Meeting of the Technical Committees "Thermal Separation of Gas- and Fluid-Mixtures" of the GVC · VDI - Society for Process- and Chemical Engineering and "Adsorption" of the DECHEMA Gesellschaft für Chemische Technik und Biotechnologie e.V. together with the Working Party on "Distillation, Absorption and Extraction" (EFCE) on April 5th to 6th in Bamberg, Germany

Plenary Lectures 1

Chair: K. Porter

PL01 **Distillation Technology - Now and Future**
R. C. Darton, UK-Oxford

PL02 **Update Survey of Distillation Columns in Operation in Japan**
K. Nagahama, J-Tokyo

PL03 **Highly Integrated Processes - Potentials and Drawbacks**
G. Schembecker, D-Dortmund

PL04 **Standard Test Systems**
T. Misek, H.-J.Bart and J. Schröter, CZ-Praha

Plenary Lectures 2

Chair: U. von Gemmingen

PL05 **Optimized Downstream Processing of Microbial Macromolecules by In Situ Adsorption**
M. Millitzer, E. Wenzig and W. Peukert, D-München*

PL06 **Determination of Adsorption Isotherms from Supercritical Fluids**
M. Lübbert, M. Johannsen and G. Brunner, D-Hamburg*

PL07 **Hybrid Systems for the Dehydration of Organic Compounds**
A. Fahmy, D. Mewes and K. Ohlrogge, D-Hannover*

PL08 **Packed Bed Columns - History, Present and Future**
N. Kolev, BG-Sofia

Industrial Technologies 1

Chair: M. Griffith

THZ01 **Distillation-column design based on creative ideas**
M. Siegert, Th. Friese, G. Schuch and Thiel, D-Ludwigshafen*

THZ02 **Pitfalls During Evaporation and Condensation of a Process Stream**
J. R. Herguijuela, CH-Sisseln

THZ03 **Condensation of Water/Ammonia-Mixtures Containing Inert Components of Pressures around 100 mbar**
M. Hadley, L. Deibele, D-Leverkusen*

Industrial Technologies 2

Chair: M. Griffith

THZ04 **Novel Distillation Concepts Using Divided-Wall Columns**
B. Kolbe, S. Wenzel, G. Emmrich, D-Düsseldorf*

THZ06 **Hybrid Membrane/Distillation Process for the Separation of Non-Ideal Ternary Mixtures**
P. Kreis, A. Górak, D-Dortmund

THZ07 **The Synthesis and Energetic Evaluation of Melt Crystallization - Distillation Hybrid Processes**
D. Thong, M. Jobson, A. Kobus, S. Nordhoff, R. Goedecke, Hanau*

Reactive Distillation

Chair: W. Arlt

THZ08 **A Shortcut Method for Kinetically Controlled Reactive Distillation Systems**
J. W. Lee, S. Brüggemann and W. Marquardt, D-Aachen*

THZ09 **The Economic Potential of Reactive Distillation Exemplified by Silane Production**
D. Müller, J.-P. Schäfer and H.-J. Leimkühler, D-Leverkusen*

THZ10 **Approaching Intelligent Design of Internals for Reactive Separations**
E. Y. Kenig, M. Kloeker, Yu. Egorov, F. Menter and A. Górak, D-Dortmund*

THZ11 **On the Problems of Solvent Hydrolysis in the Recovery by Thermal Separation**
E. Brunazzi, G. Nardini and G. Nencetti, I-Pisa*

General

Chair: K. Porter

THZ12 **Fouling in Absorption Columns**
A. Heberle, K. Schaber, D-Karlsruhe*

THZ13 **Minimum Energy for Separation of Multicomponent Mixtures in Directly Coupled Distillation Arrangements**
I. J. Halvorsen and S. Skogestad, N-Trondheim*

THZ14 **Determination of the Optimal Entrainer for an Azeotropic Distillation by Rigorous MINLP optimization**
D. Brusis and J. Stichlmair, D-Garching*

THZ15 **Structured Packings Today and Tomorrow: Trends in Distillation for the Decade**
L. Spiegel and W. Meier, CH-Winterthur*

Equipment Suppliers 1

Chair: R. Goedecke

THZ16 **Maldistribution in Packed Columns**
O. Schneider and J. Stichlmair, D-Garching*

THZ17 **Theoretical and Experimental Investigation of the Influence of Liquid Redistribution on the Performance of Packed Columns**
G. Bartlok; H. Quack and L. Spiegel, D-Dresden*

THZ18 **A New Column Pacing for Operation at Extremely Low Liquid Loads**
N. Kolev, BG-Sofia

Equipment Suppliers 2

Chair: R. Goedecke

THZ19 **ROMBOPAK S, CFD Supported Development of an Improved Structured Packing with Enhanced Performance**
L. Fischer, U. Bühlmann and J. Schütze, CH-Allschwil*

THZ20 **Styrene Monomer Purification with MellapakPlus: Some Case Studies**
F. Moser and M. Damiani, CH-Winterthur*

THZ21 **The Shell ConSep Tray Technology Provides Unparalleled Distillation Capacity**
C. Groenendaal, B. Trautrims, K. Kusters, A. Russel and J. Bravo, NL-Amsterdam*

Extraction

Chair: H.-J. Bart

THZ22 **Modeling Methodology, Parameter Determination and Simulation for Extraction**
J. Leistner, A. Górak, W. Bäcker and J. Strube, D-Dortmund*

THZ23 **Measuring and Modeling Reactive Mass Transfer in Liquid/Liquid Extraction**
M. Mörters and H.-J. Bart, D-Hanau*

THZ25 **Fluiddynamics, i. e. Holdup, Pressure Drop, and Flooding, in Packed Columns for the Gas Extraction at High Pressures**
R. Stockfleth and G. Brunner, D-Hamburg*

Adsorption / Equilibria

Chair: U. von Gemmingen

ADS01 **Activated Carbon Adsorption Equilibria and Kinetics in the Presence of Water**
W. Knop, H.-J. Bart, R. Staudt, D-Kaiserslauterm*

ADS02 **Solid Characterization by Adsorption Equilibria**
S. Maurer, M. Götzinger, A. Mersmann and W. Peukert, D-Ludwigshafen*

ADS03 **Measurement and Interpretation of Adsorption Equilibria from Aqueous Solution**
C. Mehler and W. Peukert, D-Garching*

ADS04 **Break Through Curves of Dry and Wet Gases (CH4, CO, CO2, N2) and Certain of its Mixtures in an Adsorption Column**
M. Seelbach, R. Staudt, J.U. Keller, D-Berlin*

Adsorption / Processes

Chair: W. Arlt

ADS05 **To What Extend is Helium Adsorbed on Activated Carbon and Zeolite at Ambient Temperature? (Part 1)**
J.U. Keller, S. Bohn, R. Staudt and P. Harting, D-Siegen*

ADS06 **To What Extend is Helium Adsorbed on Activated Carbon and Zeolite at Ambient Temperature? (Part 2)**
J.U. Keller, S. Bohn, R. Staudt and P. Harting, D-Siegen*

ADS07 **Adsorption and Physical Wave Phenomena**
D. Bathen, J. Reuß, M. Breitbach, H. Schmidt-Traub, D-Dortmund*

ADS08 **Adsorptive Air Prepurification - Thermal Regeneration and Heatless Drying**
U. von Gemmingen, Höllriegelskreuth

Adsorption / Chromatography

Chair: J. U. Keller

ADS09 **Influence of Reaction Kinetics on the Performance of a Chromatographic Reactor**
R. Herbsthofer, J. Brozio and H.-J. Bart, D-Kaiserslautern*

ADS10 **Model Based Control of Batch Chromatography for Multi-Component Separation**
G. Daniel, G. Dünnebier and S. Engell, D-Dortmund*

ADS11 **Modeling Gradient Elution in Non-Linear Ion-Exchange-Chromatography**
A. Wiesel, H. Schmidt-Traub, J. Lenz and J. Strube, D-Dortmund*

Adsorption / Chromatographic Processes

Chair: H.-J. Bart

ADS12 **A Rigorous Model for the Continuous Annular Chromatographic Reactor**
J. Brozio, R. Herbsthofer, L. Garcia Diez and H.-J. Bart, D-Kaiserslautern*

ADS13 **Online Monitoring for Optimal Design and Operation of Chiral Separations**
A. Epping, A. Jupke, H. Schmidt-Traub, D-Dortmund*

ADS14 **Scale Up von HPLC Säulen unter Berücksichtigung von Verteilungsproblemen in der Präparativen Anlage**
H. Boysen, G. Wozny, W. Arlt, T. Laiblin, M. Lisso, D-Berlin*

- Subject to Changes -