

SUBJECT INDEX

A

- Acid-catalyzed reactions over silica-alumina and molecular sieve catalysts. SIGMUND M. CSICSERY AND DONALD A. HICKSON, 386
- Acrolein and propylene on a Bi-Mo-Si oxide. Adsorption of, F. TRIFIRO, L. KUBELKOVA, AND I. PASQUON, 121
- Adsorption of propylene and acrolein on Bi-Mo-Si oxide. F. TRIFIRO, L. KUBELKOVA, AND I. PASQUON, 121
- Alcohols and hydrocarbons on montmorillonite surfaces. Reactions of, A. K. GALWEY, 330
- Alkylbenzenes over mordenite. Disproportionation of, SIGMUND M. CSICSERY, 394
- Alumina catalysts. Tensile strength of pelletized, SHOKO YAMADAYA, MASAAKI OBA, TOJI HASEGAWA, KIYOSHI OGAWA, AND YOSHIHIDE KOTERA, 264
- Ammonia synthesis over a singly-promoted iron catalyst. Kinetics and isotope effect of, KEN-ICHI AIKA AND ATSUMU OZAKI, 350
- Apparent activation energies on catalysts with heterogeneous surfaces. III. J. BAGG, 216
- Arylmethanes on silica-alumina. Carbonium ions from, CHING-YONG WU, RAYMOND P. PORTER, AND W. KEITH HALL, 277

B

- Benzenes adsorbed on a synthetic mordenite. ESR study of, YUKIO KURITA, TAKESHI SONODA, AND MASAKI SATO, 82
- Benzophenone. Deuteriumolysis of, S. E. SCHEPPELE, R. K. MITCHUM, J. W. BURNHAM, E. J. EISENBRAUN, AND P. W. FLANAGAN, 89
- Bi-Mo-Si oxide. Adsorption of propylene and acrolein on, F. TRIFIRO, L. KUBELKOVA, AND I. PASQUON, 121
- Biphenyl cation radical from benzene. ESR study. YUKIO KURITA, TAKESHI SONODA, AND MASAKI SATO, 82
- Bismuth molybdate. Oxygen atom incorporation into products of propylene oxidation over, GEORGE W. KEULKS, 232
- Book review. "Catalysis by Nonmetals" by KRYLOV, reviewed by G. ALEX MILLS, 408

C

- Carbonium ions from arylmethanes on silica-alumina. CHING-YONG WU, RAYMOND P. PORTER, AND W. KEITH HALL, 277

- Carboxylic acids during the autoxidation of cyclohexane. Decarboxylation of, H. BURNHAM TINKER, 237
- Catalytic hydrogenation. V., M. PECQUE AND R. MAUREL, 360
- Chelates of transition elements in liquid phase oxidation of propylene. J. ROUCHAUD AND J. MAWAKA, 172
- Chemisorption of hydrogen on platinum. By temperature programmed desorption. S. TSUCHIYA, Y. AMENOMIYA, AND R. J. CVETANOVIĆ, 245
- Chromium ions in magnesium aluminate for the decomposition of nitrous oxide. T. A. EGERTON AND J. C. VICKERMAN, 74
- Co³⁺ ions in aqueous acidic media. Oxidation by, A. MEENAKSHI AND M. SANTAPPA, 300
- Copper oxide supported on alumina. IV. Electron spectroscopy for, A. WOLBERG, J. L. OGILVIE, AND J. F. ROTH, 86
- Cyclopropane-hydrogen reaction over the group VIII noble metals. R. A. DALLA BETTA, J. A. CUSUMANO, AND J. H. SINFELT, 343

D

- Deactivation of a neodymium sulfide catalyst. Theoretical model. JOHN F. READ, WILLIAM H. BOUMA, AND SHARON E. ROBERTSON, 1
- Dealkylation and isomerization of dialkylbenzenes over a solid acid. HIDEYUKI MATSUMOTO, JUN-ICHIRO TAKE, AND YUKIO YONEDA, 113
- Decarboxylation of carboxylic acids during the autoxidation of cyclohexane. H. BURNHAM TINKER, 237
- Dehydrocyclization and isomerization of hexanes over platinum. F. M. DAUTZENBERG AND J. C. PLATTEEUW, 41
- Deuteriumolysis of benzophenone. S. E. SCHEPPELE, R. K. MITCHUM, J. W. BURNHAM, E. J. EISENBRAUN, AND P. W. FLANAGAN, 89
- 1,1-Diphenyl-2-picrylhydrazyl. Reaction of with adsorbed water on rutile. DWARIKA NATH MISRA, 204
- 1,1-diphenyl-2-picrylhydrazine. Surface reaction between manganese dioxide and, A. T. T. OEI AND J. L. GARNETT, 176
- Disproportionation of alkylbenzenes over mordenite. SIGMUND M. CSICSERY, 394

E

- Electron spectroscopy. Copper oxide supported on alumina. IV. W. WOLBERT, J. L. OGILVIE, AND J. R. ROTH, 86

- Epoxidation using a polymeric quaternary ammonium hydrogen tungstate. G. G. ALLAN AND A. N. NEOGI, 256
- EPR methods for estimation of active surface areas. A. T. T. OEI AND J. L. GARNETT, 176
- ESR and microbalance study of sulfided molybdena-alumina catalyst. K. S. SESHADRI, F. E. MASSOTH, AND L. PETRAKIS, 95
- ESR examination of ultramarines as catalysts in thiophene hydrodesulfurization. P. B. WELLS, 372
- ESR study of radicals from benzenes on mordenite. YUKIO KURITA, TAKESHI SONODA, AND MASAKI SATO, 82
- Ethylene polymerization in nickel-Y-zeolite. Kinetics of, LOTHAR RIEKERT, 8
- F**
- Field conversion of parahydrogen over the rare earths. P. W. SELWOOD, 353
- Fluorided alumina. Nature of the sites on, J. N. FINCH AND ALFRED CLARK, 292
- G**
- Gold-platinum alloys. Photoelectric determination of work function of, R. BOUWMAN AND W. M. H. SACHTLER, 127
- H**
- Hexanes. Isomerization and dehydrocyclization over platinum. F. M. DAUTZENBERG AND J. C. PLATTEEUW, 41
- Hydrazine over metals. Hydrogenolysis of, KEN-ICHI AIKA, TOMOHISA OHHATA, AND ATSUMU OZAKI, 140
- Hydrocarbons and alcohols on montmorillonite surfaces. Reactions of, A. K. GALWEY, 330
- Hydrogen on platinum. Chemisorption of, S. TSUCHIYA, Y. AMENOMIYA, AND R. J. CVETANOVIĆ, 245
- Hydrogen peroxide. Deactivation of Prussian blue during decomposition of, GÜVEN UYANIK AND BURHAN PEKIN, 195
- Hydrogenation of an ethylenic double bond. An example of trans, M. PECQUE AND R. MAUREL, 360
- Hydrogenolysis of hydrazine over metals. KEN-ICHI AIKA, TOMOHISA OHHATA, AND ATSUMU OZAKI, 140
- Hydrogenolysis of saturated hydrocarbons. Nickel and platinum. HIDEYUKI MATSUMOTO, YASUKAZU SAITO, AND YUKIO YONEDA, 101
- Hydrolysis of esters catalyzed by a cation exchange resin. R. TARTARELLI, A. LUCCHESI, AND B. STOPPATO, 310
- Infrared reflection spectroscopy and gas-metal interface. D. T. (MESSERVEY) DRMAJ AND K. E. HAYES, 154
- Infrared spectra of decationated zeolites X and Y. OH-band intensity. R. A. SCHOONHEYDT AND J. B. UYTTERHOEVEN, 55
- Infrared spectra of olefins adsorbed on silica supported palladium. N. B. AVERY, 15
- Iron ammonia catalyst. Nitrogen equilibration over, N. TAKEZAWA AND I. TOYOSHIMA, 271
- Iron catalyst. Kinetics and isotope effect of ammonia synthesis over a singly-promoted, KEN-ICHI AIKA AND ATSUMU OZAKI, 350
- Iron synthetic-ammonia catalyst. Surface covered by promoter on, R. BRILL, 236
- Isomerization and dehydrocyclization of hexanes over platinum. F. M. DAUTZENBERG AND J. C. PLATTEEUW, 41
- Isomerization of dialkylbenzenes over solid acid. HIDEYUKI MATSUMOTO, JUN-ICHIRO TAKE, AND YUKIO YONEDA, 113
- K**
- Kinetics and isotope effect of ammonia synthesis over a singly-promoted iron catalyst. KEN-ICHI AIKA AND ATSUMU OZAKI, 350
- Kinetics of ethylene polymerization in nickel-Y zeolite. LOTHAR RIEKERT, 8
- Kinetics of gas-solid reactions: influence of reaction order and temperature profiles. R. J. J. WILLIAMS, 363
- L**
- Linear free energy relationships. X., HIDEYUKI MATSUMOTO, JUN-ICHIRO TAKE, AND YUKIO YONEDA, 101
- M**
- Macromolecular organometallic catalysis. II. Epoxidation using a polymeric quaternary ammonium hydrogen tungstate. G. G. ALLAN AND A. N. NEOGI, 256
- Manganese dioxide and 1,1-diphenyl-2-picrylhydrazine. Surface reaction between, A. T. T. OEI AND J. L. GARNETT, 176
- Mechanical strength of heterogeneous catalyst. I. SHOKO YAMADAYA, MASAOKI OBA, TOJI HASEGAWA, KIYOSHI OGAWA, AND YOSHIIHIDE KOTERA, 264
- Metal catalysts. Pulse chromatographic method of determining the specific activity of, A. VERMA AND D. M. RUTHVEN, 401
- Metal films. Ultrathin as model systems. J. R. ANDERSON AND R. J. MACDONALD, 227
- Methane over heterogeneous catalyst. Oxidation of,

- C. F. CULLIS, D. E. KEENE, AND D. L. TRIMM, 378
- MgO lattice. Ni²⁺ adsorption centers on the, D. SHOPOV, A. ANDREEV, AND P. PUMPALOV, 398
- Molecular beam study of temperature effect on a surface reaction. J. J. MCCARROLL AND S. J. THOMSON, 144
- Molecular sieve catalysts. Selectivities of acid-catalyzed reactions over silica-alumina and, SIGMUND M. CSICSERY AND DONALD A. HICKSON, 386
- Molecular sieves. Oxidations of olefins adsorbed on, DALE E. VAN SICKLE AND MICHAEL L. PREST, 209
- Molybdena-alumina catalysts. ESR and microbalance study of sulfided. K. S. SESHADRI, F. E. MASSOTH, AND L. PETRAKIS, 95
- Montmorillonite surfaces. Reactions of alcohols and of hydrocarbons on, A. K. GALWEY, 330
- Mordenite. Selective disproportionation of alkylbenzenes over, SIGMUND M. CSICSERY, 394
- N
- Neodymium sulfide catalyst. Theoretical model for the deactivation of, JOHN F. READ, WILLIAM H. BOUMA, AND SHARON E. ROBERTSON, 1
- Ni adsorption centers on the MgO lattice. D. SHOPOV, A. ANDREEV, AND P. PUMPALOV, 398
- Nickel and platinum in hydrogenolysis of saturated hydrocarbons. HIDEYUKI MATSUMOTO, YASUKAZU SAITO, AND YUKIO YONEDA, 101
- Nickel-Y zeolite. Kinetics of ethylene polymerization in, LOTHAR RIEKERT, 8
- Nitrogen equilibration over reduced iron ammonia catalyst. N. TAKEZAWA AND I. TOYOSHIMA, 271
- Nitrous oxide. Chromium ions in magnesium aluminate for the decomposition of, T. A. EGERTON AND J. C. VICKERMAN, 74
- Nitrous oxide on metallic oxides. Part II. Decomposition of, E. R. S. WINTER, 32
- O
- Olefins adsorbed on molecular sieves. Oxidation of, DALE E. VAN SICKLE AND MICHAEL L. PREST, 209
- Olefins adsorbed on silica supported palladium. Infrared spectra of, N. R. AVERY, 15
- Oxidation by Co³⁺ ions in aqueous acidic media. A. MEENAKSHI AND M. SANTAPPA, 300
- Oxidation of methane over heterogeneous catalyst. Studies of the partial, C. F. CULLIS, D. E. KEENE, AND D. L. TRIMM, 378
- Oxidation of olefins on molecular sieves. DALE E. VAN SICKLE AND MICHAEL L. PREST, 209
- Oxidation of propylene. Transition element chelates in liquid phase. J. ROUCHAUD AND J. MAWAKA, 172
- Oxidation of propylene over Cu(II)-Y. ISAO MOCHIDA, SHINJI HAYATA, AKIO KATO, AND TETSURO SEIYAMA, 405
- Oxidation over molecular sieves ion-exchanged with transition metal ions. II. ISAO MOCHIDA, SHINJI HAYATA, AKIO KATO, AND TETSURO SEIYAMA, 405
- Oxo catalyst recovery and recycle system. Use of solid polymeric ligands in, A. J. MOFFAT, 322
- Oxygen atom incorporation into products of propylene oxidation over bismuth molybdate. GEORGE W. KEULKS, 232
- P
- Palladium. Displacements by an acetylene beam of species from ¹⁴C-Ethylene-covered. J. J. MCCARROLL AND S. J. THOMSON, 144
- Palladium. Infrared spectra of olefins adsorbed on silica supported, N. R. AVERY, 15
- Parahydrogen over the rare earths. Extrinsic field conversion of, P. W. SELWOOD, 353
- Photoelectric determination of work function of gold-platinum alloys. R. BOUWMAN AND W. M. H. SACHTLER, 127
- Platinum. Chemisorption of hydrogen on, S. TSUCHIYA, Y. AMENOMIYA, AND R. J. CVETANOVIĆ, 245
- Platinum. Isomerization and dehydrocyclization of hexanes over, F. M. DAUTZENBERG AND J. C. PLATTEEUW, 41
- Platinum and nickel in hydrogenolysis of saturated hydrocarbons. HIDEYUKI MATSUMOTO, YASUKAZU SAITO, AND YUKIO YONEDA, 101
- Platinum on reforming catalysts. The state of, F. FIGUERAS, B. MENCIER, L. DE MOURGUES, C. NACCACHE, AND Y. TRAMBOUZE, 315
- Propylene. Liquid phase oxidation of by transition metal chelates, J. ROUCHAUD AND J. MAWAKA, 172
- Propylene and acrolein on Bi-Mo-Si oxide. Adsorption of, F. TRIFIRO, L. KUBELKOVA, AND I. PASQUON, 121
- Propylene oxidation over bismuth molybdate. Oxygen atom incorporation into, GEORGE W. KEULKS, 232
- Prussian blue. Deactivation of decomposition of H₂O₂. GÜVEN UYANIK AND BURHAN PEKIN, 195
- Pulse chromatographic method of determining specific activity of supported metals. A. VERMA AND D. M. RUTHVEN, 401

Q

Quaternary ammonium ions on the hydrolysis of esters catalyzed by a cation exchange resin. R. TARTARELLI, A. LUCCHESI, AND B. STOPPATO, 310

R

Rare earths. Extrinsic field conversion of para-hydrogen over the, P. W. SELWOOD, 353

S

Silica-alumina. Carbonium ions from arylmethanes on, CHING-YONG WU, RAYMOND P. PORTER, AND W. KEITH HALL, 277

Silica-alumina and molecular sieve catalysts. Selectivities of acid-catalyzed reactions over, SIGMUND M. CSICSERY AND DONALD A. HICKSON, 386

Site densities of solid catalysts. RUSSELL MAATMAN, 64

Sodium chlorate. Decomposition of, T. WYDEVEN, 162

Solid polymeric ligands in a new oxo catalyst recovery and recycle system. A. J. MOFFAT, 322

T

Temperature programmed desorption. II. S. TSUCHIYA, Y. AMENOMIYA, AND R. J. CVETANOVIĆ, 245

Thiophene hydrodesulfurization. ESR examination of ultramarines as catalysts in, P. B. WELLS, 372

U

Ultramarines as catalyst in thiophene hydrodesulfurization. P. B. WELLS, 372

W

Work function of gold-platinum alloys. R. BOUWMAN AND W. M. H. SACTLER, 127

Z

Zeolite(nickel-Y). Kinetics of ethylene polymerization in, LOTHAR RIEKERT, 8

Zeolites X and Y. OH intensity in the infrared spectra of decationated, R. A. SCHOONHEYDT AND J. B. UYTTERHOEVEN, 55