

CONTENTS

Preface	XI
Acknowledgements	XII
Organizing and Scientific Committee	XIII
Financial Support	XIV
Hydrocarbon Transformations over Analogues and Derivatives of Zeolite Y (plenary lecture) Dwyer J., Dewing J., Karim K., Holmes S., Ojo A.F., Garforth A.A., Rawlence D.J.	1
Isomorphous Substitution in Zeolitic Frameworks: Procedures and Characterization (plenary lecture) Vedrine J.C.	25
Introduction of Cations into Zeolites by Solid-State Reaction (plenary lecture) Karge H.G., Beyer H.K.	43
Zeolite-hosted Metals and Semiconductors as Advanced Materials (plenary lecture) Schulz-Ekloff G.	65
Isomorphous Substitution in Zeolites: a Route for the Preparation of Novel Catalysts (plenary lecture) Bellussi G., Fattore V.	79
Zeolite Synthesis with Metal Chelate Complexes Balkus Jr. K.J., Kowalak S., Ly K.T., Hargis D.C.	93
Synthesis of Ferrous Cyanide Complexes inside Zeolite Y Bresinska I., Drago R.S.	101
Genesis of Gallosilicates with ZSM-5 Structure. Insertion of Ga and Zeolitic Properties at Various Steps of Crystallization Kosslick H., Richter M., Tuan V.A., Parlitz B., Szulzewsky K., Fricke R.	109
Studies on the Phosphorus Substituted Zeolites Prepared by Secondary Synthesis Reschetilowski W., Einicke W.-D., Meier B., Brunner E., Ernst H.	119
Synthesis of Zeolite Beta in Boron-Aluminium Media Derewinski M., Di Renzo F., Espiau P., Fajula F., Nicolle M.-A.	127

On the Possibility of Generation of Brønsted Acidity by Silicon Incorporation in Very Large Pore AlPO ₄ Molecular Sieves Martens J.A., Balakrishnan I., Grobet P.J., Jacobs P.A.	135
Crystallization of Porous Aluminophosphates and Metal Substitutions Lechert H., Weyda H., Hess M., Kleinworth R., Penchev V., Minchev Ch.	145
Factors Affecting the Crystallization of Zeolite ZSM-48 Giordano G., Dewaele N., Gabelica Z., Nagy J.B., Nastro A., Aiello R., Derouane E.G.	157
Synthesis and Characterization of Cr-modified Silicalite-1 Cornaro U., Jirů P., Tvarůžková Z., Habersberger K.	165
Synthesis, Characterization and Catalytic Activity of V-ZSM-5 Zeolites Fejes P., Marsi I., Kirisci I., Halász J., Hannus I., Rockenbauer A., Tasi Gy., Korecz L., Schoebel Gy.	173
A Study of Acid Sites in Substituted AlPO-5 Gorte R.J., Kokotailo G.T., Biaglow A.I., Parrillo D., Pereira C.	181
Structure and Photocorrosion of NaX Hosted Q-Size Metal Sulfide Particles Wark M., Schulz-Ekloff G., Jaeger N.I., Zukal A.	189
Faujasite-Hosted Methylene Blue: Synthesis, Optical Spectra and Spectral Hole Burning Hoppe R., Schulz-Ekloff G., Woehrl D., Ehrl M., Brauchle C.	199
Preparation and Characterization of Zinc-ZSM-5 Catalyst Liang J., Tang W., Ying M.-L., Zhao S.-Q., Xu B.-Q., Li H.-Y.	207
The Formation of Well Defined Surface Carbonyls of Ru and Ir with Highly Dealuminated Zeolite Y as Matrix Burkhardt I., Gutschick D., Landmesser H., Miessner H.	215

- A Comparative Study of State and Reactivity of Copper Ions Embedded in Various Molecular Sieve Materials 223
Wendlandt K.-P., Vogt F., Moerke W., Achkar I.
- Acidity, Redox Behaviour and Stability of CoAPO Molecular Sieves of Structure Types 5, 11, 34 and 16 231
Kraushaar-Czarnetzki B., Hoogervorst W.G.M., Andréa R.R., Emeis C.A., Stork W.H.J.
- State of Iron and Catalytic Properties of Akali-Metal-Exchanged Ferrisilicate Zeolite Molecular Sieves 241
Kan Q., Wu Z., Xu R., Wei Q., Peng S., Xiong G., Sheng S., Huang J.
- Framework and Extraframework Ti in Titanium-Silicalite: Investigation by Means of Physical Methods 251
Zecchina A., Spoto G., Bordiga S., Ferrero A., Petrini G., Leofanti G., Padovan M.
- Studies on the State of Copper and the Formation of Its Oxidic and Metallic Phases in Zeolite CuNaY 259
Piffer R., Hagelstein M., Cunis S., Rabe P., Foerster H., Niemann W.
- ESCA Study of Incorporation of Copper into Y Zeolite 269
Jirka I., Wichterlová B., Maryška M.
- Preparation of Ga-Doped Zeolite Catalysts via Hydrogen Induced Solid-State Interaction between Ga_2O_3 and HZSM-5 Zeolite 277
Kanazirev V., Price G.L., Dooley K.M.
- Comparison of Hydrosulfurization Zeolite Catalysts Prepared in Different Ways 287
Onyestyák Gy., Kalló D., Papp J., Jr.
- Effect of the Introduction of Ni(II) on the Catalytic Properties of SAPO-5 Molecular Sieves 295
Mavrodinova v., Neinska Ya., Minchev Ch., Lechert H., Minkov V., Valtchev V., Penchev V.
- Study of Brønsted and Lewis Acid Sites in Phosphates, Silicates and Silica Gels with Molecular Sieve Properties 303
Kustov L.M., Zubkov S.A., Kazansky V.B., Bondar L.A.

VIII

- Influence of Framework Phosphorus on the Acidic Properties of Faujasite Type Zeolite 313
Briend M., Lamy A., Dzwigaj S., Barthomeuf D.
- Zn-Doped HZSM5 Catalysts for Propane Aromatization 321
Guisnet M., Gnep N.S., Vasques H., Ramôa Ribeiro F.
- Sulfided Ni-Mo-Y Zeolites as Catalysts for Hydrogenation and Hydrodesulfurization Reactions 331
Laniecki M., Zmierczak W.
- Reduction of SO₂ on Molybdenum Loaded Y Zeolite 339
Soria J., González-Elipse A.R., Conesa J.C.
- Contribution of Metal Cations to the Para-Selectivity of Small Crystals of H-ZSM-5 Zeolite in Toluene Alkylation with Ethylene 347
Čejka J., Wichterlová B., Krtil J., Křivánek M., Fricke R.
- NO Decomposition on Cu-Incorporated A-Zeolites under the Reaction Condition of Excess Oxygen with a Small Amount of Hydrocarbons 355
Inui T., Kojo S., Shibata M., Yoshida T., Iwamoto S.
- A Comparison of the Catalytic Properties of SAPO-37 and HY Zeolite in the Cracking of n-Heptane and 2,2,4 -Trimethylpentane 365
Lopes J.M., Lemos F., Ramôa Ribeiro F., Derouane E.G.
- Cracking of Light Alkanes over MeAPO-5 Molecular Sieves 373
Meusinger J., Vinek H., Dworeckow G., Goepfer M., Lercher J.A.
- Promoting Effect of Pt Supported on Galliumsilicate in n-C₄H₁₀ Aromatization 381
Dmitriev R.V., Shevchenko D.P., Shpiro E.S., Dergachev A.A., Tkachenko O.P., Minachev Kh.M.
- Conversion of Allyl Alcohol to Oxygenated Products over Zeolite Catalysts 389
Hutchings G.J., Lee D.F., Williams C.D.
- Cation Exchange Influence on the Activity of Zeolites in Reactions between Alcohols and Hydrogen Sulphide 397
Ziółek M., Hildebrand-Leksowska K.
- Possible Intermediates during C₃H₈ aromatization over Ga-HZSM-5 Catalyst 405
Meriaudeau P., Naccache C.

Dehydrocyclodimerization of Short Chain Alkanes on Ga/ZSM-5 and Ga/beta Zeolites Corma A., Goberna C., Lopez Nieto J.M., Paredes N., Perez M.	409
Bifunctional Cobalt-ZSM-5 Catalyst for the Synthesis of Hydrocarbons from the Products of Biomass Gasification Krylova A., Lapidus A., Rathouský J., Zukal A., Jančálková M.	417
Shape Selective Reforming: Possible Reaction Pathways on Platinum-Containing Erionite/Alumina Catalysts Kalies H., Roessner F., Karge H.G., Steinberg K.-H.	425
Framework Ordering in Aluminophosphate Molecular Sieves Studied by ^{27}Al Double Rotation NMR Chmelka B.F., Wu Y., Jelínek R., Davis M.E., Pines A.	435
A Computer Analysis of ESR Powder Spectra of Silver and Sodium Clusters in Molecular Sieves Uytterhoeven M.G., Schoonheydt R.A.	443
Magic-Angle-Spinning Nuclear Magnetic Resonance and Infrared Studies on Modified Zeolites Brunner E., Freude D., Hunger M., Pfeifer H., Staudte B	453
^{129}Xe NMR Study of Intra- and Inter-Crystallite Diffusion of Cations in Faujasite Zeolites Fraissard J., Gedeon A., Chen Q., Ito T.	461
Intracrystalline Diffusion of Benzene in Ga-Silicate Zikánová A., Struve P., Buelow M., Wallau M., Kočířík M., Micke A., Tissler A., Unger K.K.	469
Intracrystalline Diffusivities of HZSM-5 Zeolites Hashimoto K., Masuda T., Murakami N.	477
New Porous Materials from Layered Compounds (plenary lecture) Clearfield A., Kuchenmeister M., Wang J., Wade K.	485
Author Index	499
Subject Index	505
Studies in Surface Science and Catalysis (other volumes in the series)	511

AUTHOR INDEX

A

Achkar I.	223
Aiello R.	157
Andréa R.R.	231

B

Balakrishnan I.	135
Balkus Jr., K. J.	93
Barthomeuf D.	313
Bellussi G.	79
Beyer H.K.	43
Biaglow A. I.	181
Bondar L. A.	303
Bordiga S.	251
Brauchle C.	199
Bresinska I.	101
Briend M.	313
Brunner E.	119, 453
Buelow M.	469
Burkhardt I.	215

C

Čejka J.	347
Chen Q.	461
Chmelka B.F.	435
Clearfield A.	485
Conesa J.C.	339
Corma A.	409
Cornaro U.	165
Cunis S.	259

D

Davis M.E.	435
Derewinski M.	127
Dergachev A.A.	381
Derouane E.G.	157, 365
Dewaele N.	157
Dewing J.	1
Di Renzo F.	127
Dmitriev R.V.	381
Dooley K.M.	277
Drago R.S.	101
Dworeckow G.	373
Dwyer J.	1
Dzwigaj S.	313

E

Ehrl M.	199
Einicke W.-D.	119
Emeis C.A.	231
Ernst H.	119
Espiau P.	127

F

Fajula F.	127
Fattore V.	79
Fejes P.	173
Ferrero A.	251
Foerster H.	259
Fraissard J.	461
Freude D.	453
Fricke R.	109, 347

G

Gabelica Z.	157
Garforth A. A.	1
Gedeon A.	461
Giordano G.	157
Gnep N. S.	321
Goberna C.	409
Goepper M.	373
González-Elipe A. R.	339
Gorte R. J.	181
Grobet P. J.	135
Guisnet M.	321
Gutschick D.	215

H

Habersberger K.	165
Hagelstein M.	259
Halász J.	173
Hannus I.	173
Hargis D. C.	93
Hashimoto K.	477
Hess M.	145
Hildebrand-Leksowska K.	397
Holmes S.	1
Hoogervorst W. G. M.	231
Hoppe R.	199
Huang J.	241
Hunger M.	453
Hutchings G. J.	389

I

Inui T.	355
Ito T.	461
Iwamoto S.	355

J

Jacobs P. A.	135
Jaeger N. I.	189
Jančálková M.	417
Jelinek R.	435
Jirka I.	269
Jiru P.	165

K	
Kalies H.	425
Kallo D.	287
Kan Q.	241
Kanazirev V.	277
Karge H.G.	43, 425
Karim K.	1
Kazansky V.B.	303
Kirisci I.	173
Kleinworth R.	145
Kočiřík M.	469
Kojo S.	355
Kokotailo G.T.	181
Korecz L.	173
Kosslick H.	409
Kowalak S.	93
Kraushaar-Czarnetzki B.	231
Křivánek M.	347
Krtil J.	347
Krylova A.	417
Kuchenmeister A.	485
Kustov L.M.	303

L	
Lamy A.	313
Landmesser H.	215
Laniecki M.	331
Lapidus A.	417
Lechert H.	145, 295
Lee D.F.	389
Lemos F.	365
Leofanti G.	251
Lercher J.A.	373
Li H. -Y.	207
Liang J.	207
Lopes J.M.	365
Lopez Nieto J.M.	409
Ly K.T.	93

M	
Marsi I.	173
Martens J.A.	135
Maryška M.	269
Masuda T.	477
Mavrodinova V.	295
Meier B.	119
Meriaudeau P.	405
Meusinger J.	373
Micke A.	469
Miessner H.	215
Minachev Kh.M.	381
Minchev Ch.	295
Minkov V.	145, 295
Moerke W.	223

Murakami N.	477
N	
Naccache C.	405
Nagy J.B.	157
Nastro A.	157
Neinska Ya.	295
Nicolle M.-A.	127
Niemann W.	259
O	
Ojo A.F.	1
Onyestyák Gy.	287
P	
Padovan M.	251
Papp Jr. J.	287
Paredes N.	409
Parlitz B.	109
Parrillo D.	181
Penchev V.	145, 295
Peng S.	241
Pereira C.	181
Perez M.	409
Petrini G.	251
Pfeifer H.	453
Piffer R.	259
Pines A.	435
Price G.L.	277
R	
Rabe P.	259
Ramôa Ribeiro F.	321, 365
Rathouský J.	417
Rawlence D. J.	1
Reschetilowski W.	119
Richter M.	109
Rockenbauer A.	173
Roessner F.	425
S	
Schoebel Gy.	173
Schoonheydt R. A.	443
Schulz-Ekloff G.	65, 189, 199
Sheng S.	241
Shevchenko D.P.	381
Shibata M.	355
Shpiro E.S.	381
Soria J.	339
Spoto G.	251
Staudte B.	453
Steinberg K.-H.	425
Stork W.H. J.	231
Struve P.	469

Szulzewsky K.	109
T	
Tang W.	207
Tasi Gy.	173
Tissler A.	469
Tkachenko O.P.	381
Tuan V. A.	109
Tvaružková Z.	165
U	
Unger K.K.	469
Uytterhoeven M.G.	443
V	
Valtchev V.	295
Vasques H.	321
Vedrine J.C.	25
Vinek H.	373
Vogt F.	223
W	
Wade K.	485
Wallau M.	469
Wang J.	485
Wark M.	189
Wei Q.	241
Wendlant K. -P.	223
Weyda H.	145
Wichterlová B.	269, 347
Williams C.D.	389
Woehrle D.	199
Wu Y.	435
Wu Z.	241
X	
Xiong G.	241
Xu B. -Q.	207
Xu R.	241
Y	
Ying M. -L.	207
Yoshida T.	355
Z	
Zecchina A.	251
Zhao S. -Q.	207
Zikánová A.	469
Ziółek M.	397
Zmierczak W.	331
Zubkov S. A.	303
Zukał A.	189, 417