

- [1] Yang KS, Lee DJ, Ryu SK, Korai Y, Kim YJ, Mochida I. Isotropic Carbon and Graphite Fibers from Chemically Modified Coal-Tar Pitch. *Korean Journal of Chemical Engineering*. 1999 Jul;16(4):518-24.
- [2] Watanabe F, Ishida S, Korai Y, Mochida I, Kato I, Sakai Y, Kamatsu M. Pitch-Based Carbon Fiber of High Compressive Strength Prepared from Synthetic Isotropic Pitch Containing Mesophase Spheres. *Carbon*. 1999;37(6):961-7.
- [3] Wang YG, Korai Y, Mochida I. Carbon Disc of High Density and Strength Prepared from Synthetic Pitch-Derived Mesocarbon Microbeads. *Carbon*. 1999;37(7):1049-57.
- [4] Wang YG, Chang YC, Ishida S, Korai Y, Mochida I. Stabilization and Carbonization Properties of Mesocarbon Microbeads (Mcmb) Prepared from a Synthetic Naphthalene Isotropic Pitch. *Carbon*. 1999;37(6):969-76.
- [5] Wang YC, Egashira M, Ishida S, Korai Y, Mochida I. Microstructure of Mesocarbon Microbeads Prepared from Synthetic Isotropic Naphthalene Pitch in the Presence of Carbon Black. *Carbon*. 1999;37(2):307-14.
- [6] Sotowa C, Watanabe Y, Yatsunami S, Korai Y, Mochida I. Catalytic Dehydrochlorination of 1,2-Dichloroethane into Vinyl Chloride over Polyacrylonitrile-Based Active Carbon Fiber. *Applied Catalysis a-General*. 1999 Apr;180(1-2):317-23.
- [7] Sakanishi K, Watanabe I, Mochida I. Structure of Coals Revealed by Slow Step Scan Xrd at Their Swelling. *Abstracts of Papers of the American Chemical Society*. 1999 Aug;218:U609-U.
- [8] Sakanishi K, Manabe T, Watanabe I, Mochida I. Characterization and Adsorption Treatment of Vacuum Residue Fractions with Carbons. *Abstracts of Papers of the American Chemical Society*. 1999 Aug;218:U625-U.
- [9] Mochida I, Shin S, Sakanishi K, Grudoski D, Shinn J. Molecular Base Approaches by Ge-Aed to Hds of Gas Oil on Sulfide Catalysts. *Hydrotreatment and Hydrocracking of Oil Fractions* 1999:187-93.

- [10] Mochida I, Miyamoto S, Kuroda K, Kawano S, Yatsunami S, Korai Y, Yasutake A, Yoshikawa M. Adsorption and Adsorbed Species of SO₂ During Its Oxidative Removal over Pitch-Based Activated Carbon Fibers. *Energy & Fuels*. 1999 Mar-Apr;13(2):369-73.
- [11] Mochida I, Miyamoto S, Kuroda K, Kawano S, Sakanishi K, Korai Y, Yasutake A, Yoshikawa M. Oxidative Fixation of SO₂ into Aqueous H₂SO₄ over a Pitch-Based Active Carbon Fiber above Room Temperature. *Energy & Fuels*. 1999 Mar-Apr;13(2):374-8.
- [12] Mochida I, Ku CH, Yoon SH, Korai Y. Anodic Performances of Anisotropic Carbon Derived from Isotropic Quinoline Pitch. *Carbon*. 1999;37(2):323-7.
- [13] Mochida I. Structural Insights to Heavy Residua and Coal for Designing Upgrading Processes. *Abstracts of Papers of the American Chemical Society*. 1999 Aug;218:U627-U.
- [14] Lu YG, Ling LC, Wu D, Liu L, Zhang BJ, Mochida I. Preparation of Mesocarbon Microbeads from Coal Tar. *Journal of Materials Science*. 1999;34(16):4043-50.
- [15] Liu ZC, Ling LC, Qiao WM, Liu L, Mochida I. Promoter Action of Sulphur on the Stabilization of Pitch Spheres. *Journal of Materials Science*. 1999 Dec;34(24):6003-7.
- [16] Ling L, Li K, Liu L, Miyamoto S, Korai Y, Kawano S, Mochida I. Removal of SO₂ over Ethylene Tar Pitch and Cellulose Based Activated Carbon Fibers. *Carbon*. 1999;37(3):499-504.
- [17] Korai Y, Hong SH, Mochida I. Development of Longitudinal Mesoscopic Textures in Mesophase Pitch-Based Carbon Fibers through Heat Treatment. *Carbon*. 1999;37(2):203-11.
- [18] Kawano Y, Fukuda T, Kawarada T, Mochida I, Korai Y. Suppression of Puffing During the Graphitization of Pitch Needle Coke by Boric Acid. *Carbon*. 1999;37(4):555-60.
- [19] Kawano Y, Fukuda T, Kawarada T, Mochida I, Korai Y. Mechanisms for Puffing Inhibition of Coal Tar Based Needle Coke with Disodium Hydrogen Phosphate (Dhp) and Boric Acid. *Carbon*. 1999;37(11):1725-30.

- [20] Kanno K, Koike N, Korai Y, Mochida I, Komatsu M. Mesophase Pitch and Phenolic Resin Blends as Binders for Magnesia-Graphited Bricks. *Carbon*. 1999;37(2):195-201.
- [21] Hong SH, Korai Y, Mochida I. Development of Mesoscopic Textures in Transverse Cross-Section of Mesophase Pitch-Based Carbon Fibers. *Carbon*. 1999;37(6):917-30.
- [22] Farag H, Whitehurst DD, Sakanishi K, Mochida I. Improving Kinetic Analysis of Sequential and Parallel Reactions of Hydrodesulfurization of Dibenzothiophenes by Establishing Reasonable Boundaries for Reaction Rate Constants. *Catalysis Today*. 1999 Apr;50(1):49-56.
- [23] Farag H, Whitehurst DD, Sakanishi K, Mochida I. Carbon Versus Alumina as a Support for Co-Mo Catalysts Reactivity Towards Hds of Dibenzothiophenes and Diesel Fuel. *Catalysis Today*. 1999 Apr;50(1):9-17.
- [24] Farag H, Sakanishi K, Mochida I, Whitehurst DD. Kinetic Analyses and Inhibition by Naphthalene and H₂s in Hydrodesulfurization of 4,6-Dimethyldibenzothiophene (4,6-Dmdbt) over Como-Based Carbon Catalyst. *Energy & Fuels*. 1999 Mar-Apr;13(2):449-53.
- [25] Egashira M, Araki T, Korai Y, Mochida I. Some Properties of Carbon Disks Prepared from the Toluene Insoluble Fraction in Fullerene Soot. *Carbon*. 1999;37(1):27-31.
- [26] Chang YC, Sohn HJ, Ku CH, Wang YG, Korai Y, Mochida I. Anodic Performances of Mesocarbon Microbeads (Mcmb) Prepared from Synthetic Naphthalene Isotropic Pitch. *Carbon*. 1999;37(8):1285-97.
- [27] Yoshikawa M, Yasutake A, Mochida I. Low-Temperature Selective Catalytic Reduction of Nox by Metal Oxides Supported on Active Carbon Fibers. *Applied Catalysis a-General*. 1998 Oct;173(2):239-45.
- [28] Whitehurst DD, Isoda T, Mochida I. Present State of the Art and Future Challenges in the Hydrodesulfurization of Polyaromatic Sulfur Compounds. *Advances in Catalysis*, Vol 42 1998:345-471.

- [29] Whitehurst DD, Farag H, Nagamatsu T, Sakanishi K, Mochida I. Assessment of Limitations and Potentials for Improvement in Deep Desulfurization through Detailed Kinetic Analysis of Mechanistic Pathways. *Catalysis Today*. 1998 Oct;45(1-4):299-305.
- [30] Wang YG, Chang YC, Ishida S, Korai Y, Mochida I. Preparation of Mesocarbon Microbeads from a Synthetic Isotropic Pitch through Two Stage Heat Treatment in the Presence of Carbon Black. *Carbon*. 1998;36(7-8):1231-3.
- [31] Sakanishi K, Yamashita N, Whitehurst DD, Mochida I. Depolymerization and Demetallation Treatments of Asphaltene in Vacuum Residue. *Catalysis Today*. 1998 Aug;43(3-4):241-7.
- [32] Sakanishi K, Obata H, Mochida I, Sakaki T, Shibata M. Selective Dimerization of Benzothiophene Using Supported Aluminum Sulfate under Supercritical CO₂ Conditions. *Journal of Supercritical Fluids*. 1998 Jun;13(1-3):203-10.
- [33] Sakanishi K, Nagamatsu T, Mochida I, whitehurst DD. Hydrodesulfurization Kinetics and Mechanism of 4,6-Dimethyldibenzothiophene over Nimo Catalyst Supported on Carbon. *Abstracts of Papers of the American Chemical Society*. 1998 Aug;216:U600-U.
- [34] Sakanishi K, Hasuo H, Mochida I. Solvent-Free Liquefaction of Brown and Subbituminous Coals Using Nimo Sulfide Catalyst Supported on Carbon Nanoparticles (Vol 12, Pg 284, 1998). *Energy & Fuels*. 1998 Mar-Apr;12(2):444-.
- [35] Sakanishi K, Hasuo H, Kishino M, Mochida I. Solvent-Free Liquefaction of Brown and Subbituminous Coals Using Nimo Sulfide Catalyst Supported on Carbon Nanoparticles. *Energy & Fuels*. 1998 Mar-Apr;12(2):284-8.
- [36] Okamoto Y, Umeno S, Shiraki Y, Arima Y, Nakai K, Chiyoda O, Yoshida H, Uchikawa K, Inamura K, Akai Y, Hasegawa S, Shishido T, Hattori H, Katada N, Segawa K, Koizumi N, Yamada M, Mochida I, Ishihara A, Kabe T, Nishijima A, Matsumoto H, Niwa M, Uchijima T. A Study on the Preparation of Supported Metal Oxide Catalysts Using Jrc-Reference Catalysts. I. Preparation of a Molybdena-Alumina Catalyst. Part 4. Preparation Parameters and Impact Index. *Applied Catalysis a-General*. 1998 Jun;170(2):359-79.

[37] Okamoto Y, Umeno S, Arima Y, Nakai K, Takahashi T, Uchikawa K, Inamura K, Akai Y, Chiyoda O, Katada N, Shishido T, Hattori H, Hasegawa S, Yoshida H, Segawa K, Koizumi N, Yamada M, Nishijima A, Kabe T, Ishihara A, Isoda T, Mochida I, Matsumoto H, Niwa M, Uchijima T. A Study on the Preparation of Supported Metal Oxide Catalysts Using Jrc-Reference Catalysts. I. Preparation of a Molybdena-Alumina Catalyst. Part 3. Drying Process. *Applied Catalysis a-General*. 1998 Jun;170(2):343-57.

[38] Okamoto Y, Arima Y, Hagio M, Nakai K, Umeno S, Akai Y, Uchikawa K, Inamura K, Ushikubo T, Katada N, Hasegawa S, Yoshida H, Tanaka T, Isoda T, Mochida I, Segawa K, Nishijima A, Yamada M, Matsumoto H, Niwa M, Uchijima T. A Study on the Preparation of Supported Metal Oxide Catalysts Using Jrc-Reference Catalysts. I. Preparation of a Molybdena-Alumina Catalyst. Part 2. Volume of an Impregnation Solution. *Applied Catalysis a-General*. 1998 Jun;170(2):329-42.

[39] Mochida I, Sakanishi K, Suzuki N, Sakurai M, Tsukui Y, Kaneko T. Progresses of Coal Liquefaction Catalysts in Japan. *Catalysis Surveys from Japan*. 1998 May;2(1):17-30.

[40] Mochida I, Miyazaki T. Reactivities of Several Carbonaceous Materials for Their Combustion Catalyzed by Potassium Salts on Perovskite Type Oxide. *Energy & Fuels*. 1998 Sep-Oct;12(5):939-44.

[41] Mochida I, Miyamoto S, Sakanishi K, Korai Y, Yasutake A, Yoshikawa M. Oxidative Removal of So₂ over Pitch Based Active Carbon Fiber above Room Temperature. *Abstracts of Papers of the American Chemical Society*. 1998 Aug;216:U848-U.

[42] Mochida I, Ku CH, Yoon SH, Korai Y. Anodic Performance and Mechanism of Mesophase-Pitch-Derived Carbons in Lithium Ion Batteries. *Journal of Power Sources*. 1998 Oct;75(2):214-22.

[43] Mochida I, Ku CH, Egashira M, Kimura M, Korai Y. Anodic Performances of Unconventional Non-Graphitic Carbons. *Denki Kagaku*. 1998 Dec;66(12):1281-7.

[44] Mochida I, Kishino M, Kawano S, Sakanishi K, Kori Y, Yasutake A, Yoshikawa M. Regeneration of Initial Activity of a Pitch-Based Acf for NO-NH₃ Reaction at Ambient

Temperature. *Fuel*. 1998 Dec;77(15):1741-6.

[45] Mochida I, An KH, Korai Y, Kojima T, Komatsu M, Yoshikawa M. Activated Carbon Fibers Prepared from Quinoline and Isoquinoline Pitches. *Sekiyu Gakkaishi-Journal of the Japan Petroleum Institute*. 1998 Nov;41(6):399-405.

[46] Miyazaki T, Tokubuchi N, Inoue M, Arita M, Mochida I. Catalytic Activity of Potassium Sulfate and Chloride Supported on Perovskite-Type Oxide for the Gasification of Carbon Particles. *Energy & Fuels*. 1998 May-Jun;12(3):612-6.

[47] Miyazaki T, Tokubuchi N, Inoue M, Arita M, Mochida I. Catalytic Activities of K_2CO_3 Supported on Several Oxides for Carbon Combustion. *Energy & Fuels*. 1998 Sep-Oct;12(5):870-4.

[48] Lecrenay E, Sakanishi K, Nagamatsu T, Mochida I, Suzuka T. Hydrodesulfurization Activity of Como and Nimo Supported on $Al_2O_3-TiO_2$ for Some Model Compounds and Gas Oils. *Applied Catalysis B-Environmental*. 1998 Oct;18(3-4):325-30.

[49] Lecrenay E, Sakanishi K, Mochida I, Suzuka T. Hydrodesulfurization Activity of Como and Nimo Catalysts Supported on Some Acidic Binary Oxides. *Applied Catalysis a-General*. 1998 Dec;175(1-2):237-43.

[50] Korai Y, Yoon SH, Oka H, Mochida I, Nakamura T, Kato I, Sakai Y. The Properties of Co-Oligomerized Mesophase Pitch from Methyl-naphthalene and Naphthalene Catalyzed by Hf/Bf_3 . *Carbon*. 1998;36(4):369-75.

[51] Korai Y, Hong SH, Mochida I. Meso-Scale Texture of Mesophase Pitch and Its Spun Fiber. *Carbon*. 1998;36(1-2):79-85.

[52] Kawabuchi Y, Sotowa C, Kuroda K, Kawano S, Whitehurst DD, Mochida I. Chemical Vapor Deposition of Organic Compounds over Active Carbon Fiber to Control Its Porosity and Surface Function. *Synthesis and Characterization of Advanced Materials* 1998:61-70.

[53] Kawabuchi Y, Oka H, Kawano S, Mochida I, Yoshizawa N. The Modification of Pore

Size in Activated Carbon Fibers by Chemical Vapor Deposition and Its Effects on Molecular Sieve Selectivity. *Carbon*. 1998;36(4):377-82.

[54] Kanno K, Koike N, Korai Y, Mochida I. Densification of Carbons Prepared from Mesophase Pitch and Phenolic Resin Blend. *Carbon*. 1998;36(7-8):869-74.

[55] Isoda T, Nagao S, Korai Y, Mochida I. Acid Assisted Desulfurization of 4,6-Dimethyldibenzothiophene and Its Reaction Network over Mixture of Ni-Hy Zeolite and CoMo/Al₂O₃. *Sekiyu Gakkaishi-Journal of the Japan Petroleum Institute*. 1998 Jan;41(1):22-8.

[56] Isoda T, Kusakabe K, Morooka S, Mochida I. Reactivity and Selectivity for the Hydrocracking of Vacuum Gas Oil over Metal-Loaded and Dealuminated Y-Zeolites. *Energy & Fuels*. 1998 May-Jun;12(3):493-502.

[57] Farag H, Whitehurst DD, Mochida I. Synthesis of Active Hydrodesulfurization Carbon-Supported Co-Mo Catalysts. Relationships between Preparation Methods and Activity/Selectivity. *Industrial & Engineering Chemistry Research*. 1998 Sep;37(9):3533-9.

[58] Farag H, Mochida I, Sakanishi K, Whitehurst DD. Kinetics of Hydrodesulfurization Reaction of 4,6-Dimethyldibenzothiophene over Co-Mo/C Catalyst, the Inhibition Effect by Naphthalene and H₂s. *Abstracts of Papers of the American Chemical Society*. 1998 Aug;216:U598-U.

[59] Egashira M, Hoshii K, Araki T, Korai Y, Mochida I. Effects of Fullerene Addition on the Carbonization of Synthetic Naphthalene Isotropic Pitch. *Carbon*. 1998;36(12):1739-47.

[60] Chang YC, Sohn HJ, Korai Y, Mochida I. Anodic Performances of Coke from Coals. *Carbon*. 1998;36(11):1653-62.

[61] Yoon SH, Takano N, Korai Y, Mochida I. Crack Formation in Mesophase Pitch-Based Carbon Fibres .1. Some Influential Factors for Crack Formation. *Journal of Materials Science*. 1997 May;32(10):2753-8.

[62] Yoon SH, Korai Y, Mochida I. Crack Formation in Mesophase Pitch-Based Carbon Fibres .2. Detailed Structure of Pitch-Based Carbon Fibres with Some Types of Open Cracks. *Journal of Materials Science*. 1997 May;32(10):2759-69.

[63] Yang KS, Kim YA, An KH, Yoon SH, Son TW, Mochida I. Modification of Naphthalene-Derived Mesophase Pitch with Benzoquinone. *Carbon*. 1997;35(7):923-8.

[64] Shin S, Jang J, Yoon SH, Mochida I. A Study on the Effect of Heat Treatment on Functional Groups of Pitch Based Activated Carbon Fiber Using Ftir. *Carbon*. 1997;35(12):1739-43.

[65] Sakanishi K, Yamashita N, Whitehurst DD, Mochida I. Depolymerization and Demetallation Treatments of Asphaltene in Vacuum Residue. *Abstracts of Papers of the American Chemical Society*. 1997 Apr;213:67-PETR.

[66] Sakanishi K, Taniguchi H, Hasuo H, Mochida I. Iron-Based Catalysts Supported on Carbon Nanoparticles of Hollow Structure for Coal Liquefaction. *Industrial & Engineering Chemistry Research*. 1997 Feb;36(2):306-9.

[67] Rodriguez NM, Kim MS, Fortin F, Mochida I, Baker RTK. Carbon Deposition on Iron-Nickel Alloy Particles. *Applied Catalysis a-General*. 1997 Jan;148(2):265-82.

[68] Mochida I, Sakai Y, Fujiyama S, Komatsu M. Development of Process for Manufacturing of Mesophase Pitch from Aromatic Hydrocarbons. *Nippon Kagaku Kaishi*. 1997 Jan(1):1-10.

[69] Mochida I, Kuroda K, Miyamoto S, Sotowa C, Korai Y, Kawano S, Sakanishi K, Yasutake A, Yoshikawa M. Remarkable Catalytic Activity of Calcined Pitch Based Activated Carbon Fiber for Oxidative Removal of So₂ as Aqueous H₂so₄. *Energy & Fuels*. 1997 Mar-Apr;11(2):272-6.

[70] Mochida I, Kuroda K, Kawano S, Matsumura Y, Yoshikawa M, Grulke E, Andrews R. Kinetic Study of the Continuous Removal of Sox Using Polyacrylonitrile-Based Activated Carbon Fibres .2. Kinetic Model. *Fuel*. 1997 May;76(6):537-41.

[71] Mochida I, Kuroda K, Kawano S, Matsumura Y, Yoshikawa M. Kinetic Study of the

Continuous Removal of Sox on Polyacrylonitrile-Based Activated Carbon Fibres .1. Catalytic Activity of Pan-Acf Heat-Treated at 800 Degrees C. Fuel. 1997 May;76(6):533-6.

[72] Mochida I, Kishino M, Kawano S, Iwaizono H, Yasutake A, Yoshikawa M. Initial Period of NO-NH₃ Reaction over a Heat-Treated Pitch-Based Active Carbon Fiber. Energy & Fuels. 1997 Mar-Apr;11(2):307-10.

[73] Mochida I, Kawano S, Hironaka M, Kawabuchi Y, Korai Y, Matsumura Y, Yoshikawa M. Kinetic Study on Reduction of No of Low Concentration in Air with Nh₃ at Room Temperature over Pitch-Based Active Carbon Fibers of Moderate Surface Area. Langmuir. 1997 Oct;13(20):5316-21.

[74] Mochida I, Kawabuchi Y, Kawano S, Matsumura Y, Yoshikawa M. High Catalytic Activity of Pitch Based Activated Carbon Fibres of Moderate Surface Area for Oxidation of No to No₂ at Room Temperature. Fuel. 1997 May;76(6):543-8.

[75] Mochida I, Eguchi S, Hironaka M, Nagao S, Sakanishi K, Whitehurst DD. The Effects of Seeding in the Synthesis of Zeolite MCM-22 in the Presence of Hexamethyleneimine. Zeolites. 1997 Feb-Mar;18(2-3):142-51.

[76] Mochida I, Egashira M, Korai Y, Yokogawa K. Structural Changes of Fullerene by Heat-Treatment up to Graphitization Temperature. Carbon. 1997;35(12):1707-12.

[77] Miyazaki T, Tokubuchi N, Arita M, Inoue M, Mochida I. Catalytic Combustion of Carbon by Alkali Metal Carbonates Supported on Perovskite-Type Oxide. Energy & Fuels. 1997 Jul-Aug;11(4):832-6.

[78] Ma XL, Sakanishi K, Isoda T, Mochida I. Determination of Sulfur Compounds in Non-Polar Fraction of Vacuum Gas Oil. Fuel. 1997 Mar;76(4):329-39.

[79] Lecrenay E, Sakanishi K, Mochida I. Catalytic Hydrodesulfurization of Gas Oil and Model Sulfur Compounds over Commercial and Laboratory-Made Como and Nimo Catalysts: Activity and Reaction Scheme. Catalysis Today. 1997 Dec;39(1-2):13-20.

[80] Lecrenay E, Mochida I. Catalytic Hydrodesulfurization of Petroleum Middle

Distillate and Model Sulfur Compounds over a Series of Catalysts Activity and Scheme. Hydrotreatment and Hydrocracking of Oil Fractions 1997:333-42.

[81] Korai Y, Wang YG, Yoon SH, Ishida S, Mochida I, Nakagawa Y, Matsumura Y. Effects of Carbon Black Addition on Preparation of Meso-Carbon Microbeads. Carbon. 1997;35(7):875-84.

[82] Korai Y, Ishida S, Yoon SH, Wang YG, Mochida I, Nakagawa Y, Yamaguchi C, Matsumura Y, Sakai Y, Komatsu M. Preparation of Mesocarbon Microbeads by Dispersing Mesophase Pitch in Isotropic Pitches. Carbon. 1997;35(10-11):1503-15.

[83] Korai Y, Ishida S, Watanabe F, Yoon SH, Wang YG, Mochida I, Kato I, Nakamura T, Sakai Y, Komatsu M. Preparation of Carbon Fiber from Isotropic Pitch Containing Mesophase Spheres. Carbon. 1997;35(12):1733-7.

[84] Kawabuchi Y, Sotowa C, Kishino M, Kawano S, Whitehurst DD, Mochida I. Chemical Vapor Deposition of Heterocyclic Compounds over Active Carbon Fiber to Control Its Porosity and Surface Function. Langmuir. 1997 Apr;13(8):2314-7.

[85] Kanno K, Fernandez JJ, Fortin F, Korai Y, Mochida I. Modifications to Carbonization of Mesophase Pitch by Addition of Carbon Blacks. Carbon. 1997;35(10-11):1627-37.

[86] Isoda T, Nagao S, Ma XL, Korai Y, Mochida I. Catalytic Activities of NiMo and CoMo/Al₂O₃ of Variable Ni and Co Contents for the Hydrodesulfurization of 4,6-Dimethyldibenzothiophene in the Presence of Naphthalene. Applied Catalysis a-General. 1997 Feb;150(1):1-11.

[87] Hasuo HU, Sakanishi K, Taniguchi H, Kishino M, Mochida I. Effects of Catalytic Activity and Solvent Composition on Two-Stage Coal Liquefaction. Industrial & Engineering Chemistry Research. 1997 May;36(5):1453-7.

[88] Farag H, Whitehurst DD, Sakanishi K, Mochida I. A Fresh Approach to Kinetic Analyses of the Hydrodesulfurization of Dibenzothiophenes. Abstracts of Papers of the American Chemical Society. 1997 Sep;214:20-PETR.

[89] Farag H, Whitehurst DD, Sakanishi K, Mochida I. Comparison of Carbon and Alumina Supported Co-Mo Catalysts for Hds of Dibenzothiophenes. Abstracts of Papers of the American Chemical Society. 1997 Sep;214:9-PETR.

[90] Egashira M, Whitehurst DD, Korai Y, Mochida I. Carbonization of the Toluene Soluble Fraction of Fullerene Soot into a Disk. Carbon. 1997;35(7):945-9.

[91] Yoon SH, Korai Y, Mochida I, Yokogawa K, Fukuyama S, Yoshimura M. Axial Nano-Scale Microstructures in Graphitized Fibers Inherited from Liquid Crystal Mesophase Pitch. Carbon. 1996;34(1):83-8.

[92] Yamashita N, Sakanishi K, Mochida I. Hydrotreatment of Petroleum Vacuum Residue with Nimo Supported on Carbon Black of Hollow Nano-Particles. Abstracts of Papers of the American Chemical Society. 1996 Mar;211:22-CATL.

[93] Sotowa C, Kawabuchi Y, Mochida I. Catalytic Dehydrochlorination of 1,2-Dichloroethane over Pyridine Deposited Pitch-Based Active Carbon Fiber. Chemistry Letters. 1996(11):967-8.

[94] Sakanishi K, Taniguchi H, Hasuo H, Mochida I. Remarkable Oil Yield from an Indonesian Subbituminous Coal in Liquefaction Using Nimo Supported on a Carbon Black under Rapid Stirring. Energy & Fuels. 1996 Jan-Feb;10(1):260-1.

[95] Sakanishi K, Obata H, Mochida I, Sakaki T. Capture and Recovery of Indole from Methyl-naphthalene Oil in a Continuous Supercritical CO₂ Extraction Apparatus over a Fixed Bed of Anion-Exchange Resin. Industrial & Engineering Chemistry Research. 1996 Jan;35(1):335-7.

[96] Sakanishi K, Ishida S, Mochida I, Kamijo T, Kiguchi J, Honma M. Microtexture Change of Semi-Cokes and Its Mechanical Strength Development During the Carbonization. Tetsu to Hagane-Journal of the Iron and Steel Institute of Japan. 1996 May;82(5):419-24.

[97] Sakanishi K, Hasuo H, Kishino M, Mochida I, Okuma O. Catalytic Activity of Nimo Sulfide Supported on a Particular Carbon Black of Hollow Microsphere in the Liquefaction of a Subbituminous Coal. Energy & Fuels. 1996 Jan-Feb;10(1):216-9.

- [98] Mochida I, Yoon SH, Takano N, Fortin F, Korai Y, Yokogawa K. Microstructure of Mesophase Pitch-Based Carbon Fiber and Its Control. *Carbon*. 1996;34(8):941-56.
- [99] Mochida I, Tsunawaki T, Sotowa C, Korai Y, Higuchi K. Coke Produced in the Commercial Pyrolysis of Ethylene Dichloride into Vinyl Chloride. *Industrial & Engineering Chemistry Research*. 1996 Oct;35(10):3803-7.
- [100] Mochida I, Sotowa C, Watanabe Y, Yatsunami S. Dehydrochlorination of 1,2-Dichloroethane into Vinylchloride over Active Carbon Fibers. *Abstracts of Papers of the American Chemical Society*. 1996 Mar;211:25-CATL.
- [101] Mochida I, Sakanishi K, Ma XL, Nagao S, Isoda T. Deep Hydrodesulfurization of Diesel Fuel: Design of Reaction Process and Catalysts. *Catalysis Today*. 1996 May;29(1-4):185-9.
- [102] Mochida I, Kuroda K, Yasutake A, Yoshikawa M, Matsumura Y, Nagasaki R, Center D. Oxidation of SO₂ into Recoverable Aq.H₂SO₄ over Pitch Based Active Carbon Fibers. *Abstracts of Papers of the American Chemical Society*. 1996 Mar;211:87-FUEL.
- [103] Mochida I, Kuroda K, Kawabuchi Y, Kawano S, Matsumura Y, Yoshikawa M. Remarkable Activity Enhancement of Pitch Based Active Carbon Fibers by Heat-Treatment for Oxidative So₂ Removal. *Chemistry Letters*. 1996(7):541-2.
- [104] Mochida I, Kawano S, Yasutake A, Yoshikawa MA, Matsumura Y. State of Nox over Pitch Based Active Carbon Fiber at the Initial Stage of NO-NH₃ Reaction. *Abstracts of Papers of the American Chemical Society*. 1996 Mar;211:54-FUEL.
- [105] Mochida I, An KH, Sakanishi K, Korai Y. Preparation of Nitrogen-Rich Pitches from Diazanaphthalenes Using AlCl₃. *Carbon*. 1996;34(5):601-8.
- [106] Mochida I. Technological, Development in the Coal and Heavy Petroleum Upgrading for Future Society. *Abstracts of Papers of the American Chemical Society*. 1996 Mar;211:83-FUEL.
- [107] Miyazaki T, Inoue M, Mochida I. Low Temperature Catalytic Combustion of

Carbon by Alkali Metal Salt/Perovskite Type Oxide Mixture. Abstracts of Papers of the American Chemical Society. 1996 Mar;211:59-FUEL.

[108] Menendez R, Fernandez JJ, Bermejo J, Cebolla V, Mochida I, Korai Y. The Role of Carbon Black Coal-Tar Pitch Interactions in the Early Stage of Carbonization. Carbon. 1996;34(7):895-902.

[109] Ma XL, Sakanishi K, Mochida I. Hydrodesulfurization Reactivities of Various Sulfur Compounds in Vacuum Gas Oil. Industrial & Engineering Chemistry Research. 1996 Aug;35(8):2487-94.

[110] Ma XL, Sakanishi K, Isoda T, Nagao S, Mochida I. Structural Characteristics and Removal of Visible-Fluorescence Species in Hydrodesulfurized Diesel Oil. Energy & Fuels. 1996 Jan-Feb;10(1):91-6.

[111] Korai Y, Wang YG, Yoon SH, Ishida S, Mochida I, Nakagawa Y, Matsumura Y. Preparation of Meso-Carbon Microbeads with Uniform Diameter from Ar-Isotropic Pitch in the Presence of Carbon Black. Carbon. 1996;34(9):1156-9.

[112] Korai Y, Ishida S, Yoon SH, Wang YG. Efficient Preparation of Meso-Carbon Microbeads from Synthetic Isotropic Pitch Derived from Naphthalene. Carbon. 1996;34(12):1569-76.

[113] Kawabuchi Y, Sotowa C, Kuroda K, Kawano S, Whitehurst DD, Mochida I. Chemical Vapor Deposition of Organic Compounds over Active Carbon Fiber to Control Its Porosity and Surface. Abstracts of Papers of the American Chemical Society. 1996 Aug;212:35-MTLS.

[114] Kawabuchi Y, Sotowa C, Kishino M, Kawano S, Whitehurst DD, Mochida I. Chemical Vapor Deposition of Some Heterocyclic Compounds over Active Carbon Fiber to Control Its Porosity. Chemistry Letters. 1996(11):941-2.

[115] Kawabuchi Y, Kishino M, Kawano S, Whitehurst DD, Mochida I. Carbon Deposition from Benzene and Cyclohexane onto Active Carbon Fiber to Control Its Pore Size. Langmuir. 1996 Aug;12(17):4281-5.

- [116] Kawabuchi Y, Kawano S, Mochida I. Molecular Sieving Selectivity of Active Carbons and Active Carbon Fibers Improved by Chemical Vapour Deposition of Benzene. *Carbon*. 1996;34(6):711-7.
- [117] Isoda T, Nagao S, Ma XL, Korai Y, Mochida I. Hydrodesulfurization of Refractory Sulfur Species .2. Selective Hydrodesulfurization of 4,6-Dimethyldibenzothiophene in the Dominant Presence of Naphthalene over Ternary Sulfides Catalyst. *Energy & Fuels*. 1996 Mar-Apr;10(2):487-92.
- [118] Isoda T, Nagao S, Ma XL, Korai Y, Mochida I. Hydrodesulfurization of Refractory Sulfur Species .1. Selective Hydrodesulfurization of 4,6-Dimethyldibenzothiophene in the Major Presence of Naphthalene over CoMo/Al₂O₃ and Ru/Al₂O₃ Blend Catalysts. *Energy & Fuels*. 1996 Mar-Apr;10(2):482-6.
- [119] Isoda T, Nagao S, Ma XL, Korai Y, Mochida I. Hydrodesulfurization Pathway of 4,6-Dimethyldibenzothiophene through Isomerization over Y-Zeolite Containing CoMo/Al₂O₃ Catalyst. *Energy & Fuels*. 1996 Sep-Oct;10(5):1078-82.
- [120] Isoda T, Nagao S, Korai Y, Mochida I. Hds Reactivity of Alkyldibenzothiophenes in Gas Oil .2. Hds Reactivity of 4,6-Dimethyldibenzothiophene and Its Reaction Pathway over Ni Loaded Y-Zeolite and CoMo/Al₂O₃. *Abstracts of Papers of the American Chemical Society*. 1996 Aug;212:18-PETR.
- [121] Isoda T, Nagao S, Korai Y, Mochida I. Hds Reactivity of Alkyldibenzothiophenes in Gas Oil .1. Acid Assisted Desulfurization of 4,6-Dimethyldibenzothiophene through Isomerization and Cracking. *Abstracts of Papers of the American Chemical Society*. 1996 Aug;212:17-PETR.
- [122] Hsu ML, Grant DM, Pugmire RJ, Korai Y, Yoon SH, Mochida I. A Two-Dimensional C-13-Nmr Study of Powdered and Oriented Mesophase Pitches. *Carbon*. 1996;34(6):729-39.
- [123] Hasuo H, Taniguchi H, Sakanishi K, Mochida I. Catalytic Activity of NiMo Supported Hollow Carbon Black in the Two Stage Coal Liquefaction. *Abstracts of Papers of the American Chemical Society*. 1996 Mar;211:24-CATL.

- [124] Egashira M, Yokogawa K, Korai Y, Whitehurst DD, Mochida I. Structural Changes of Fullerene by Heat-Treatment. Abstracts of Papers of the American Chemical Society. 1996 Aug;212:32-MTLS.
- [125] Sotowa C, Korai Y, Mochida I, Higuchi K. Coking Phenomena in the Pyrolysis of Ethylene Dichloride into Vinyl-Chloride. Abstracts of Papers of the American Chemical Society. 1995 Aug;210:95-PETR.
- [126] Sakanishi K, Obata H, Mochida I, Sakaki T. Removal and Recovery of Quinoline Bases from Methylnaphthalene Oil in a Semicontinuous Supercritical CO₂ Separation Apparatus with a Fixed-Bed of Supported Aluminum Sulfate. Industrial & Engineering Chemistry Research. 1995 Nov;34(11):4118-21.
- [127] Sakanishi K, Hasuo H, Mochida I, Whitehurst DD, Okuma O. Preparation of Highly Dispersed Nimo Catalysts Supported on Carbon-Black Particles of Hollow Spheres. Abstracts of Papers of the American Chemical Society. 1995 Apr;209:76-FUEL.
- [128] Sakanishi K, Hasuo H, Mochida I, Okuma O. Preparation of Highly Dispersed Nimo Catalysts Supported on Hollow Spherical Carbon-Black Particles. Energy & Fuels. 1995 Nov-Dec;9(6):995-8.
- [129] Rodriguez NM, Kim MS, Baker RTK, Fortin F, Mochida I. Carbon Deposition on Nickel-Iron Alloys. Abstracts of Papers of the American Chemical Society. 1995 Aug;210:96-PETR.
- [130] Mochida I, Yoon SH, Korai Y, Kanno K, Sakai Y, Komatsu M. Carbon-Fibers from Aromatic-Hydrocarbons. Chemtech. 1995 Feb;25(2):29-37.
- [131] Mochida I, Yatsunami S, Kawabuchi Y, Nakayama Y. Influence of Heat-Treatment on the Selective Adsorption of CO₂ in a Model Natural-Gas over Molecular-Sieve Carbons. Carbon. 1995;33(11):1611-9.
- [132] Mochida I, Sakanishi K, Hasuo H, Taniguchi H, Okuma O. Preparation and Modification of Recoverable Particle Catalysts for Coal-Liquefaction. Abstracts of Papers of the American Chemical Society. 1995 Apr;209:67-FUEL.

- [133] Mochida I, Kawano S, Hironaka M, Yatsunami S, Korai Y, Matsumura Y, Yoshikawa M. Reduction of No at Very-Low Concentration in Air with NH₃ at Room-Temperature over a Series of Calcined Pitch-Based Active-Carbon Fibers. *Chemistry Letters*. 1995 May(5):385-6.
- [134] Mochida I, Kawano S, Hironaka M, Yatsunami S, Korai Y, Matsumura Y, Yoshikawa M. Reduction of No of Very-Low Concentration in Air with NH₃ at Room-Temperature over Calcined Active-Carbon Fibers. *Energy & Fuels*. 1995 Jul-Aug;9(4):659-64.
- [135] Mochida I, Fujiura R, Kojima T, Sakamoto H, Yoshimura T. Carbon Disc of High-Density and Strength Prepared from Heat-Treated Mesophase Pitch Grains. *Carbon*. 1995;33(3):265-74.
- [136] Mochida I, Egashira M, Koura H, Dakeshita K, Yoon SH, Korai Y. Carbonization of C-60 and C-70 Fullerenes to Fullerene Soot. *Carbon*. 1995;33(8):1186-8.
- [137] Mochida I, An KH, Korai Y. Catalytic Condensation of Isoquinoline into Pitch in Higher Yield in the Presence of Nitro Solvents. *Carbon*. 1995;33(8):1079-84.
- [138] Mochida I, An KH, Korai Y. Preparation of Nitrogen-Containing Pitches from Quinoline and Isoquinoline by Aid of AlCl₃. *Carbon*. 1995;33(8):1069-77.
- [139] Ma XL, Sakanishi K, Isoda T, Mochida I. Quantum-Chemical Calculation on the Desulfurization Reactivities of Heterocyclic Sulfur-Compounds. *Energy & Fuels*. 1995 Jan-Feb;9(1):33-7.
- [140] Ma XL, Sakanishi K, Isoda T, Mochida I. Hydrodesulfurization Reactivities of Narrow-Cut Fractions in a Gas Oil. *Industrial & Engineering Chemistry Research*. 1995 Mar;34(3):748-54.
- [141] Isoda T, Nagao S, Ma X, Korai Y, Mochida I. Selective Hydrodesulfurization of 4,6-Dimethyldibenzothiophene in the Dominant Presence of Naphthalene over Hybrid CoMo/Al₂O₃ and Ru/Al₂O₃ Catalyst. *Abstracts of Papers of the American Chemical Society*. 1995 Aug;210:134-FUEL.

[142] Isoda T, Nagao S, Ma X, Korai Y, Mochida I. Selective Hydrodesulfurization of 4,6-Dimethyldibenzothiophene in the Major Presence of Naphthalene over Molybdenum Based Binary and Tertiary Sulfides Catalysts. Abstracts of Papers of the American Chemical Society. 1995 Aug;210:133-FUEL.

[143] Isoda T, Nagao S, Ma X, Korai Y, Mochida I. X-Ray Photoelectron-Spectroscopy Study on the Surface-Structure of NiMo Catalysts for Hydrodesulfurization of 4,6-Dimethyl-Benzothiophene. Abstracts of Papers of the American Chemical Society. 1995 Aug;210:14-PETR.

[144] Fujiura R, Kojima T, Komatsu M, Mochida I. Mechanical-Properties of Binderless Carbon Mold Prepared from Heat-Treated Mesophase Pitch of Controlled Grain-Size. Carbon. 1995;33(8):1061-8.

[145] Fortin F, Yoon SH, Korai Y, Mochida I. Structure of Round-Shaped Methylnaphthalene-Derived Mesophase Pitch-Based Carbon-Fibers Prepared by Spinning through a Y-Shaped Die Hole. Journal of Materials Science. 1995 Sep;30(18):4567-83.

[146] Endo A, Mochida I, Shimizu K, Sato GP. A Simple Thin-Layer Spectroelectrochemical Cell for Nonaqueous Solution Systems. Analytical Sciences. 1995 Jun;11(3):457-9.

[147] Amemiya M, Mochida I. Coke Deposition on the Hydrotreating Catalyst. Abstracts of Papers of the American Chemical Society. 1995 Aug;210:107-PETR.