

paperID	title	authors	organisations
1 Basic data			
1150	Experimental investigations on the fluid-dynamic design of high performance separating trays based on a miniaturized measuring cell	Leushacke, Wibke; Merkel, Amelie; Grünewald, Marcus	Ruhr-University Bochum, Germany
1163	Conducting Distillative Separation Efficiency Measurements with Elevated Feed Viscosities	Gutperl, Sven; Jasch, Katharina; Scholl, Stephan	TU Braunschweig, Germany
1165	A kinetic mass-transfer study of the oxidative-absorption of SO ₂ in H ₂ O ₂ aqueous solutions	Flagiello, Domenico (1); Di Natale, Francesco (1); Lancia, Amedeo (1); Sebastiani, Ilio (2); Nava, Fabrizio (2); Milicia, Antonino (2); Erto, Alessandro (1)	1: Department of Chemical, Materials and Production Engineering, University of Naples Federico II – P.le Tecchio 80, 80125 Naples, Italy; 2: Desmet Ballestra SpA – Via Piero Portaluppi 17 - 20138 Milan, Italy
1170	Cyrene and derivatives of cyrene as biobased entrainers in extractive distillation	Schuur, Boelo; Brouwer, Thomas; Bock, Jorrit; Hooisma, Simon	University of Twente, The Netherlands
1186	Gas absorption performance and stability of fine bubbles in seawater and saline solutions	Piña Torres, José de Jesús (1); Cabrera Ruiz, Julián (2); Alcantara Avila, J. Rafael (3)	1: Technical University of Munich, Germany; 2: Universidad de Guanajuato; 3: Kyoto University, Japan
1201	Further development of the guideline for standardized characterization measurements of packed columns	Triebel, Andrea; Schlager, Marcus; Haushofer, Georg; Wolf-Zöllner, Verena; Lehner, Markus	Montanuniversität Leoben, Austria
1216	Experimental Investigations of Fluid Dynamics of Gravity-destabilized Liquid Film Flows over Structured Surfaces Using Light Induced Fluorescence	Raddant, Hannes; Brösigke, Georg; Hoffmann, Christian; Illner, Markus; Repke, Jens-Uwe	Technische Universität Berlin, Germany
1248	Study of axial dispersion on several modern structured and random packings	Valenz, Lukáš; Šobr, Patrik; Čmelíková, Tereza; Rejl, František Jonáš	University of Chemistry and Technology, Prague, Czech Republic
1251	Mass-transfer model for distillation columns equipped with structured packings	Rejl, František Jonáš; Čmelíková, Tereza; Valenz, Lukáš; Jan, Haidl	University of Chemistry and Technology, Prague, Czech Republic
1254	Using thermography for visualisation of liquid surface activity in mass-transfer processes	Mařík, Karel; Haidl, Jan; Prokopec, Vadim; Rejl, František Jonáš	University of Chemistry and Technology, Prague, Czech Republic
1255	Mutual verification of the gas-phase volumetric mass-transfer coefficients determined in the packed absorption column	Valenz, Lukáš; Rejl, František Jonáš; Čmelíková, Tereza; Reisnerová, Martina; Hojgrová, Anna	University of Chemistry and Technology, Prague, Czech Republic
1267	Intensified extractive distillation process for the separation of Acetone/Methanol mixture using the ionic liquid 1-Allyl-3-Methylimidazolium Bromide	Guella, Fadia Nouara; Benyounes, Hassiba	University of Sciences and Technology of Oran Mohamed Boudiaf, Algeria
2 Modelling, Simulation, Control (in particular assisted by hybrid modelling or use of IA methods)			
1106	Synthesis of Double Dividing Wall Distillation Systems for the Separation of Quaternary Mixtures	Flores-Flores, Monserrat (1); Gómez-Castro, Fernando Israel (1); Romero-Izquierdo, Araceli Guadalupe (2); Gutiérrez-Antonio, Claudia (2); Errico, Massimiliano (3)	1: Universidad de Guanajuato, Mexico; 2: Universidad Autónoma de Querétaro, Mexico; 3: University of Southern Denmark, Denmark
1109	Pressure-driven, dynamic modeling of distillation columns using smooth reformulations to describe startup, shutdown, and flexible operation	Hoffmann, Christian; Repke, Jens-Uwe	Technische Universität Berlin, Germany
1113	Model based and experimental analysis of the dynamic reactive absorption loop behavior	Bothe, Mike; Lutters, Nicole; Kenig, Eugeny Y.	Paderborn University, Chair of Fluid Process Engineering, Paderborn/Germany
1116	Energy saving potential of dividing wall columns identified by NQ-curves	Ränger, Lena-Marie (1); Seidel, Tobias (2); Bortz, Michael (2); Grützner, Thomas (1)	1: Ulm University, Germany; 2: Fraunhofer Institute for Industrial Mathematics ITWM, Germany
1117	CFD-based investigation of the packing microstructure influence on droplet behavior and film flow	Dechert, Christopher; Kenig, Eugeny	Paderborn University, Germany
1119	Novel Process for Levulinic Acid Production Using Reactive Distillation.	Alcocer-García, Heriberto; Solis-Sanchez, Jose Luis; Sánchez-Ramírez, Eduardo; Romero-García, Ana Gabriela; Segovia-Hernandez, Juan Gabriel	Universidad de Guanajuato, Mexico
1120	Energy and Control Analysis in Intensified Schemes for Acetone Purification	Amézquita-Ortiz, Jonathan Martin (1); Alcocer-García, Heriberto (1); Contreras-Zarazua, Gabriel (1); Fontalvo, Javier (2); Segovia-Hernandez, Juan Gabriel (1)	1: Universidad de Guanajuato, Mexico; 2: Universidad Nacional de Colombia-Manizales
1123	Rate-Based Column Simulation in the Complex Domain	Jawahill, Jaeide; Taylor, Ross	Clarkson University, United States of America
1125	A Simple Method for Calculating a Pitchfork Distillation Boundary	Krollkowski, Lechoslaw	Wroclaw University of Science and Technology, Poland
1128	Balance between steady-state design and dynamic control of four-product dividing wall columns	Qian, Xing (1); Jia, Shengkun (2)	1: College of Information Science and Technology, Beijing University of Chemical Technology, Beijing 100029, China; 2: School of Chemical Engineering and Technology, Chemical Engineering Research Center, State Key Laboratory of Chemical Engineering, Tianjin University, Tianjin 300350, China
1139	A meaningful interpretation of an equilibrium stage in a pumparound	Lee, Ming Yang; Duss, Markus	Sulzer Chemtech AG, Switzerland

1141	Integrated entrainer design for extractive distillation using the infinitely sharp splits method and computer-aided molecular design	Nielsen, Adem Rosenkvist Auichaoui (1); Rodriguez-Donis, Ivonne (2); Gerbaud, Vincent (3); Shcherbakova, Natalya (3); Abildskov, Jens (1)	1: Department of Chemical and Biochemical Engineering, Technical University of Denmark, Denmark; 2: Laboratoire de Chimie Agro-industrielle, LCA, Université de Toulouse, INRA, Toulouse, France; 3: Laboratoire de Génie Chimique, Université de Toulouse, CNRS, INP, UPS, Toulouse, France
1151	Controllability of pilot multiple dividing wall column for various feed compositions	Lukač, Goran (1); Preißinger, Ulrich (2); Dejanović, Igor (1); Grützner, Thomas (2)	1: University of Zagreb, Faculty of Chemical Engineering and Technology, Zagreb, Croatia; 2: Ulm University, Institute of Chemical Engineering, Ulm, Germany
1155	Towards a better understanding of wiped film evaporators - using a modular model for fluid dynamics and heat transfer	Appelhaus, David; Jahnke, Stefan; Jasch, Katharina; Scholl, Stephan	TU Braunschweig, Germany
1172	Controllability study of a dual condenser four product DWC	Lukač, Goran (1); Halvorsen, Ivar J. (2); Olujić, Žarko (3); Dejanović, Igor (1)	1: University of Zagreb, Faculty of Chemical Engineering and Technology, Croatia; 2: SINTEF, Norway; 3: Retired
1176	Entrainer selection for extractive distillation using the Infinitely Sharp Split method	Rodriguez-Donis, Ivonne (1); Abildskov, Jens (2); Shcherbakova, Nataliya (3); Gerbaud, Vincent (3)	1: Laboratory of Agro-Industrial Chemistry, France; 2: PROSYS, Department of Chemical and Biochemical Engineering, Denmark; 3: Chemical Engineering Laboratory, France
1177	The Influence of Physical Properties on Structured Packing HETP Correlations	Starrantino, Andrew (1); McCarley, Ken (2); Mohammad, Sayeed (2); Cai, Tony (2); Aichele, Clint (1)	1: School of Chemical Engineering, Oklahoma State University, Stillwater, OK 74078; 2: Fractionation Research Incorporated, Stillwater, OK 74074
1179	Direct and fully automated shortcut method for designing an extractive dividing wall column: 1. Minimum azeotropic Mixtures with a Heavy Entrainer	SEIHOU, Fatima Zohra (1); Gerbaud, Vincent (2,3); Benyounes, Hassiba (4)	1: Laboratoire de Génie Chimique et de Catalyse Hétérogène, Université de Science et de la Technologie – Mohamed Boudiaf, Oran, Algérie; 2: Université de Toulouse, INP, UPS, LGC (Laboratoire de Génie Chimique), 4 allée Emile Monso, F-31432 Cedex 04 Toulouse, France; 3: CNRS, LGC (Laboratoire de Génie Chimique), F-31432 Cedex 04 Toulouse, France; 4: UST. Oran, Laboratoire de chimie physique de matériaux, catalyse et environnement, Oran, Algeria
1181	Design of a Novel Process for CO2 Capture Using Deep Eutectic Liquids	Mora-Garduño, Carlos Abraham (1); Jalomo-Fonseca, Karla Rebeca (1); Romero-Garcia, Ana Gabriela (1); Ponce-Ortega, Jose Maria (2); Gonzalez-Campos, Betzabe (2); Segovia-Hernandez, Juan Gabriel (1)	1: Universidad de Guanajuato, Mexico; 2: Universidad Michoacana de san Nicolas de Hidalgo, Mexico
1185	Smooth Penalty Function Method for Rigorous Optimization of Distillation Processes	Liu, Xingwei; Jia, Shengkun; Luo, Yiqing; Yuan, Xigang	Tianjin University, China, People's Republic of
1187	Machine learning-based modelling of distillation process combining long short-term memory with wavelet transform	Kwon, Hyukwon (1,2); Choi, Yeongryeol (1,2); Cho, Hyungtae (1); Kim, Junghwan (1)	1: Korea Institute of Industrial Technology, Korea, Republic of (South Korea); 2: Yonsei University, Korea, Republic of (South Korea)
1196	Optimal design and operation of flexible reactive distillation processes	Tsatse, Aikaterini; Sorensen, Eva	University College London (UCL), United Kingdom
1200	Parallel column model for Reactive Dividing Wall Column simulation	de Villiers, Ruan; Kooijman, Hendrik A.; Taylor, Ross	Clarkson University, United States of America
1228	Modeling distillation columns for practical purposes	Ehlers, Christoph; Paul, Niklas; Rix, Armin; Zitzewitz, Philip; Hiller, Christoph	Evonik Operations GmbH, Germany
1231	Measurement of vapor-liquid equilibria of β -damascenone and simulation of its behavior during a batch distillation	Zanghelini, Gabriela (1); Giampaoli, Pierre (1); Esteban-Decloux, Martine (1); Vitu, Stéphane (1,2); Athès, Violaine (1)	1: Université Paris-Saclay, INRAE, AgroParisTech, UMR Sayfood, 91300 Massy, France; 2: CNAM, 75003 Paris, France
1234	Intensification of CO2 Capture from Methane-rich Streams Using a Rotating Packed Bed Absorption Column	Mendes, João Gabriel (1); Simões, Gabriel (1); Mendes, Delano (1); Vieira de Melo, Silvio Alexandre (2); Pontes, Karen (1); Illner, Markus (2); Esche, Erik (2); Repke, Jens-Uwe (2)	1: Federal University of Bahia (UFBA), Brazil; 2: Technische Universität Berlin, D-10623 Berlin, Germany
1241	Influence of the Size of Prefractionator on Processing Capacity for Two-Column Batch Distillation Processes	Nemeth, Bence; Hegely, Laszlo; Lang, Peter	Budapest University of Technology and Economics, Department of Building Services and Process Engineering, Hungary
1250	The development of soft sensors for continuous estimation of the distillation 95% point of diesel product	Ujević Andrijić, Željka; Bof, Nenad; Herceg, Srećko	University of Zagreb, Faculty of Chemical Engineering and Technology, Croatia
1260	Exergy analysis of a Top Heat-Integrated Distillation Columns (T-HIDIC) for Propylene-Propane system	Mancera, Javier (1); Martinez-Riascos, Carlos Arturo (1); Mendoza, Diego Fernando (2); Guevara-Luna, Marco Andrés (3)	1: Universidad Nacional de Colombia, Colombia; 2: Universidad de Antioquia, Colombia; 3: Université de Strasbourg, France
1264	Optimisation of the Dehydration of Isopropanol by Batch Heteroazeotropic Distillation with Off-cut Recycling	Nemeth, Bence; Hegely, Laszlo; Lang, Peter	Budapest University of Technology and Economics, Hungary, Faculty of Mechanical Engineering, Department of Building Service and Process Engineering
1266	Heterogeneous Azeotropic Separation with Intermediate Boiling Point: from Thermodynamic Analysis to Process Design	Wang, Mingmei; Li, Lin; Wang, Erqiang; Li, Zengxi	University of Chinese Academy of Sciences, China, People's Republic of
1284	Rapid method for prediction of random packing performance based on minimized experimental efforts	Mačkowiak, Jerzy	ENVIMAC Engineering GmbH, Germany

1293	Simulation and Control of C9-C10 Aromatics Splitter Column of Bouali Sina Petrochemical Company	Zivdar, Mortaza (1); Mirhosseini, Seyed Mortaza (2); Mokhtari, Mohammad Amin (2); Abdollahi, Mohammad (3)	1: Professor, Chemical Engineering Department, University of Sistan and Baluchestan, P.O. Box 98135-674, Zahedan, Iran; 2: MSc, Chemical Engineering Department, University of Sistan and Baluchestan, P.O. Box 98135-674, Zahedan, Iran; 3: Process Dept. Bouali Sina Petrochemical Company, Site 4, Petrochemical Special Economic Zone, Bandar-e Mahshahr, Iran
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3_Hybrid and Multifunctional Processes (modularity, flexibility and intensification)

1104	Industrial experience in using cyclic distillation for the purification of ethanol food grade	Bedryk, Olesja; Shevchenko, Alexander; Maleta, Vladimir; Kiss, Anton	University of Manchester, United Kingdom
1114	Modelling of a hybrid process combining zero gravity distillation and vapour permeation	Wende, Marc; Kenig, Eugeny Y.	Chair of Fluid Process Engineering, Paderborn University, Paderborn, Germany
1134	Design of Intensified processes separation to recover Furfural and coproducts Economic, Environmental, Safety and Control evaluation.	Contreras-Zarazúa, Gabriel; Jasso-Villegas, Miriam E.; Sánchez-Ramírez, Eduardo; Segovia-Hernandez, Juan Gabriel	Universidad de Guanajuato, Mexico
1175	A feasible divided wall column process for the purification of cinnamic aldehyde from Vietnam's Cinnamomum Cassia oil	NGUYEN, Trung-Dung (1); PHAN, Ngoc-Quang (1); CAO, Hong-Ha (1); TA, Hong-Duc (1); MEYER, Xuan-Mi (2); BLANCO, Jean-Francois (2); COGNET, Patrick (2); MEYER, Michel (2)	1: Hanoi University of Science and Technology, Vietnam; 2: Universite de Toulouse, ENSIACET – INP de Toulouse, Laboratoire de Genie Chimique, UMR CNRS 5503, France
1192	An optimisation-based comparison of different dividing wall column configurations	Duanmu, Fanyi; Sorensen, Eva	University College London (UCL), United Kingdom
1195	Optimal design and operation of hybrid distillation/pervaporation processes	Chia, Dian; Sorensen, Eva	University College London (UCL), United Kingdom
1262	A Novel Intensified and Integrated Distillation Approach for Improving Manufacture of Propylene Glycol Monomethyl Ether Acetate	Kim, Gwang Sik (1); Islam, Muhammad (1); Chaniago, Yus Donald (2); Koo, Kee-Kahb (3); Nhien, Le Cao (1); Amjad, Riaz (1); Lee, Moonyong (1)	1: Yeungnam University, Korea, Republic of (South Korea); 2: Ulsan National Institute of Science and Technology, Republic of (South Korea); 3: Sogang University, Republic of (South Korea)

4_Equipment Design, Technology and Innovation (additive manufacturing, centrifugal separation,...)

1111	Investigation of liquid maldistribution in a random packed column operated as a cooling tower	Winkler, Thomas; Klein, Harald; Rehfeldt, Sebastian	Technical University of Munich, Germany
1122	Flashing feed and mist eliminator performance at critical fluid properties	Döß, Alexander (1); Schubert, Markus (1); Schleicher, Eckhard (1); Flegiel, Felix (2); Hampel, Uwe (1,3)	1: Helmholtz-Zentrum Dresden-Rossendorf, Institute of Fluid Dynamics, Bautzner Landstraße 400, 01328 Dresden, Germany.; 2: Linde GmbH, Engineering Division, Dr.-Carl-von-Linde Straße 6–14, 82049 Pullach, Germany; 3: Technische Universität Dresden, Chair of Imaging Techniques in Energy and Process Engineering, 01062 Dresden, Germany
1132	CFD simulation and additive manufacturing as a combined tool for the development of innovative structured packings on a laboratory scale	Sarajlic, Nadin (1); Neukäufer, Johannes (2); Ashour, Mohamed Adel (2); Grützner, Thomas (2); Knösche, Carsten (3); Paschold, Jürgen (3); Klein, Harald (1); Rehfeldt, Sebastian (1)	1: Technical University of Munich, Germany; 2: Ulm University, Germany; 3: BASF SE, Germany
1138	Novel additively manufacturable structured packings developed by innovative design methods	Lange, Andreas; Fieg, Georg	Hamburg University of Technology, Germany
1145	PREDICTING PRESSURE DROP OF ADVANCED WIRE GAUZE CORRUGATED SHEET STRUCTURED PACKINGS FOR DEEP VACUUM APPLICATIONS	Olujić, Zarko (1); Sacher, Johannes (2); Repke, Jens Uwe (2)	1: Retired, The Hague, The Netherlands; 2: Technische Universität Berlin, Straße des 17. Juni 135, 10136 Berlin, Germany
1153	Experimental characterization of an innovative separation tray with enhanced flexibility	Riese, Julia; Fasel, Henrik; Grünewald, Marcus	Ruhr University Bochum, Germany
1158	Hydraulic investigations of the operating limits of high performance trays	Engel, Felicitas Sophia; Klein, Harald; Rehfeldt, Sebastian	Technical University of Munich, Germany
1159	Experimental studies on the fluid dynamics of a miniaturized measuring cell for an improved design procedure of distillation columns	Merkel, Amelie; Leushacke, Wibke; Plate, Dominik; Gruenewald, Marcus	Ruhr-Universität Bochum, Germany
1209	Liquid Holdup Distribution in Structured-Packed Columns via Gamma-Ray Computed Tomography	Berger, Alan (1); Houghton, Patrick (1); Wilson, Jonathan (1); Schubert, Markus (2); Bieberle, André (2)	1: 1940 Air Products Blvd Allentown PA 18106 USA; 2: Helmholtz-Zentrum Dresden-Rossendorf (HZDR), Germany
1212	Improving Design and Scale-up of Columns with Structured Packings by Means of CFD	Xia, Marc Fan; Neumann, Maximilian Peter; Rehfeldt, Sebastian; Klein, Harald	Technical University of Munich, Department of Mechanical Engineering, Institute of Plant and Process Technology, Garching/Germany
1230	Loading & Flooding in Mellapak Structured Packing: Radiographic & Computer-Tomographic Insights	Linder, Thomas (1); Eder, Simon (2); Arlt, Wolfgang (2); Thommes, Matthias (2); Gäbler, Anso (1)	1: Sulzer Chemtech AG, Switzerland; 2: Institute of Separation Science & Technology, Friedrich-Alexander-University Erlangen-Nürnberg, Germany
1274	The experimental characterization of random packing liquid interfaces with Electric Impedance Tomography	Lamprecht, Johannes; Burger, Andries	Department of Process Engineering, Stellenbosch University, South Africa
1296	Measuring tray and point efficiencies in hydraulic air/water column mockups via air-stripping of isobutyl acetate in aqueous solution	Marchini, Sara (1,2,3); Vishwakarma, Vineet (2); Schubert, Markus (2); Brunazzi, Elisabetta (3); Hampel, Uwe (1,2)	1: Chair of Imaging Techniques in Energy and Process Engineering, Technische Universität Dresden, 01062 Dresden, Germany; 2: Institute of Fluid Dynamics, Helmholtz-Zentrum Dresden-Rossendorf, Bautzner Landstraße 400, 01328 Dresden, Germany; 3: Department of Civil and Industrial Engineering, University of Pisa, Largo Lucio Lazzarino 2, 56126 Pisa, Italy

5_Process Operation and Troubleshooting

1133	Investigations of crystallization fouling in columns	Inderwies, Korbinian; Klein, Harald; Rehfeldt, Sebastian	Technical University of Munich, Department of Mechanical Engineering, Institute of Plant and Process Technology, Germany
1148	Automated detection of loading and flooding points in packed columns	Haushofer, Georg; Wolf-Zöllner, Verena	Montanuniversität Leoben, Austria
1156	Find the error - Machine Learning as a Tool for Identifying Unstable Operating Points in Thermosiphon Reboilers	Appelhaus, David; Scholl, Stephan; Jasch, Katharina	TU Braunschweig, Germany
1174	Investigations on thermosiphon reboiling using foaming liquid mixtures	Strodtmann, Laura; Jasch, Katharina; Schöll, Stephan	Technische Universität Braunschweig, Germany
1194	Wet-oxidative gas desulfurization under avoidance of solid sulfur precipitation	Wurm, Julian (1); Repke, Jens-Uwe (1); von Morstein, Olaf (2); Thielert, Holger (2)	1: TU Berlin, Germany; 2: thyssenkrupp Industrial Solutions AG, Germany
1258	Troubleshooting Liquid Side Draw-off Trays	yang, quan; Bachmann, Christian; Hou, Peng-Cheng; Shen, Sha-Li; Lee, SiangHua	Sulzer Chemtech
6 Energy and Sustainability in separation processes (efficiency, renewable energy, CO2 capture, new concepts,...)			
1108	Assessment of Deep Eutectic Solvents for Alcohol-Water Separations by Extractive Distillation	de Haan, Andre; Hartanto, Dhoni; Hartanto, Dhoni	Delft University of Technology, Netherlands, The
1110	Simulation of a Cryogenic 13C Isotope Distillation Process Applying Different Cooling Concepts	Fritsch, Philipp (1); Hözl, Michael (1); Aleksiev, Alexander (1,2); Rehfeldt, Sebastian (1); Klein, Harald (1)	1: Technical University of Munich; 2: Linde GmbH, Linde Engineering
1140	Optimizing Mass Transfer for Post Combustion Carbon Capture	Lee, Ming Yang (1); Venkatesan, Saravanan (2); Stephane, Karl (2); Bachmann, Christian (1)	1: Sulzer Chemtech AG, Switzerland; 2: Shell Technology Centre Bangalore, India
1142	CO2 capture from syngas by absorption process using fluorinated anion ionic liquids	Nesrine, AMIRI (1); Hassiba, BENYOUNES (2); Zoubida, LOUNIS (1)	1: Laboratoire d'Ingénierie de la Sécurité Industrielle et du Développement Durable, Institut de Maintenance et de la Sécurité Industrielle, Université Oran 2, Algérie; 2: Laboratoire de chimie physique de matériaux, catalyse et environnement, Université des Sciences et de la Technologie d'Oran USTO-MB, Algérie
1144	Conceptual design of distillation process for the separation of styrene monomer from polystyrene pyrolysis oil: experiment and simulation	Dahal, Roshi (1); Uusi-Kyyny, Petri (1); Pokki, Juha-Pekka (1); Alopaeus, Ville (1,2)	1: Aalto University, School of Chemical Engineering, Department of Chemical and Metallurgical Engineering, P.O. Box 11000, FI-00076 Aalto, Finland; 2: Mid Sweden University, Department of Chemical Engineering, Sundsvall, 85170, Sweden
1147	Synthesis of Alternative Intensified Sequences for the Separation of a Multicomponent Renewable Hydrocarbons Mixture	Oliva-González, Isaac (1); Romero-Izquierdo, Araceli Guadalupe (2); Gutiérrez-Antonio, Claudia (2); Gómez-Castro, Fernando Israel (1); Hernández, Salvador (1)	1: Universidad de Guanajuato, México; 2: Universidad Autónoma de Querétaro, México
1193	CO2-capture from air using amino-acid salt solutions	Feron, Paul; Kiani, Ali	CSIRO, Australia
1198	Experimental Investigation of the Impact of Physico-chemical Properties on Liquid Film Flow Over Flat and Corrugated Surfaces.	AL SAYEGH, Mohamad (1,2); ROUZINEAU, David (1); MEYER, Michel (1); CID, Emmanuel (1); ALIX, Pascal (2); DALMAZZONE, Christine (2); ROESLER, John (2)	1: Laboratoire de génie chimique de Toulouse, France; 2: IFP Energies Nouvelles, Solaize, France
1204	BE-Clean: P2X technology for gas desulphurization	Borgquist, Sebastian (1); Villadsen, Sebastian Nis Bay (1); Fosbøl, Philip Loidrup (1); Abildskov, Jens (2)	1: CERE, Dept. Chem. Biochem. Eng., Tech. Univ. Denmark; 2: PROSYS, Dept. Chem. Biochem. Eng., Tech. Univ. Denmark
1220	Enhancing the SO2 removal efficiency of a spray tower using electrified water droplets	Parisi, Arianna (1); Carotenuo, Claudia (2); Lancia, Amedeo (1); Di Natale, Francesco (1)	1: The Sustainable Technologies for Pollution Control Lab, Department of Chemical, Material and Industrial Production Engineering, University of Naples Federico II, Piazzale V. Tecchio 80, 80125 Napoli, Italy; 2: Department of Engineering, University of Campania "L. Vanvitelli", Via Roma 29, 81031 Aversa (Caserta), Italy
1225	Investigation of carbon footprints of three desalination technologies: Reverse Osmosis (RO), Multi-Stage Flash Distillation (MSF), and Multi-Effect Distillation (MED)	Do Thi, Huyen Trang; Toth, Andras Jozsef	Budapest University of Technology and Economics, Hungary
1240	Kinetics in DEEA-MAPA-H2O-CO2 systems for the post-combustion CO2 capture by absorption-regeneration using demixing solvents	COSTA, Alexis; MOUHOUBI, Seloua; DUBOIS, Lionel; DE WEIRELD, Guy; THOMAS, Diane	University of Mons - Faculty of Engineering, Belgium
1246	Feasibility of internal heat integrated dividing wall column separating methanol, ethanol, and isopropanol	Qiao, Qingliang (1); Chen, Haisheng (2); Huang, Kejin (3)	1: Beijing University of Chemical Technology; 2: Beijing University of Chemical Technology; 3: Beijing University of Chemical Technology
1249	Dynamic behavior of thermosiphon-assisted falling film distillation column	Alves, José Luiz Francisco; Machado, Ricardo Antonio Francisco; Marangoni, Cintia	Federal University of Santa Catarina, Brazil
1276	CO2 CAPTURE USING ADSORBENTS BASED ON SUPPORTED IMINES	Sanchez Quiñones, Carlos Alberto Augusto; Álvarez-Torellas, Silvia; Delgado, Jose Antonio; Águeda Maté, V. Ismael; Larriba Martínez, Marcos; Martín Martínez, María	Catalysis and Separation Processes group (CyPS), Complutense University of Madrid
1280	Comparative assessment of solvent-based post-combustion capture processes for waste-to-energy	Otgonbayar, Tuvshinjargal; Pérez Calvo, José Francisco; Mazzotti, Marco	ETH Zurich, Switzerland

1287	EVALUATION OF CHEMICAL ABSORPTION AND SOLVENT REGENERATION FOR CO2 CAPTURE FROM FLUE GASES WITH DIFFERENT DESIGN CONFIGURATIONS	Bruschi, Larissa Thaís; Vilela Weikert, Clara; Maciel Filho, Rubens; Wolf Maciel, Maria Regina	State University of Campinas, Brazil
1288	Are Deep Eutectic Solvents Feasible for Simultaneous Capture of CO2 and H2S from Natural Gas?	Vilela Weikert, Clara; Bruschi, Larissa Thaís; Maciel Filho, Rubens; Wolf Maciel, Maria Regina	State University of Campinas, Brazil
1297	Solvent Management by Oxygen Removal in Amine based Post Combustion CO2 Capture	Srivastava, Tanya	TNO, Netherlands, The
7_Biobased Processes			
1253	Downstream processing of dimethyl ether synthesized from biogas with a hydrogen-enhanced reaction	Otto, Caroline; Benker, Bernd; Lindermeir, Andreas	TU Clausthal, Germany
1268	Solvent selection for simultaneous separation of furans from catalytic reactor in downstream purification process	Fele Žilnik, Ljudmila; Novak, Uroš; Grilc, Miha; Likožar, Blaž	National Institute of Chemistry, Slovenia
1279	Recovery and characterization of cellulosic ethanol from fermentation of sugarcane bagasse	Maciel Filho, Rubens (4); Yamakawa, Celina (1); Rojas, Sebastian (2); Herrera, Willian (4); E.V. Rossell, Carlos (3); Wolf Maciel, Maria Regina (4)	1: Technical University of Denmark; 2: Goethe University Frankfurt; 3: Center on Energy Planning-State University of Campinas; 4: School of Chemical Engineering- State University of Campinas
1290	Simulation of eucalyptus bio-oil and Brazilian crude oils blends distillation: effects, challenges and opportunities.	Fernandes, Daniel Santos; Fregolente, Leonardo Vasconcelos; Maciel, Maria Regina Wolf	School of Chemical Engineering (FEQ), University of Campinas (UNICAMP), 13083-852 Campinas, Sao Paulo, Brazil
1291	Simulation of eucalyptus bio-oil and Brazilian crude oils blends distillation: effects, challenges and opportunities.	Fernandes, Daniel Santos; Fregolente, Leonardo Vasconcelos; Maciel, Maria Regina Wolf	Chemical Engineering Faculty - State University of Campinas (UNICAMP), Brazil
8 On-board Separation Processes (embedded processes in cars, boats, aircrafts, satellites)			
1164	Advanced marine scrubbing for simultaneous de-SOx/NOx using a wet oxidative process coupled with wash water treatment	Flagiello, Domenico; Erto, Alessandro; Lancia, Amedeo; Di Natale, Francesco	Department of Chemical, Materials and Production Engineering, University of Naples Federico II – P.le Tecchio 80, 80125 Naples, Italy
1211	Flow morphology of TEG desiccant in a structured packing air dehumidifier exposed to floating conditions	Mamedov, Tural (1); Schleicher, Eckhard (1); Schubert, Markus (1); Ehlert, Thomas (2); Kenig, Eugeny (2); Hampel, Uwe (1,3)	1: Helmholtz-Zentrum Dresden-Rossendorf, Institute of Fluid Dynamics, 01328 Dresden, Germany; 2: Paderborn University, Faculty of Mechanical Engineering, Chair of Fluid Process Engineering, D-33098 Paderborn, Germany; 3: TU Dresden, Institute of Power Engineering, Chair of Imaging Techniques in Energy and Process Engineering, 01062 Dresden, Germany
1219	Analysis of a marine scrubber operation with conventional and AI based methodologies	Napolitano, Erasmo Salvatore (1,2); Campanile, Lelio (3); Portolano, Alberto (4); Di Natale, Francesco (1)	1: The Sustainable Technologies for Pollution Control (STPC-Lab) Department of Chemical, Materials and Production Engineering, University of Naples Federico II; P.le Tecchio, 80, 80125 Naples, Italy; 2: DIMES Department, University of Calabria, Via P. Bucci cubo 42C, 87036 Rende (Cs), Italy; 3: Department of Mathematics and Physics, University of Campania Luigi Vanvitelli; Viale Lincoln, 5 - 81100 Caserta (Italy); 4: Grimaldi Euromed, Via Marchese Campodisola 13, 80133 Napoli (Italy)
1281	The new EcoMarine #2 random packing: An innovative product for flue-gas desulfurization on marine ships	Schlager, Marcus (1); Wolf-Zöllner, Verena (1); Geipel, Christian (2); Mehring, Christian (2); Sola, Jose Luis (2)	1: Montanuniversität Leoben, 8700 Leoben, Austria; 2: RVT Process Equipment GmbH, 96349 Steinwiesen, Germany