10.3390/membranes13020173, 13, 173, 2023
- ▶ 71. Kortuz, W., Kirschtowski, S., Seidel-Morgenstern, A., Hamel, C.: Mechanistic kinetic modeling of the rhodium-catalyzed tandem hydroaminomethylation of 1-decene in a thermomorphic solvent system, *Catalyst Communications*, DOI: 10.1016/j.catcom.2023.106633, 2023
- ▶ 72. Rätze, K.H.G., Kortuz, W., Kirschtowski, S., Hamel, C., Sundmacher, K.: Model-Based Identification of a Reaction Kinetic Model for the Hydroaminomethylation of 1-Decene in a Thermomorphic Multiphase System, *AIChE Journal*, submitted

Arbeiten mit und ohne wissenschaftlicher Qualitätssicherung

Konferenzbeiträge (231)

- ▶ 1. Hamel, C., Thomas, S., Klose, F., Schädlich, K., Seidel-Morgenstern, A.: Selektivitätssteigerung in Membranreaktoren. Fachausschuss-Sitzung „Reaktionstechnik“, Frankfurt a. M., Germany, 13.-14.01.2003
- ▶ 2. Tóta, Á., Hamel, C., Thomas, S., Joshi, M., Klose, F., Seidel-Morgenstern, A.: Experimentelle Untersuchung von Konzentrations- und Verweilzeiteffekten in Membranreaktoren (Poster). XXXVI. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 19.-21.03.2003
- ▶ 3. Hamel, C., Thomas, S., Schädlich, K., Seidel-Morgenstern, A.: Theoretische Untersuchung von Folge- und Parallelreaktionen in Membranreaktoren (Poster). XXXVI. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 19.-21.03.2003
- ▶ 4. Klose, F., Hamel, C., Joshi, M., Tóta, Á., Seidel-Morgenstern, A.: Operation modes of packed-bed membrane reactors in catalytic oxidation of hydrocarbons. Jubilee Scientific Conference with International Participation, Sofia, Bulgaria, 04.-05.06.2003
- ▶ 5. Klose, F., Wolff, T., Hamel, C., Alandjiyska, M., Weiß, H., Joshi, M., Tóta, Á., Seidel-Morgenstern, A.: Partial oxidation of

ethane: Reaction mechanism and the potential of membrane reactors. Jubilee Scientific Conference with International Participation, Sofia, Bulgaria, 04.-05.06.2003

- ▶ 6. Thomas, S., Tóta, Á., Joshi, M., Hamel, C., Klose, F., Seidel-Morgenstern, A.: Optimised reactant supply in fixed-bed and membrane reactors. ISMR3-CCRE18: Joint Research Symposium of the 3rd International Symposium on Multifunctional Reactors and the 18th Colloquia on Chemical Reaction Engineering, Bath, UK, 27.-30.08.2003
- ▶ 7. Tóta, Á., Hamel, C., Thomas, S., Joshi, M., Klose, F., Seidel-Morgenstern, A.: Experimental and theoretical investigation of concentration and contact time effects in membrane reactors (Poster). ISMR3-CCRE18: Joint research symposium of the 3rd International Symposium on Multifunctional Reactors and the 18th Colloquia on Chemical Reaction Engineering, Bath, UK, 27.-30.08.2003
- ▶ 8. Tsotsas, E., Seidel-Morgenstern, A., Hamel, C.: Modellierung des Stoff- und Wärmetransports in Membran- und konventionellen Festbettreaktoren. Kickoff-Meeting „ConNeCat“, Uhde GmbH, Dortmund, Germany, 22.10.2003
- ▶ 9. Klose, F., Hamel, C., Joshi, M., Tóta, Á., Seidel-Morgenstern, A.: Optimized oxidant dosing in packed-bed membrane reactors for the catalytic oxidation of hydrocarbons. XVI. International Conference on Chemical Reactors, Berlin, Germany, 01.-05.12.2003
- ▶ 10. Hamel, C., Seidel-Morgenstern, A., Tsotsas, E.: Modellierung des Stoff- und Wärmetransports in Membran- und konventionellen Festbettreaktoren. 1. Halbjahrestreffen "ConNeCat", Hannover, Germany, 02.02.2004
- ▶ 11. Joshi, M., Hamel, C., Tóta, Á., Klose, F., Seidel-Morgenstern, A.: Reaktionskinetik für die oxidative Dehydrierung von Ethan an einem V/Al₂O₃-Katalysator (Poster). XXXVII. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 17.-19.03.2004
- ▶ 12. Tóta, Á., Hamel, C., Joshi, M., Klose, F., Tsotsas, E., Seidel-Morgenstern, A.: Experimentelle und modellgestützte Studie zur Beschreibung von Konzentrations-, Temperatur- und Geschwindigkeitsfeldern in Festbett-Membranreaktoren (Poster). XXXVII. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 17.-19.03.2004
- ▶ 13. Tóta, Á., Hamel, C., Joshi, M., Klose, F., Seidel-Morgenstern, A.: Reaktionstechnische Analyse des Betriebes von Festbett-Membranreaktoren für die Oxidation von Kohlenwasserstoffen (Poster). XXXVII. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 17.-19.03.2004
- ▶ 14. Tóta, Á., Hamel, C., Tsotsas, E., Seidel-Morgenstern, A.: Analysis of tubular packed-bed membrane reactors based on non-isothermal 2D-reactor models (Poster). ISCRE 18 – 18th International Symposium on Chemical Reaction Engineering, Chicago, USA, 06.-09.06.2004
- ▶ 15. Hamel, C., Seidel-Morgenstern, A., Tsotsas, E.: Modellierung des Stoff- und Wärmetransports in Membran- und konventionellen Festbettreaktoren. 2. Halbjahrestreffen „ConNeCat“, Frankfurt, Germany, 28.06.2004
- ▶ 16. Yang, J., Čermáková, J., Uchtyl, P., Hamel, C., Seidel-Morgenstern, A.: Mass Transport Study of Combined Gas Phase and Surface Diffusion in Porous Glass Membrane (Poster). ICCMR-6 – 6th International Conference on Catalysis in Membrane Reactor, Lahnstein, Germany, 06.-09.07.2004
- ▶ 17. Hamel, C., Tóta, Á., Ziomek, G., Schädlich, K., Seidel-Morgenstern, A.: Theoretical study of describing and optimising concentration, temperature and velocity fields in a multi stage membrane reactor (Poster). ICCMR-6 – 6th International Conference on Catalysis in Membrane Reactor, Lahnstein, Germany, 06.-09.07.2004
- ▶ 18. Yang, J., Čermáková, J., Uchtyl, P., Hamel, C., Seidel-Morgenstern, A.: Adsorption, Gas Phase Transport and Surface Diffusion in Porous Glass Membranes (Poster). ICIM8 – 8th International Conference on Inorganic Membranes, Cincinnati, USA, 18.-22.07.2004
- ▶ 19. Hamel, C., Seidel-Morgenstern, A., Tsotsas, E.: Modellierung des Stoff- und Wärmetransports in Membran- und konventionellen Festbettreaktoren. 3. Halbjahrestreffen „ConNeCat“, Berlin, Germany, 17.02.2005
- ▶ 20. Tóta, Á., Hamel, C., Tsotsas, E., Seidel-Morgenstern, A.: Numerische Simulation von Festbett-Membranreaktoren. DECHEMA/GVC-Fachsektion „Reaktionstechnik“, DECHEMA-Arbeitsausschuss „Technische Reaktionen“, GVC-Fachausschüsse „Technische Reaktionsführung“ und „Energieverfahrenstechnik“, Bad Herrenalb, Germany, 07.-09.03.2005
- ▶ 21. Hamel, C., Bron, M., Claus, P., Seidel-Morgenstern, A.: Experimentelle und modellgestützte Studie zur Hydrierung von Acrolein zu Allylalkohol in Festbett- und in Membranreaktoren (Poster). XXXVIII. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 16.-18.03.2005
- ▶ 22. Tóta, Á., Hamel, C., Klose, F., Seidel-Morgenstern, A.: Experimental and Model Based Study of Forced Temperature Profiles and Dosing Effects in a Multi-Stage Membrane Reactor (Poster). CAMURE-5 & ISMR-4 – 5th International Symposium on Catalysis in Multiphase Reactors & 4th International Symposium on Multifunctional Reactors, Portorož, Slovenia, 15.-18.06.2005
- ▶ 23. Seidel-Morgenstern, A., Hamel, C., Bron, M., Claus, P.: Selectivity and Yield Improvement by Optimised Reactant. Chemical Reactor Engineering X: Innovation in Chemical Reactor Engineering, Zacatecas, Mexico, 28.08.-02.09.2005
- ▶ 24. Hamel, C., Bron, M., Claus, P., Seidel-Morgenstern, A.: Experimental and model based study of the hydrogenation of acrolein to allyl alcohol in fixed-bed- and in membrane reactors (Poster). ICCMR-7 – 7th International Conference on Catalysis in Membrane Reactors, Cetraro, Italy, 11.-14.09.2005
- ▶ 25. Hamel, C., Seidel-Morgenstern, A., Tsotsas, E.: Modellierung des Stoff- und Wärmetransports in Membran- und konventionellen Festbettreaktoren. 4. Halbjahrestreffen „ConNeCat“, Stuttgart, Germany, 15.12.2005
- ▶ 26. Klose, F., Wolff, T., Hamel, C., Tóta, Á., Seidel-Morgenstern, A., Chalakov, L., Rihko-Struckmann, L., Sundmacher, K., Peglow, M., Ahchieva, D., Heinrich, S., Mörl, L., Weiß, H.: Möglichkeiten und Grenzen des Einsatzes von Membranreaktoren in der katalytischen Oxidation von Kohlenwasserstoffen. XXXIX. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 15.-17.03.2006
- ▶ 27. Hamel, C., Tóta, Á., Joshi, M., Kleinert, A., Wang, H., Caro, J., Werth, S., Seidel-Morgenstern, A.: Modellierung und Simulation eines Membranreaktors zur partiellen Oxidation von Methan mit gekoppeltem Steamreforming unter Verwendung O₂-selektiver Perowskitmembranen (Poster). XXXIX. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 15.-17.03.2006
- ▶ 28. Hamel, C., Tóta, Á., Joshi, M., Klose, F., Seidel-Morgenstern, A.: Reaktionstechnische Analyse des Betriebes von Festbett-Membranreaktoren für die Oxidation von Kohlenwasserstoffen (Poster). Infotag „Prozeßintensivierung – Ansichten der Industrie“, Frankfurt/Main, Germany, 23.05.2006
- ▶ 29. Hamel, C., Seidel-Morgenstern, A., Tsotsas, E.: Modellierung des Stoff- und Wärmetransports in Membran- und kon-

ventionellen Festbettreaktoren. 5. Halbjahrestreffen „ConNeCat“, Hermsdorf, Germany, 13.07.2006

- ▶ 30. Tóta, Á., Hamel, C., Klose, F., Tsotsas, E., Seidel-Morgenstern, A.: Enhancement of intermediate product selectivity in multi-stage reactors: potential and pitfalls (Poster). ISCRE 19 – 19th International Symposium on Chemical Reaction Engineering, Potsdam, Germany, 03.-06.09.2006
- ▶ 31. Hamel, C., Tóta, Á., Wang, H., Tablet, C., Caro, J., Tsotsas, E.: Modelling and simulation of a membrane reactor for the oxidation of methane with simultaneous steam reforming using O₂-selective perovskite hollow fibres. ISCRE 19 – 19th International Symposium on Chemical Reaction Engineering, Potsdam, Germany, 03.-06.09.2006
- ▶ 32. Joshi, M., Tóta, Á., Hamel, C., Wolff, T., Klose, F., Seidel-Morgenstern, A.: Statistical analysis of fixed-bed reactor experiments for estimating kinetic parameters. GVC/DECHEMA-Jahrestagungen 2006, Wiesbaden, Germany, 26.-28.09.2006
- ▶ 33. Hamel, C., Seidel-Morgenstern, A., Tsotsas, E.: Modellierung des Stoff- und Wärmetransports in Membranreaktoren mit sauerstoffselektiven Perowskithohlfasern zur Generierung von Synthesegas. Kolloquium des VDI Bezirksverbandes Magdeburg, Magdeburg, Germany, 27.10.2006
- ▶ 34. Klose, F., Wolff, T., Hamel, C., Tóta, Á., Ahchieva, D., Heinrich, S., Seidel-Morgenstern, A.: Pilot-plant study on membrane reactors for catalytic oxidation of hydrocarbons (Poster). XXXX. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 14.-16.03.2007
- ▶ 35. Hamel, C., Tóta, Á., Klose, F., Tsotsas, E., Seidel-Morgenstern, A.: Experimentelle und modellgestützte Analyse von ein- und mehrstufigen Membranreaktoren zur oxidativen Dehydrierung kurzkettiger Kohlenwasserstoffe im Pilotmaßstab (Poster). XXXX. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 14.-16.03.2007
- ▶ 36. Hamel, C., Tóta, Á., Klose, F., Tsotsas, E., Seidel-Morgenstern, A.: Experimental and model-based analysis of single and multi-stage membrane reactors for the oxidation of short-chain hydrocarbons in a pilot scale. ECCE-6 – 6th Euro-pean Congress of Chemical Engineering, Copenhagen, Denmark, 16.-21.09.2007
- ▶ 37. Hamel, C., Wang, H., Caro, J., Tsotsas, E., Seidel-Morgenstern, A.: Simulation study of membrane supported oxidation of methane with simultaneous steam reforming using O₂-selective Perovskite hollow fibres (Poster). ECCE-6 – 6th Euro-pean Congress of Chemical Engineering, Copenhagen, Denmark, 16.-21.09.2007
- ▶ 38. Hamel, C., Tóta, Á., Klose, F., Tsotsas, E., Seidel-Morgenstern, A.: Analysis of single- and multi-stage membrane reactor for the selective oxidation of short-chain alkanes – simulation study and pilot scale experiments. Indo-German Workshop – Advances in Reaction and Separation Processes, Chennai, India, 18.-20.02.2008
- ▶ 39. Hamel, C., Tóta, Á., Klose, F., Wolff, T., Seidel-Morgenstern, A.: Experimentelle Bewertung einer ein- bzw. mehrstufigen Dosierung von Reaktanden in Kombination mit einer Temperaturmodulation in Membranreaktoren kleintechnischer Dimension (Poster). 41. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 27.-29.02.2008
- ▶ 40. Hamel, C., Tóta, Á., Klose, F., Tsotsas, E., Seidel-Morgenstern, A.: Experimentelle und modellgestützte Studien zur Beschreibung von Konzentrations-, Temperatur und Geschwindigkeitsfeldern in Membranreaktoren im Technikumsmaßstab (Poster). Jahrestreffen Reaktionstechnik 2008, Würzburg, Germany, 18.-20.05.2008
- ▶ 41. Hamel, C., Tsotsas, E., Seidel-Morgenstern, A.: Analysis of single- and multi-stage membrane reactors for the generation of short-chain alkenes in a pilot scale. ISCRE – The 20th International Symposium on Chemical Reaction Engineering, Kyoto Japan, 07.-10.09.2008
- ▶ 42. Hamel, C., Wolff, T., Lehmann, T., Zahn, V., Seidel-Morgenstern, A.: Experimentelle Studien zur Kompatibilität von Katalysator und Membran bei partiellen Oxidationsreaktionen. 42. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 11.-13.03.2009
- ▶ 43. Hamel, C., Wolff, T., Edreva, V., Tsotsas, E., Seidel-Morgenstern, A.: Zur Kompatibilität von Katalysator & Membran bei Selektivoxidationen – Modellbasierte & experimentelle Studien (Poster). Jahrestreffen Reaktionstechnik 2009, Würzburg, Germany, 08.-10.06.2009
- ▶ 44. Hamel, C., Wolff, T., Seidel-Morgenstern, A.: Bewertung des Potentials der mehrstufigen Eduktdosierung in Kombination mit einer Temperaturmodulation am Beispiel der Selektivoxidation von Propan an Vanadiumkatalysatoren (Poster). 43. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 10.-12.03.2010
- ▶ 45. Zahn, V., Wolff, T., Lehmann, T., Veit, P., Hamel, C., Seidel-Morgenstern, A.: Direktsynthese von Propen mittels bifunktionaler nickelhaltiger Trägerkatalysatoren – Präparation und Potential (Poster). 43. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 10.-12.03.2010
- ▶ 46. Hamel, C., Tsotsas, E., Seidel-Morgenstern, A.: Analysis of single and multi-stage membrane reactors for the generation of short-chain hydrocarbons in a pilot scale – Potential and Pitfalls. Sino-German Workshop on novel inorganic membranes, Guangzhou, China, 21.-26.03.2010
- ▶ 47. Hamel, C., Seidel-Morgenstern, A.: Dosierung von Mehrkomponentengemischen in Membranreaktoren mit interner Kreislaufführung zur Prozessintensivierung & -lenkung (Poster). Jahrestreffen Reaktionstechnik 2010, Würzburg, Germany, 10.-12.05.2010
- ▶ 48. Wolff, T., Lehmann, T., Zahn, V., Hamel, C., Seidel-Morgenstern, A.: Direct synthesis of propene using supported bifunctional nickel catalysts – preparation and potential (Poster). Jahrestreffen Reaktionstechnik 2010, Würzburg, Germany, 10.-12.05.2010
- ▶ 49. Zahn, V., Wolff, T., Lehmann, T., Hamel, C., Seidel-Morgenstern, A.: Direct Synthesis of Propene Using Supported Bifunctional Nickel Catalysts: Preparation and Potential (Poster). ISCRE 21 – 21st International Symposium on Chemical Reaction Engineering, Philadelphia, USA, 13.-16.06.2010
- ▶ 50. Hamel, C., Wolff, T., Seidel-Morgenstern, A.: Multi-Component Dosing in Membrane Reactors Including an Internal Reactant Recycling (Poster). 19th International Congress of Chemical and Process Engineering (CHISA 2010) and 7th European Congress of Chemical Engineering (ECCE-7), Prague, Czech Republic, 28.08.-01.09.2010
- ▶ 51. Lehmann, T., Wolff, T., Hamel, C., Zahn, V. M., Seidel-Morgenstern, A.: Catalytic Study of Template-Ion Exchanged Ni/MCM-41 as Used for the Direct Transformation of Ethene Into Propene (Poster). 2010 AIChE Annual Meeting, Salt Lake City, USA, 07.-12.11.2010
- ▶ 52. Wolff, T., Alvarado Perea, L., Lehmann, T., Hamel, C., Seidel-Morgenstern, A.: Effect of silica source on the synthesis of nickel ion-loaded mesoporous catalysts and their catalytic activity for the generation of propene (Poster). 44. Jahrestreffen

Deutscher Katalytiker mit Jahrestreffen Reaktionstechnik, Weimar, Germany, 16.-18.03.2011

- ▶ 53. Alvarado Perea, L., Wolff, T., Lehmann, T., Hamel, C., Seidel-Morgenstern, A.: Synthesis of Ni/AlMCM-41 materials and their catalytic performance for the direct conversion of ethene to propene (Poster). 44. Jahrestreffen Deutscher Katalytiker mit Jahrestreffen Reaktionstechnik, Weimar, Germany, 16.-18.03.2011
- ▶ 54. Hamel, C., Wolff, T., Markert, J., Seidel-Morgenstern, A.: Reaktionstechnische Analyse des Betriebs von Membranreaktoren zur integrierten Kopplung von oxidativer & thermischer Dehydrierung am Beispiel Propan (Poster). 44. Jahrestreffen Deutscher Katalytiker mit Jahrestreffen Reaktionstechnik, Weimar, Germany, 16.-18.03.2011
- ▶ 55. Lehmann, T., Wolff, T., Hamel, C., Garke, B., Seidel-Morgenstern, A., Goldhahn, R.: Towards a better understanding of light olefin transformations on template-ion exchanged Ni/MCM-41 (Poster). 44. Jahrestreffen Deutscher Katalytiker mit Jahrestreffen Reaktionstechnik, Weimar, Germany, 16.-18.03.2011
- ▶ 56. Alvarado Perea, L., Wolff, T., Lehmann, T., Hamel, C., Seidel-Morgenstern, A.: Direct conversion of ethene to propene or Ni/MCM-41 and Ni/AlMCM-41 materials: synthesis and characterisation (Poster). 9th International Symposium on the Characterisation of Porous Solids – COPS 9, Dresden, Germany, 05.-08.06.2011
- ▶ 57. Markert, J., Hoang, M. D., Arellano-Garcia, H., Hamel, C., Seidel-Morgenstern, A.: Experimental kinetic studies of the Rhodium-catalyzed hydroformylation of 1-Dodecene in multiphase fluid systems, (Poster). European Congress of Chemical Engineering, Berlin, Germany, 25.-29.09.2011
- ▶ 58. Brunsch, Y., Behr, A., Hoang, M. D., Arellano-Garcia, H., Markert, J., Hamel, C., Seidel-Morgenstern, A.: Isomerisation and Hydrogenation in Rh-Catalyzed Hydroformylation of 1-Dodecene in Thermomorphic Solvent Systems, (Poster). European Congress of Chemical Engineering, 25.-29.09.2011, Berlin
- ▶ 59. Wolff, T., Lehmann, T., Alvarado Perea, L., Hamel, C., Seidel-Morgenstern, A.: Physico-chemical and catalytic characterisation of Ni/MCM-41 as used for the conversion of ethene to propene - influence of silica source and reaction conditions, (Poster). European Congress of Chemical Engineering, Berlin, Germany, 25.-29.09.2011
- ▶ 60. Hamel, C., Wolff, T., Markert, J., Seidel-Morgenstern, A.: Analysis of the operation of membrane reactors for the integrated coupling of the oxidative & thermal dehydrogenation of propane, (Poster). European Congress of Chemical Engineering, Berlin, Germany, 25.-29.09.2011
- ▶ 61. Hamel, C., Wolff, T., Markert, J., Seidel-Morgenstern, A.: Multi-Component dosing in membrane reactors with internal reactant recirculation, (Vortrag). ICCMR, Sankt Petersburg, Russia, 20.-24.06.2011
- ▶ 62. Hamel, C., Wolff, T., Pushpavanam, S., Seidel-Morgenstern, A.: Multi-component Dosing in Membrane Reactors Including Recycling – Concept and Demonstration for the Oxidative Dehydrogenation of Propane, (Poster), Second Indo-German-Workshop, Bad Herrenalb, Germany, 19.-22.02.2012
- ▶ 63. Hamel, C., Markert, J., Kiedorf, G., Hoang, M. D., Arellano-Garcia, H., Seidel-Morgenstern, A.: The Rhodium-catalyzed hydroformylation of 1-Dodecene in a multiphase fluid system - kinetic studies, (Poster), Second Indo-German-Workshop, Bad Herrenalb, Germany, 19.-22.02.2012
- ▶ 64. Alvarado Perea, L., Wolff, T., Hamel, C., Veit, P., Seidel-Morgenstern, A.: Synthesis and Characterization of Ni/MCM-41 and Ni/AlMCM-41 prepared by Template Ion Exchange, (Poster). 24. Deutsche Zeolith-Tagung, Magdeburg, Germany, 7.-9.03.2012
- ▶ 65. Lehmann, T., Wolff, T., Hamel, C., Seidel-Morgenstern, A.: Nature of Ni(II) phase, catalyst structure and formation mechanism of Ni/MCM-41 synthesised by a template ion exchange approach, (Vortrag). 24. Deutsche Zeolith-Tagung, Magdeburg, Germany, 7.-9.03.2012
- ▶ 66. Lehmann, T., Wolff, T., Hamel, C., Seidel-Morgenstern, A.: Ni/MCM-41 via a Template Ion Exchange Approach: Nature of Ni(II) Phase, Catalyst Structure and Formation Mechanism, (Poster). 45. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 14.-16.03.2012
- ▶ 67. Hamel, C., Markert, J., Kiedorf, G., Hoang, M. D., Arellano-Garcia, H., Brunsch, Y., Behr, A., Seidel-Morgenstern, A.: Kinetische und modellbasierte Analyse der Isomerisierung & Hydrierung bei der Hydroformylierung von 1- & iso-Dodecenen in einem thermomorphen Lösungsmittelsystem, (Poster). 45. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 14.-16.03.2012
- ▶ 68. Markert, J., Hamel, C., Munkelt, T., Hoang, M. D., Arellano-Garcia, H., Brunsch, Y., Behr, A., Seidel-Morgenstern, A.: Netzwerkanalyse der Hydroformylierung von 1-Dodecenen durch gezielte experimentelle Perturbationstechniken, (Poster). 45. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 14.-16.03.2012
- ▶ 69. Hamel, C., Wolff, T., Seidel-Morgenstern, A.: Selectivity Enhancement by Multi-Component Dosing with Internal Reactant Recycling in Membrane Reactors - Selected Examples (Vortrag), Second Sino-German-Workshop, Hannover, Germany, 19.03.2012
- ▶ 70. Hamel, C., Markert, J., Kiedorf, G., Hoang, M. D., Arellano-Garcia, H., Brunsch, Y., Behr, A., Seidel-Morgenstern, A.: Hydroformylierung von 1-Dodecenen in einem thermomorphen Lösungsmittelsystem – Netzwerkanalyse und kinetische Modellierung, (Vortrag). Jahrestreffen Reaktionstechnik, Würzburg, Germany, 14.-16.05.2012
- ▶ 71. Markert, J., Munkelt, T., Hamel, C., Seidel-Morgenstern, A.: Kopplung von Reaktion & Kalorimetrie zur kinetischen Analyse der Hydroformylierung von 1-Dodecenen in einem thermomorphen Lösungsmittelsystem, (Poster). Jahrestreffen Reaktionstechnik, Würzburg, Germany, 14.-16.05.2012
- ▶ 72. Hoang M. D., Wozny, G., Markert, J., Hamel, C., Seidel-Morgenstern, A., Arellano-Garcia, H., Brunsch, Y., Behr, A.: Model Based Optimal Design of Experiments for Determining Reaction Network Structures, (Vortrag). Symposia on Process System Engineering, Singapore, 15.-19.07.2012
- ▶ 73. Hamel, C., Kiedorf, G., Markert, J., Wolff, T., Seidel-Morgenstern, A.: Multi-component Dosing in Membrane Reactors with Internal Reactant Recirculation, (Vortrag). ISCRE 22, Maastricht, Netherlands, 2.-5.09.2012
- ▶ 74. Markert, J., Hamel, C., Kiedorf, G., Hoang, M. D., Arellano Garcia, H., Seidel-Morgenstern, A.: Kinetic Studies of the Rhodium-catalyzed Hydroformylation of 1-Dodecene, (Vortrag). ISCRE 22, Maastricht, Netherlands, 2.-5.09.2012
- ▶ 75. Markert, J., Hamel, C., Kiedorf, G., Munkelt, T., Hoang, M. D., Arellano-Garcia, H., Seidel-Morgenstern, A.: The Rhodium-catalyzed hydroformylation of 1-Dodecene in a multiphase fluid system - kinetic studies, International Symposium "InPROMP 2012", Berlin, Germany 15.-16.11.2012

- ▶ 76. Markert, J., Hamel, C., Seidel-Morgenstern, A.: Hydroformylation of 1-dodecene: Investigation of the reaction network in different multi-phase fluid systems, ECCE, Den Haag, Netherlands, 21-25.04.2013
- ▶ 77. Alvarado Perea, L., Wolff, T., Hamel, C., Seidel-Morgenstern, A.: Direct Transformation of Ethylene to Propylene -Influence of the Active Metal-, ECCE, Den Haag, Netherlands, 21.-25.04.2013
- ▶ 78. Hamel, C., Markert, J., Kiedorf, G., Müller, A., Behr, A., Seidel-Morgenstern, A.: Einfluss des Pretreatments liganden-modifizierter Rh-Katalysatoren auf die Hydroformylierung von 1-Dodecen - Erweiterter Katalysezyklus & mechanistische Modellansätze, 46. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 13.-15.03.2013
- ▶ 79. Alvarado Perea, L., Wolff, T., Hamel, C., Seidel-Morgenstern, A.: Direct transformation of ethene to propene; study of the reaction conditions effect and deactivation-regeneration of the catalysts Ni/AlMCM-41, 46. Jahrestreffen Deutscher Katalytiker Weimar, Germany, 13.-15.03.2013
- ▶ 80. Markert, J., Hamel, C., Seidel-Morgenstern, A.: Zur kontinuierlichen Hydroformylierung von 1-Dodecen in einem thermomorphen Lösungsmittelsystem, Jahrestreffen Reaktionstechnik, Würzburg, Germany, 6.-8.05.2013
- ▶ 81. Kiedorf, G., Hamel, C., Seidel-Morgenstern, A.: Untersuchungen zur diskreten Dosierung von Multi-Komponenten-Gemischen in einem Simulated Moving Bed Reactor, Jahrestreffen Reaktionstechnik, Würzburg, Germany, 6.-8.05.2013
- ▶ 82. Gao, K., Hamel, C., Yang, J., Seidel-Morgenstern, A.: Analysis of the Methane-Dehydro-Aromatization on a Mo/MCM-22 catalyst in Membrane Reactor, ICCMR, Porto, Portugal, 7.-11.07.2013
- ▶ 83. Hamel, C., Kiedorf, G., Markert, J., Jörke, A., Seidel-Morgenstern, A.: Prozessintensivierung und -lenkung in der heterogenen und homogenen Katalyse durch Dosier- und Rückführungsstrategien, Hochschule Nürnberg, Nürnberg, Germany, 6.12.2013
- ▶ 84. Munkelt, T., Hamel, C., Seidel-Morgenstern, A., Küster, C., Chmelik, C., Enke, D.: Tailoring of porous glass beads for the separation of chiral anesthetic gases via chromatographic and microscopic characterization, 10th International Symposium on the Characterization of Porous Solids (COPS-X), Granada, Spain, 11.-14.05.2014
- ▶ 85. Alvarado Perea, L., Wolff, T., Hamel, C., Seidel-Morgenstern, A.: Bimetallic NiRe and NiMo mesostructured catalysts for the direct conversion of ethene to propene, 10th International Symposium on the Characterization of Porous Solids (COPS-X) Granada, Spain, 11.-14.05.2014
- ▶ 86. Munkelt, T., Hamel, C., Küster, C., Chmelik, C., Enke, D., Seidel-Morgenstern, A.: "Modified porous glass beads as stationary phase of a preparative separation process for volatile anaesthetic gases", 26. Deutsche Zeolith-Tagung, Paderborn, Germany, 26.-28.02.2014
- ▶ 87. Hamel, C., Markert, J., Kiedorf, G., Jörke, A., Seidel-Morgenstern, A.: Hydroformylierung von langkettigen Olefinen in temperaturgesteuerten Mehrphasen-Lösungsmittelsystemen, Sitzung des ProcessNet-Arbeitsausschusses „Technische Reaktionen“, Frankfurt/Main, Germany, 13.01.2014
- ▶ 88. Hamel, C., Kiedorf, G., Markert, J., Jörke, A., Seidel-Morgenstern, A.: Kinetik der Hydroformylierung von langkettigen Olefinen in zwei temperaturgesteuerten Mehrphasen-Lösungsmittelsystemen, 47. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 12.-14.03.2014
- ▶ 89. Alvarado Perea, L., Wolff, T., Hamel, C., Seidel-Morgenstern, A.: Direct conversion of ethene to propene on Ni/AlMCM-41 study of the reaction mechanism, 47. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 12.-14.03.2014
- ▶ 90. Hamel, C., Henschel, B., Markert, J., Jörke, A., Kiedorf, G., Sundmacher, K., Seidel-Morgenstern, A.: Prozessführungsstrategien für die Hydroformylierung von 1-Dodecen in einem Mehrphasen-Lösungsmittelsystem, Jahrestreffen Reaktionstechnik, Würzburg, Germany, 28.-30.04.2014
- ▶ 91. Jörke, A., Hamel, C., Triemer, S., Kiedorf, G., Seidel-Morgenstern, A.: Parameter identification in kinetic models and experimental design: parameter subset selection applied to the isomerization of 1-decene, Jahrestreffen Reaktionstechnik, Würzburg, Germany, 28.-30.04.2014
- ▶ 92. Jörke, A., Hamel, C., Triemer, S., Kiedorf, G., Seidel-Morgenstern, A.: Kinetic analysis of the hydroformylation of 1-decene in a thermomorphic multicomponent solvent system: subnetworks, model reduction and parameter estimation, CHISA, Prague Czech Republic, 23.-27.08.2014
- ▶ 93. Gao, K., Hamel, C., Seidel-Morgenstern, A.: Kinetic development and parameters estimation of methane-dehydro-aromatization, CHISA, Prague, Czech Republic, 23.-27.08.2014
- ▶ 94. Kiedorf, G., Seidel-Morgenstern, A., Hamel, C.: Investigation of the reaction kinetics of the total oxidation of alkene mixtures over a chromium oxide catalyst, CHISA, Prague, Czech Republic, 23.-27.08.2014
- ▶ 95. Munkelt, T., Hamel, C., Seidel-Morgenstern, A., Küster, C., Enke, D., Chmelik, C.: Modified porous glass beads as stationary phase of a preparative separation process for volatile anaesthetic gases, CHISA, Prague, Czech Republic. 23.-27.08.2014
- ▶ 96. Hübener, M., Kiedorf, G., Seidel-Morgenstern, A., Hamel, C.: Experimental and Theoretical Study of Batch and Continuous Chromatographic Purification of Prebiotic Galacto-Oligosaccharides, SPICA, Basel, Switzerland, 05.-08.10.2014
- ▶ 97. Gao, K., Seidel-Morgenstern, A., Hamel, C.: Kinetic development and parameters estimation of methane-dehydro-aromatization, Sino-German-Workshop, Hannover, 02.-06.11.2014
- ▶ 98. Hamel, C., Gao, K., Kiedorf, G., Jörke, A., Seidel-Morgenstern, A.: Selectivity improvement and process intensification via membranes in heterogeneous and homogeneous catalysis, Sino-German-Workshop, Hannover, 02.-06.11.2014
- ▶ 99. Jörke, A., Seidel-Morgenstern, A., Hamel, C.: Isomerization of 1-Decene in a Liquid Multiphase Thermomorphic Multicomponent Solvent System: Model Formulation, Kinetic Experiments and Parameter Estimation, Aiche, Atlanta, USA, 18.11.2014
- ▶ 100. Kiedorf, G., Seidel-Morgenstern, A., Hamel, C.: Reaction Kinetics of the Oxidation of Alkene Mixtures over a Chromium Oxide Catalyst and Feasibility Study of a Simulated Moving Bed Reactor, Aiche, Atlanta, USA, 18.11.2014
- ▶ 101. Gerlach, M., Lemberg, M., Grauke, R., Sadowski, G., Seidel-Morgenstern, A., Hamel, C.: Solvent effects on the hydroformylation of 1-dodecene: Experimental validation of predictions by PCP-SAFT, 48. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 11.-13.03.2015
- ▶ 102. Alvarado Perea, L., Wolff, T., Hamel, C., Seidel-Morgenstern, A.: Direct conversion of ethene to propene: Pore diameter effects for Ni/AlMCM-41, 48. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 11.-13.03.2015

- ▶ 103. Wolff, T. L., Alvarado Perea, Hamel, C., Seidel-Morgenstern, A.: Direct conversion of ethene to propene: Performance of NiRe/AIMCM-41 catalysts, 48. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 11.-13.03.2015
- ▶ 104. Kiedorf, G., Wolff, T., Gerlach, M., Jörke, A., Seidel-Morgenstern, A., Hamel, C.: Reaction kinetics of binary alkene mixtures supported by individual measurement of mixture adsorption isotherms on a CrOx catalyst, 48. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 11.-13.03.2015
- ▶ 105. Jörke, A., Kohls, E., Triemer, S., Seidel-Morgenstern, A., Hamel, C., Stein, M.: Resolution of complex reaction mixtures containing structural decene isomers in homogeneous catalysis, 48. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 11.-13.03.2015
- ▶ 106. Hübener, M., Pottratz, I., Fischer, C., Kleinschmidt, T., Seidel-Morgenstern, A., Hamel, C.: Experimental and Model-based Study of Chromatographic Purification of Prebiotic Galacto-Oligosaccharides, 47. Jahrestreffen Agglomerations- und Schüttguttechnik, Lebensmittelverfahrenstechnik und Lebensmittelbiotechnologie, Magdeburg, Germany, 15.-18.03.2015
- ▶ 107. Kohls, E., Jörke, A., Triemer, S., Hamel, C., Seidel-Morgenstern, A., Stein, M.: Thermochemistry of Long Chain Olefins in Complex Reaction Media, Bunsentagung, Bochum, Germany, 11.-13.03.2015
- ▶ 108. Gerlach, M., Kaiser, M., Henschel, B., Kiedorf, G., Jörke, A., Hamel, C., Seidel-Morgenstern, A., Sundmacher, K.: Process control strategies and identification of kinetic parameters based on dynamic optimization, Achema, Frankfurt a. M., Germany, 15.-19.06.2015
- ▶ 109. Jörke, A., Kohls, E., Triemer, S., Seidel-Morgenstern, A., Hamel, C.: Identification, thermodynamics and kinetic behavior of complex decene isomer mixtures used in homogeneous rhodium catalysis, ESCRE, München, Germany, 27.-30.10.2015
- ▶ 110. Kiedorf, G., Wolff, T., Seidel-Morgenstern, A., Hamel, C.: Potential of a loop reactor for the oxidation of alkene mixtures over a CrOx catalyst - Importance of the reaction kinetics, ESCRE, München, Germany, 27.-30.10.2015
- ▶ 111. Gerlach, M., Lemberg, M., Grauke, R., Sadowski, G., Seidel-Morgenstern, A., Hamel, C.: Experimental study and predictions by PCP-SAFT on solvent effects for the hydroformylation of 1-dodecene in a multiphase system, ESCRE, München, Germany, 27.-30.10.2015
- ▶ 112. Kohls, E., Jörke, A., Hamel, C., Seidel-Morgenstern, A., Stein, M.: Quantum mechanical characterization of hydroformylation of long chain olefins catalyzed by Rh-based catalyst, 17th International Symposium on Relations between Homogeneous and Heterogeneous Catalysis, Utrecht, Netherlands, 12.-14.07.2015
- ▶ 113. Hamel, C.: Prozessintensivierung & -lenkung mittels zyklisch betriebener Membran-Distributoren, DFG Projekttakademie Göttingen, Germany, 15.-17.02.2016
- ▶ 114. Mueller, I., Kiedorf, G., Runne, E., Fischer, C., Kleinschmidt, T., Seidel-Morgenstern, A., Hamel, C.: Synthesis and Kinetics of Galacto-Oligosaccharides Formation, Jahrestreffen Lebensmittel-verfahrenstechnik, ProcessNet, Erlangen, Germany, 10.-12.03.2016
- ▶ 115. Gerlach, M., Lemberg, M., Grauke, R., Sadowski, G., Seidel-Morgenstern, A., Hamel, C.: Solvent effects on the hydroformylation of 1-dodecene, 49. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 16.-18.03.2016
- ▶ 116. Kiedorf, G., Mueller, I., Runne, E., Seidel-Morgenstern, A., Hamel, C.: Reaction kinetics of the Prebiotic Galacto-Oligosaccharides Synthesis - Experimental and Model-based Study, 49. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 16.-18.03.2016
- ▶ 117. Wolff, T., Alvarado Perea, L., Felischak, M., Hamel, C., Alejandro López Gaona, J., Seidel-Morgenstern, A.: Direct transformation of ethene to propene: study of deactivation of catalysts for two-reactor concept, 49. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 16.-18.03.2016
- ▶ 118. Titze, J., Huber, H. W., Hamel, C.: The potential of wort concentrate used for beer production to enable cost optimization in craft breweries, 12. International Trends in Brewing Symposium (TIB 2016), KU Leuven Technology Campus Ghent, Ghent, Belgium, 3.-7.04.2016
- ▶ 119. Gerlach, M., Lemberg, M., Grauke, R., Sadowski, G., Seidel-Morgenstern, A., Hamel, C.: Solvent effects on the hydroformylation of 1-dodecene, Jahrestreffen Reaktionstechnik mit Mischvorgängen, Würzburg, Germany, 2.-4.05.2016
- ▶ 120. Kiedorf, G., Mueller, I., Runne, E., Seidel-Morgenstern, A., Hamel, C.: Reaction kinetics of the Prebiotic GOS Synthesis: Mechanistic Models, Model Reduction, Parameter Estimation, Jahrestreffen Reaktionstechnik mit Mischvorgängen, Würzburg, Germany, 2.-4.05.2016
- ▶ 121. Felischak, M., Hamel, C., Wolff, T., Alvarado Perea, L., Seidel-Morgenstern, A.: Direct transformation of ethene to propene: study of deactivation of catalysts for two concepts, Jahrestreffen Reaktionstechnik mit Mischvorgängen, Würzburg, Germany, 2.-4.05.2016
- ▶ 122. Munkelt, T., Mutavdzin, I., Hamel, C., Seidel-Morgenstern, A., Küster, C., Enke, D.: Developing of a preparative chromatography process for resolving enantiomers of chiral anaesthetics using modified porous glass beads, 22nd International Congress of Chemical and Process Engineering, CHISA, Prague, Czech Republic, 27.-31.08.2016
- ▶ 123. Munkelt, T., Mutavdzin, I., Hamel, C., Seidel-Morgenstern, A., Küster, C., Enke, D.: Developing a preparative chromatography process for resolving enantiomers of chiral anaesthetics using modified porous glass beads, 12th International Conference on the Fundamentals of Adsorption (FOA), Friedrichshafen, Germany, 29.05.-3.06.2016
- ▶ 124. Kiedorf, G., Seidel-Morgenstern, A., Hamel, C.: Potential of a Loop Reactor for the Oxidation of Hydrocarbon Mixtures over a CrxO3 Catalyst - Importance of the Reaction Kinetics, ISCRE 24, Minneapolis, USA, 12.-15.06.2016
- ▶ 125. Gerlach, M., Lemberg, M., Grauke, R., Sadowski, G., Seidel-Morgenstern, A., Hamel, C.: Predictions by PCP-SAFT and experimental study on solvent effects for the hydroformylation of 1-dodecene, ISCRE 24, Minneapolis, USA, 12.-15.06.2016
- ▶ 126. Gerlach, M., Lemberg, M., Grauke, R., Sadowski, G., Seidel-Morgenstern, A., Hamel, C.: Predictions by PCP-SAFT and experimental study on solvent effects for the hydroformylation of 1-dodecene, ISCRE 24, Minneapolis, USA, 12.-15.06.2016
- ▶ 127. Lemberg, M., Gerlach, M., Kohls, E., Hamel, C., Seidel-Morgenstern, A., Stein, M., Sadowski, G.: Vorhersage des Lösungsmiteleinflusses auf das Reaktionsgleichgewicht der Hydroformylierung von 1 Dodecen, Eurogress, Aachen, Germany, 12.-15.09.2016
- ▶ 128. Hamel, C., Felischak, M., Kiedorf, G., Gerlach, M., Jörke, A., Wolff, T., Alvarado Perea, L., Seidel-Morgenstern, A.: Selectivity improvement and process intensification via dosing strategies in heterogeneous and homogeneous catalysis, Zacatecas, Mexico, 13.7.2016

- ▶ 129. Munkelt, T., Mutavdzin, I., Hamel, C., Seidel-Morgenstern, A., Küster, C., Enke, D.: Developing of a preparative chromatography process for resolving enantiomers of chiral anaesthetics using modified porous glass beads, CHISA, Prague, Czech Republic, 27.-31.8.2016
- ▶ 130. Munkelt, T., Mutavdzin, I., Hamel, C., Seidel-Morgenstern, A., Küster, C., Enke, D.: Gas phase separation and recovery volatile chiral anesthetics based on porous glass supports of different modifications, SPICA, Wien, Austria, 9.-12.10.2016 Posterpreis
- ▶ 131. Felischak, M., Wolff, T., Alvarado Perea, L., Seidel-Morgenstern, A., Hamel, C.: Direct Synthesis of Propene from Ether Feedstock: Investigation of Catalytic Concepts, AIChE Annual Meeting, San Francisco, USA, 13.-18.11.2016
- ▶ 132. Sadowski, G., Lemberg, M., Gerlach, M., Kohls, E., Hamel, C., Stein, M., Seidel-Morgenstern, A.: Hydroformylation: Thermodynamics of High-Pressure Reaction Equilibria, AIChE Annual Meeting, San Francisco, USA, 13.-18.11.2016
- ▶ 133. Jörke, A., Seidel-Morgenstern, A., Hamel, C.: Hydroformylation of n-decene with terminal or internal double-bond: Mechanism, kinetic modelling and optimal reaction control, AIChE Annual Meeting, San Francisco, USA, 13.-18.11.2016
- ▶ 134. Mueller, I., Kiedorf, G., Runne, E., Pottratz, I., Seidel-Morgenstern, A., Hamel, C.: Prozesslenkung und -intensivierung b der Galacto-Oligosaccharid-Synthese, Jahrestreffen der ProcessNet Fachgruppen AGG, GFSP, TRO, LVT und WSUE, Bruchsal, Germany, 13.-15.02.2017
- ▶ 135. Alvarado Perea, L., Wolff, T., López Gaona, J. A., Hamel, C., Seidel-Morgenstern, A.: Direct conversion of ethene to propene on Ni/AlMCM-41 catalysts: A study of the reaction mechanism, International-Mexican Congress on Chemical Reacti Engineering (IMCCRE 2016), Querétaro, Mexico, 05.-09.06.2016
- ▶ 136. Alvarado Perea, L., Wolff, T., López Gaona, J. A., Hamel, C., Seidel-Morgenstern, A.: Conversión directa de eteno a propeno sobre catalizadores del tipo Ni/AlMCM-41: Estudio Del Mecanismo De Reaccion, XXXVII Encuentro Nacional de la AMIDIQ, Puerto Vallarta, Mexico, 03.-06.05.2016
- ▶ 137. Felischak, M., Wolff, T., Alvarado Perea, L., López Gaona, J. A., Seidel-Morgenstern, A., Hamel, C.: Prolonged Ni/(Al)MCM-41 application under reaction conditions for the production of propene from ethane, 50. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 15.-17.03.2017
- ▶ 138. Wolff, T., Felischak, M., Alvarado Perea, L., López Gaona, J. A., Hamel, C., Seidel-Morgenstern, A.: Experimental investigation of the metathesis of ethene and 2 butene using metallic catalysts supported on mesoporous material, 50. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 15.-17.03.2017
- ▶ 139. Felischak, M., Wolff, T., Alvarado Perea, L., López Gaona, J. A., Seidel-Morgenstern, A., Hamel, C.: Mechanistic investigation of propene production from ethene for long time on stream using Ni/(Al)MCM-41, Jahrestreffen Reaktionstech-nik, Würzburg, Germany, 22.-24.05.2017
- ▶ 140. Wolff, T., Felischak, M., Alvarado Perea, L., López Gaona, J. A., Hamel, C., Seidel-Morgenstern, A.: Deactivation study Mo, W, Re and NiRe incorporated onto mesoporous supports for metathesis of ethene and 2-butene, Jahrestreffen Reaktionstechnik, Würzburg, Germany, 22.-24.05.2017
- ▶ 141. Mueller, I., Kiedorf, G., Runne, E., Pottratz, I., Seidel-Morgenstern, A., Hamel, C.: Process Control and Yield Enhancement of the Galacto-Oligosaccharide Formation, Jahrestreffen Reaktionstechnik, Würzburg, Germany, 22.-24.05.2017
- ▶ 142. Kiedorf, G., Wolff, T., Seidel-Morgenstern, A., Hamel, C.: Simulated Moving Bed Reactor Operation, Jahrestreffen Reaktionstechnik, Würzburg, Germany, 22.-24.05.2017
- ▶ 143. Gerlach, M., S. Haupt, Seidel-Morgenstern, A., Hamel, C.: Isomerizing hydroesterification of long chain olefins in thermomorphic solvent systems: Reaction network analysis and kinetics, Jahrestreffen Reaktionstechnik, Würzburg, Germany, 22.-24.05.2017
- ▶ 144. Mueller, I., Kiedorf, G., Runne, E., Seidel-Morgenstern, A., Hamel, C.: Kinetische Modellierung der Galactooligosaccharid-Synthese, 18. Nachwuchswissenschaftlerkonferenz, Mittweida, Germany, 31.05.2017
- ▶ 145. Mueller, I., Kiedorf, G., Runne, E., Pottratz, I., Seidel-Morgenstern, A., Hamel, C.: Simulation and Experimental Study of Continuous Chromatographic Purification of Prebiotics Galacto-Oligosaccharides, Prep, Philadelphia, USA, 16.-20.07.2017
- ▶ 146. Alvarado Perea, L., Wolff, T., Hamel, C., Seidel-Morgenstern, A.: Experimental optimization of Ni based catalysts for the transformation of ethene into propene, Catalysis and Chemical Engineering, Paris, France, 19.-21.2.2018
- ▶ 147. Jörke, A., Seidel-Morgenstern, A., Hamel, C.: Mechanisms and kinetics of complex hydroformylation systems, Einstein Workshop, Berlin, Germany, 09.11.2017
- ▶ 148. Felischak, M., Wolff, T., Alvarado Perea, L., Seidel-Morgenstern, A., Hamel, C.: Kinetic Investigation of propene production under metathesis conditions applying W/SiO₂, 51. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 14.-16.03.2017
- ▶ 149. Gerlach, M., Haupt, S., Seidel-Morgenstern, A., Hamel, C.: Kinetics of the palladium-catalyzed isomerizing methoxycarbonylation of long chain olefins in thermomorphic solvent systems, 51. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 14.-16.03.2018
- ▶ 150. Mueller, I., Hamel, C.: Simulations- und Experimental-Studie zur kontinuierlichen chromatographischen Aufreinigung von Prebiotika mittels SMB, Jahrestagung Processnet LVT 2018, Berlin, Germany, 5.-6.03.2018
- ▶ 151. Brune, A., Wolff, T., Seidel-Morgenstern, A., Hamel, C.: Analysis of Membrane Reactors for Integrated Coupling of Oxidative and Thermal Dehydrogenation of Propane, Jahrestreffen Reaktionstechnik, Würzburg, Germany, 07.-10.05.2018
- ▶ 152. Kirschtowski, S., Brune, A., Gerlach, M., Seidel-Morgenstern, A., Hamel, C.: Kinetics of the methoxycarbonylation of long chain olefins and sustainable oleo chemicals in thermomorphic solvent systems, Jahrestreffen Reaktionstechnik, Würzburg, Germany, 07.-10.05.2018
- ▶ 153. Mueller, I., Kiedorf, G., Kirschtowski, S., Seidel-Morgenstern, A., Hamel, C.: Enzymatic Catalysis of Prebiotic Galacto-Oligosaccharides: Mechanistic Model Development for Enzymes of Different Origins, Jahrestreffen Reaktionstechnik, Würzburg, Germany, 07.-10.05.2018
- ▶ 154. Felischak, M., Wolff, T., Seidel-Morgenstern, A., Hamel, C.: Conceptual study of the ethene to propene reaction carried out in a reactor cascade, Jahrestreffen Reaktionstechnik, Würzburg, Germany, 07.-10.05.2018
- ▶ 155. Kiedorf, G., Wolff, T., Seidel-Morgenstern, A., Hamel, C.: Autothermal Operation in a Simulated Moving Bed Reactor, ISCRE 25, Florence, Italy, 20.-23.05.2018
- ▶ 156. Felischak, M., Nikolic, D., Petkovska, M., Hamel, C., Seidel-Morgenstern, A.: Experimental implementation of multiple

input variations for the hydrolysis of acetic anhydride, ISCRE 25, Florence, Italy, 20.-23.05.2018

- ▶ 157. Gerlach, M., Wajid, D. A., Seidel-Morgenstern, A., Hamel, C.: Influence of hydroperoxides on Rh/diphosphite-catalyzed hydroformylation, ISCRE 25, Florence, Italy, 20.-23.05.2018
- ▶ 158. Munkelt, T., Mutavdzin, I., Hamel, C., Seidel-Morgenstern, A., Enke, D.: Development of a semi-continuous gas chromatographic process for separating enantiomers of chiral inhalation anaesthetics, ProcessNet, Aachen, Germany, 10.-13.9.2018
- ▶ 159. Brune, A., Seidel-Morgenstern, A., Hamel, C.: Deactivation and regeneration of VOx catalyst for dehydrogenation of propane in multifunctional reactors, 52. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 13.-15.03.2019
- ▶ 160. Felischak, M., Wolff, T., Alvarado Perea, L., Seidel-Morgenstern, A., Hamel, C.: Deactivation and regeneration strategy of Ni/(Al)MCM-41 for the direct conversion of ethylene to propene, 52. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 13.-15.03.2019
- ▶ 161. Gerlach, M., Wendt, M., Seidel-Morgenstern, A., Hamel, C.: Catalyst stability in the rhodium diphosphite catalyzed hydroformylation of long chain olefins, 52. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 13.-15.03.2019
- ▶ 162. Kirschtowski, S., Kadar, C., Strauch, D., Seidel-Morgenstern, A., Hamel, C.: Reductive amination of a long chain aldehyde: solvent effects and gas solubility, 52. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 13.-15.03.2019
- ▶ 163. Mueller, I., Kirschtowski, S., Seidel-Morgenstern, A., Hamel, C.: Mechanistic Kinetic Modelling of the Biocatalysed Formation of Galacto-Oligosaccharides with Enzymes of Different Origins, 52. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 13.-15.03.2019
- ▶ 164. Wolff, T., Felischak, M., Alvarado Perea, L., Hamel, C., Seidel-Morgenstern, A.: Experimental deactivation study of Re- and NiRe-catalysts for the metathesis of ethene and 2-butene, 52. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 13.-15.03.2019
- ▶ 165. Brune, A., Wolff, T., Seidel-Morgenstern, A., Hamel, C.: Modelling of Integrated Membrane Reactors for the Selective Dehydrogenation of Propane, Jahrestreffen Reaktionstechnik, Würzburg, Germany, 27.-29.05.2019
- ▶ 166. Felischak, M., Nikolic, D., Petkovska, M., Hamel, C., Seidel-Morgenstern, A.: Forced Periodic Operation: Effect of shape for two simultaneously imposed modulations, Jahrestreffen Reaktionstechnik, Würzburg, Germany, 27.-29.05.2019
- ▶ 167. Gerlach, M., Huxoll, F., Seidel-Morgenstern, A., Hamel, C., Sadowski, G.: Activity based kinetic modeling of solvent effect for the hydroformylation of 1-dodecene, Jahrestreffen Reaktionstechnik, Würzburg, Germany, 27.-29.05.2019
- ▶ 168. Kirschtowski, S., Kadar, C., Seidel-Morgenstern, A., Hamel, C.: Kinetics of the reductive amination of long chain aldehydes in different solvent systems, Jahrestreffen Reaktionstechnik, Würzburg, Germany, 27.-29.05.2019
- ▶ 169. Mueller, I., Kirschtowski, S., Seidel-Morgenstern, A., Hamel, C.: Kinetics of the reductive amination of long chain aldehydes in different solvent systems, Jahrestreffen Reaktionstechnik, Würzburg, Germany, 27.-29.05.2019 Posterpreis
- ▶ 170. Brune, A., Seidel-Morgenstern, A., Hamel, C.: Deactivation and regeneration of VOx catalyst for dehydrogenation of propane in multifunctional reactors, Young Professionals Conference on Process Engineering (YCOPE), Magdeburg, Germany, 18.-20.03.2019
- ▶ 171. Kirschtowski, S., Kadar, C., Strauch, D., Seidel-Morgenstern, A., Hamel, C.: Reductive amination of a long chain aldehyde: solvent effects and gas solubility, Young Professionals Conference on Process Engineering (YCOPE), Magdeburg, Germany, 18.-20.03.2019
- ▶ 172. Brune, A., Seidel-Morgenstern, A., Hamel, C.: Integrated Membrane Reactors for the Selective Dehydrogenation of Propane, 14th International Conference on Catalysis in Membrane Reactors (ICCMR), Eindhoven, Netherlands, 08-11.07.2019 Posterpreis
- ▶ 173. Gerlach, M., Wendt, M., Seidel-Morgenstern, A., Hamel, C.: Kinetic Modelling of deactivation in the rhodium diphosphite catalyzed hydroformylation of long chain olefins assisted by operando spectroscopy, ECCE 12, Florence, Italy, 15.-19.09.2019
- ▶ 174. Kirschtowski, S., Kadar, C., Seidel-Morgenstern, A., Hamel, C.: Reductive amination in different solvent systems: reaction network analysis and kinetics, ECCE 12, Florence, Italy, 15.-19.09.2019
- ▶ 175. Hofmann, K., Burkhardt, S., Kleinschmidt, T., Hamel, C.: Performance keramischer Nanofiltrationsmembranen zur Aufreinigung komplexer Zuckergemische in Abhängigkeit von molekularen und operativen Einflussfaktoren, Jahrestreffen der ProcessNet-Fachgruppen Hochdruckverfahrenstechnik und Membrantechnik, Weihenstephan, Germany, 17.-19.2.2020
- ▶ 176. Pottratz, I., Mueller, I., Seidel-Morgenstern, A., Hamel, C.: Experimental and model-based study of immobilized monolithic pore-through-flow bioreactors for the production of GOS, Jahrestreffen der ProcessNet-Fachgruppen Lebensmittelverfahrenstechnik, Mischvorgänge, Grenzflächenbestimmte Systeme und Prozesse, Würzburg, Germany, 26.-27.03.2020
- ▶ 177. Hofmann, K., Burkhardt, S., Kleinschmidt, T., Hamel, C.: Evaluierung des Potentials keramischer Nanofiltrationsmembranen zur Aufreinigung von Multikomponenten-Zuckergemischen, Jahrestreffen der ProcessNet-Fachgruppen Hochdruckverfahrenstechnik und Membrantechnik, Weihenstephan, Weimar, Germany, 17.-19.2.2020
- ▶ 178. Brune, A., Seidel-Morgenstern, A., Hamel, C.: Analysis and modelbased description of Deactivation and regeneration of VOx catalyst for dehydrogenation of propane in multifunctional reactors, 53. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 11.-13.03.2020
- ▶ 179. Felischak, M., Wolff, T., Alvarado Perea, L., Seidel-Morgenstern, A., Hamel, C.: Evaluation of stability and regenerative aspects of metathesis catalysts for incorporation in a segregated reactor setup, 53. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 11.-13.03.2020
- ▶ 180. Wolff, T., Felischak, M., Alvarado Perea, L., Hamel, C., Seidel-Morgenstern, A.: Characterization of rhenium based catalysts for propene production by metathesis of ethene and 2-butene, 53. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 11.-13.03.2020
- ▶ 181. Gerlach, M., Seidel-Morgenstern, A., Hamel, C.: Catalyst deactivation in the rhodium diphosphite catalyzed hydroformylation, 53. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 11.-13.03.2020
- ▶ 182. Kirschtowski, S., Bube, S., Seidel-Morgenstern, A., Hamel, C.: Influence of Water on the reductive amination kinetics of undecanal in a thermomorphic solvent system, 53. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 11.-13.03.2020
- ▶ 183. Mueller, I., Kowalski, K., Kirschtowski, S., Seidel-Morgenstern, A., Hamel, C.: Biocatalytic Synthesis of Galacto-Oligosaccharides – Understanding of the Mechanism and Mechanistic Kinetic Modelling, Weimar, Germany, 11.-13.03.2020
- ▶ 184. Brune, A., Walter, J. P., Seidel-Morgenstern, A., Hamel, C.: Experimental and model-based study of integrated reactor

setups for the dehydrogenation of propane, XXIV International Conference on Chemical Reactors Chemreactor-24, Mi-lan, Italy, 31.8.-4.09.2020

- ▶ 185. Kirschtowski, S., Alkan, E., Seidel-Morgenstern, A., Hamel, C.: Hydroaminomethylation of a long chain olefin: Influence of operating parameters and modes, XXIV International Conference on Chemical Reactors CHEMREACTOR-24, Milan, Italy, 31.8.-4.09.2020
- ▶ 186. Pottratz, I., Mueller, I., Seidel-Morgenstern, A., Hamel, C.: Potential of monolithic membrane pore-through-flow bioreactors for the production of GOS, XXIV International Conference on Chemical Reactors CHEMREACTOR-24, Milan, Italy, 31.8. 4.09.2020
- ▶ 187. Gerlach, M., Seidel-Morgenstern, A., Hamel, C.: Prediction of the kinetics of homogeneously-catalyzed hydroformylation Effect of different solvents and solvent mixtures, Jahrestreffen Reaktionstechnik, Würzburg, Germany, 18.-20.05.2020
- ▶ 188. Pottratz, I., Müller, I., Seidel-Morgenstern, A., Hamel, C.: Experimental and model-based study of immobilized mono-lith pore-through-flow bioreactors for the production of GOS, Jahrestreffen Reaktionstechnik, Würzburg, Germany, 18.-20.05.2020
- ▶ 189. Walter, J. P., Brune, A., Seidel-Morgenstern, A., Hamel, C.: Simulation studies of the oxidative dehydrogenation of propane to propene in integrated reactor concepts of various complexity, Jahrestreffen Reaktionstechnik, Würzburg, Germany, 18.-20.05.2020
- ▶ 190. Kaps, L., Felischak, M., Nikolic, D., Petkovska, M., Hamel, C., Seidel Morgenstern, A.: Forced periodic reactor operation Analysis of process and forcing parameters exploiting the Nonlinear Frequency Response Method, Jahrestreffen Reaktionstechnik, Würzburg, Germany, 18.-20.05.2020
- ▶ 191. Pottratz, I., Mueller, I., Brune, A., Seidel-Morgenstern, A., Hamel, C.: Production of galacto-oligosaccharides in mono-lith membrane pore-through-flow bioreactors, ProcessNet-Jahrestagung und DECHEMA-Jahrestagung der Biotechnologen, Aachen, Germany, 21.-24.09.2020
- ▶ 192. Kirschtowski, S., Alkan, E., Bube, S., Seidel-Morgenstern, A., Hamel, C.: Reaction Network Analysis of the Hydroaminomethylation of a Long Chain Olefin in a Thermomorphic Solvent System: Mass Transfer and Kinetics ProcessNet-Jahrestagung und DECHEMA-Jahrestagung der Biotechnologen, Aachen, Germany, 21.-24.09.2020
- ▶ 193. Walter, J. P., Brune, A., Seidel-Morgenstern, A., Hamel, C.: Model-based simulation studies of integrated reactor concepts of various complexity for the oxidative dehydrogenation of propane to propene, ProcessNet-Jahrestagung und DECHEMA-Jahrestagung der Biotechnologen, Aachen, Germany, 21.-24.9.2020
- ▶ 194. Brune, A., Walter, J. P., Seidel-Morgenstern, A., Hamel, C.: Kinetic modelling of catalyst deactivation and regeneration of a VOx catalyst during the selective dehydrogenation of propane, ProcessNet-Jahrestagung und DECHEMA-Jahrestagung der Biotechnologen, Aachen, Germany, 21.-24.9.2020
- ▶ 195. Hofmann, K., Jeske, J., Schurzmann, T., Kleinschmidt, T., Hamel, C.: Charakterisierung, Vergleich und Potential von Polymermembranen zur Konzentration und Separation von Lactose, Jahrestreffen der ProcessNet-Fachgruppen Hochdruckverfahrenstechnik und Membrantechnik, Frankfurt a.M., Germany, 04.-05.2.2021
- ▶ 196. Walter, J. P., Brune, A., Seidel-Morgenstern, A., Hamel, C.: Influence of scaleup on hotspot formation and reactor performance of fixed-bed reactors and membrane distributors, Jahrestreffen der ProcessNet-Fachgruppen Hochdruckverfahrenstechnik und Membrantechnik, Frankfurt a.M., Germany, 04.-05.2.2021
- ▶ 197. Mueller, I., Runne, E., Kowalski, K., Seidel-Morgenstern, A., Hamel, C.: Modellierungsansätze zur enzymkatalysierten Synthese präbiotischer Galactooligosaccharide, Jahrestreffen der ProcessNet-Fachgruppe Lebensmittelverfahrenstechnik, Würzburg, Germany, 11.-12.03.2021
- ▶ 198. Pottratz, I., Schmidt, C., Mueller, I., Hamel, C.: Kontinuierliche Produktion von präbiotischen Galacto-Oligosacchariden mittels Enzym-immobilisierter Porendurchflussreaktoren. Jahrestreffen der ProcessNet-Fachgruppe Lebensmittelverfahrenstechnik, Würzburg, Germany, 11.-12.03.2021
- ▶ 199. Hofmann, K., Burkhardt, S., Kleinschmidt, T., Hamel, C.: Potential of ceramic nanofiltration membranes for the purification of multi-component sugar mixtures, Jahrestreffen der ProcessNet-Fachgruppe Lebensmittelverfahrenstechnik, Würzburg, Germany, 11.-12.03.2021
- ▶ 200. Kirschtowski, S., Kortus, W., Seidel-Morgenstern, A., Hamel, C.: Kinetic description of the Hydroaminomethylation by Coupling Hydroformylation and Reductive Amination, 54. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 16.-19.03.2021
- ▶ 201. Mueller, I., Runne, E., Seidel-Morgenstern, A., Hamel, C.: Kinetic Modelling the Biocatalytic Formation of Prebiotic Galacto-oligosaccharides, 54. Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 16.-19.03.2021
- ▶ 202. Kirschtowski, S., Kortus, W., Seidel-Morgenstern, A., Hamel, C.: Kinetic description of the Hydroaminomethylation with mechanistic kinetic models, Annual Meeting on Reaction Engineering 2021, Online Event, Germany, 10 - 12 May 2021
- ▶ 203. Wolff, T., Felischak, M., Alvarado Perea, L., Hamel, C.: Seidel-Morgenstern, A. Direct transformation of ethene to propene in a reactor cascade: Study of the metathesis step applying tungsten-containing catalysts, Annual Meeting on Reaction Engineering 2021, Online Event, Germany, 10 - 12 May 2021
- ▶ 204. Walter, J. P., Brune, A., Hamel, C.: Transient simulation of propane dehydrogenation in an integrated membrane reactor considering coke growth and catalyst activity, Annual Meeting on Reaction Engineering 2021, Online Event, Germany, 10 - 12 May 2021
- ▶ 205. Pottratz, I., Schmidt, C., Mueller, I., Hamel, C.: Scale-up of prebiotic production by monolith based immobilized β galactosidase pore-through flow reactor, Annual Meeting on Reaction Engineering 2021, Online Event, Germany, 10 - 12 May 2021
- ▶ 206. Walter, J. P., Brune, A., Hamel, C.: Selective methanol oxidation to DMM for synthesis of sustainable intermediates – catalyst screening and potential, 13th European Congress of Chemical Engineering and 6th European Congress of Applied Biotechnology, Online Event, Germany, 20 - 23 September 2021
- ▶ 207. Mueller, I., Runne, E., Seidel-Morgenstern, A., Hamel, C.: Comparative Development Study on the Mechanistic Modelling of Enzyme Catalyzed Production of Prebiotics, 13th European Congress of Chemical Engineering and 6th European Congress of Applied Biotechnology, Online Event, Germany, 20 - 23 September 2021
- ▶ 208. Brune, A., Geschke, A., Seidel-Morgenstern, A., Hamel, C.: Experimental Study of an Integrated Membrane Reactor Cascade with Flow Reversal for the Dehydrogenation of Propane, 13th European Congress of Chemical Engineering and 6th

European Congress of Applied Biotechnology, Online Event, Germany, 20 - 23 September 2021

- ▶ 209. Kortus, W., Kirschtowski, S., Seidel-Morgenstern, A., Hamel, C.: Mechanistic kinetic modeling of hydroaminomethylation 13th European Congress of Chemical Engineering and 6th European Congress of Applied Biotechnology, Online Event, Germany, 20 - 23 September 2021
- ▶ 210. Kirschtowski, S., Alkan, E., Kortus, W., Seidel-Morgenstern, A., Hamel, C.: Hydroaminomethylation of a long chain olefin Influence of operating parameters, International Conference on Chemical Reactors CHEMREACTOR-24, Italy, 12 - 17 September 2021
- ▶ 211. Brune, A., Walter, J. P., Seidel-Morgenstern, A., Hamel, C.: Experimental and model-based study of integrated reactor setups for the dehydrogenation of propane, International Conference on Chemical Reactors CHEMREACTOR-24, Italy, 12 - September 2021
- ▶ 212. Pottratz, I., Mueller, I., Seidel-Morgenstern, A., Hamel, C.: Potential of monolithic membrane pore-through-flow bioreactors for the production of GOS, Experimental and model-based study of integrated reactor setups for the dehydrogenation of propane, International Conference on Chemical Reactors CHEMREACTOR-24, Italy, 12 - 17 September 2021
- ▶ 213. Hofmann, K., Kleinschmidt, T., Hamel, C.: Herausforderungen bei Scale-up und industriellen Feeds am Beispiel der Aufkonzentrierung von Lactose in Molkenpermeat, Jahrestreffen der ProcessNet-Fachgruppen Extraktion, Phytoextrakte und Membrantechnik, 3. - 4. Februar 2022
- ▶ 214. Walter, J. P., Brune, A., Seidel-Morgenstern, A., Hamel, C.: VOx catalysts for selective methanol oxidation – influence of supporting material, VOx loading and oxygen concentration on DMM formation, Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 2022
- ▶ 215. Hofmann, K., Maharaj, T., Hamel, C.: Evaluating the Potential of integrating Semi-continuous Fermentation and Filtration Process for Efficiency Enhancement, Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 2022
- ▶ 216. Pottratz, I., Hamel, C.: Coupling Enzyme systems for improved synthesis of Galacto-oligosaccharids, Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 2022
- ▶ 217. Hofmann, K., Kleinschmidt, T., Hamel, C.: Untersuchungen zum Potential semi-kontinuierlich geführter Fermentationsprozesse in einer Filtrationsanlage, Jahrestreffen der ProcessNet-Fachgruppen Lebensmittelverfahrenstechnik und Trocknungstechnik, 10. - 11. März 2022
- ▶ 218. Müller, I., Pottratz, I., Möbus, N., Seidel-Morgenstern, A., Hamel, C.: Kopplung der biokatalysierten Synthese und Downstream Processing zur Herstellung hochreiner Galactooligosaccharide, Jahrestreffen der ProcessNet-Fachgruppen Lebensmittelverfahrenstechnik und Trocknungstechnik, 10. - 11. März 2022
- ▶ 219. Pottratz, I., Hamel, C.: Galacto-Oligosaccharidsynthese aus Molkenpermeat mittels immobilisierter β -Galactosidase im Porendurchflussreaktor, Jahrestreffen der ProcessNet-Fachgruppen Lebensmittelverfahrenstechnik und Trocknungstechnik, 10. - 11. März 2022
- ▶ 220. Brune, A., Geschke, A., Seidel-Morgenstern, A., Hamel, C.: Modeling and Simulation of Catalyst Deactivation and Regeneration Cycles for Propane Dehydrogenation, Annual Meeting on Reaction Engineering and ProcessNet Subject Division Heat and Mass Transfer, Würzburg 2022
- ▶ 221. Hofmann, K., Kleinschmidt, T., Hamel, C.: Evaluation of the Potential of Integrating Semi-continuous Fermentation and Filtration Process for Efficiency Enhancement, Annual Meeting on Reaction Engineering and ProcessNet Subject Division Heat and Mass Transfer, Würzburg 2022
- ▶ 222. Walter, J. P., Wolff, T., Hamel, C.: Kinetic description of the selective oxidation of methanol on a VOx/TiO₂ catalyst, Annual Meeting on Reaction Engineering and ProcessNet Subject Division Heat and Mass Transfer, Würzburg 2022
- ▶ 223. Kortus, W., Kirschtowski, S., Seidel-Morgenstern, A., Hamel, C.: Crucial influence of mass transfer on the kinetics of hydroaminomethylation, Annual Meeting on Reaction Engineering and ProcessNet Subject Division Heat and Mass Transfer, Würzburg 2022
- ▶ 224. Müller, I., Pottratz, I., Moebus, N., Hamel, C.: Coupling biocatalyzed synthesis and downstream processing for the production of high-purity galacto-oligosaccharides, Annual Meeting on Reaction Engineering and ProcessNet Subject Division Heat and Mass Transfer, Würzburg 2022
- ▶ 225. Gerlach, M., Huxoll, F., Seidel-Morgenstern, A., Sadowski, G., Hamel, C.: Application and limitation of thermodynamic approaches to hydroformylation Annual Meeting on Reaction Engineering and ProcessNet Subject Division Heat and Mass Transfer, Würzburg 2022
- ▶ 226. Brune, A., Walter, J.P., Seidel-Morgenstern, A., Hamel, C.: Integrated Periodically Operating Membrane Reactors for Selective Dehydrogenation of Propane, AICHEMIA-Vortrag, Frankfurt 2022
- ▶ 227. Kirschtowski, S., Kortus, W., Hamel, C.: Hydroformylation - The crucial initial step in the Hydroaminomethylation, Jahrestreffen Deutscher Katalytiker, Weimar, Germany, 2023
- ▶ 228. M. Gerlach, Kirschtowski, S., Kortus, W., Müller, I., Pottratz, I., Hamel, C.: Mechanistic Kinetic Modelling in Homogeneous and Bio Catalysis – Potential and Application, Annual Meeting Reaction Engineering, Frankfurt, Germany, 2023
- ▶ 229. Walter, J.P., W., Hamel, C.: Selective Oxidation of Green Methanol to Oxygenates - Comparison of Empirical and Mechanistic Kinetic Approaches, Annual Meeting Reaction Engineering, Frankfurt, Germany, 2023
- ▶ 230. Pottratz, I., Hamel, C.: Monolith based pore-through-flow membrane bioreactors in pilot scale for the use of prebiotic production, Annual Meeting Reaction Engineering, Frankfurt, Germany, 2023
- ▶ 231. Brune, A., Seidel-Morgenstern, A., Hamel, C.: Monolith based pore-through-flow membrane bioreactors in pilot scale for use of prebiotic production, Annual Meeting Reaction Engineering, Frankfurt, Germany, 2023