

PAPER ORDER FORM

1997 NPRA ANNUAL MEETING

March 16-18, 1997

San Antonio, TX

- N/A **AM-97-04 WORLD CRUDE OIL SUPPLY CHANGES: IMPLICATIONS FOR REFINING** - Kevin Lindemer, Cambridge Energy Research Associates (Written text not available.)
- _____ **AM-97-05 RISK MANAGEMENT: CONCEPTUAL FOUNDATIONS AND PRACTICAL APPLICATIONS** - Richard E. Coffin, Lehman Brothers
- _____ **AM-97-06 CHANGES IN THE PIPELINE INFRASTRUCTURE – REFINER CHALLENGES AND OPPORTUNITIES** - Kevin A. Giles, Barnes and Click, Inc.
- _____ **AM-97-07 DOWNSTREAM FINANCIAL PERFORMANCE: BACK TO THE FUTURE?** - Dr. Calvin B. Cobb, Ernst & Young/Wright Killen
- _____ **AM-97-08 REFINING IN THE FUTURE — MEETING THE PERFORMANCE CHALLENGE** - Tom Kellagher, McKinsey & Company, Inc.
- _____ **AM-97-09 KOCH EAST PLANT FLEXICRACKING UNIT FEED INJECTION SYSTEM REPLACEMENT PROJECT** - S. Anderson, Koch Refining, M. Bothe, Tru-Tec/Koch Engineering, and R.E. Walter and S. Zaczepinski, Exxon Research and Engineering Company
- _____ **AM-97-10 FCC TECHNOLOGY UPGRADES: A COMMERCIAL EXAMPLE** - S.J. McCarthy, M.F. Raterman, and C.G. Smalley, Mobil Technology Company, J.F. Sodomini, Mobil Oil Corporation, and R.B. Miller, The M. W. Kellogg Technology Company
- _____ **AM-97-11 NEW FCC PARTICULATE ABATEMENT TECHNOLOGY** - B. Karl Bussey, The M. W. Kellogg Company, and Girish K. Chitnis and Klaus W. Schatz, Mobil Technology Co.
- _____ **AM-97-12 HEAVY OIL CRACKER REVAMP IMPROVES UNIT OPERATION AND PROFITABILITY** - Ralph Amini, Valero Refining Company, and R.J. Glendinning and H. McQuiston, ABB Lummus Global
- _____ **AM-97-13 RESID FCC REGENERATORS: TECHNOLOGY OPTIONS AND EXPERIENCE** - Mark W. Schnaith, and Daniel A. Kauff, UOP
- _____ **AM-97-14 REVAMP FOR LOW SULFUR DIESEL: A CASE STUDY** - David L. Yeary, Phillips 66 Company, Johannes Wrisberg, Haldor Topsoe A/S, and Brian M. Moyse, Haldor Topsoe
- _____ **AM-97-15 HYDROCRACKING FOR MAXIMUM PROFITABILITY** - Mark E. Reno, Hemant B. Gala, and George J. Antos, UOP
- _____ **AM-97-16 THE H-OIL® PROCESS: A WORLDWIDE LEADER IN VACUUM RESIDUE HYDROPROCESSING** - James J. Colyar, and Lawrence I. Wisdom, HRI, Inc.
- _____ **AM-97-17 OPTIMUM HYDROGEN UTILIZATION KEY TO REFINERY PROFITABILITY** - Jerome K. DeHey, KBC Advanced Technologies Inc.

- _____ **AM-97-18 MEDIUM SIZE HYDROGEN SUPPLY USING THE TOPSOE CONVECTION REFORMER** - Ib Dybkjær, and Jørgen N. Gøl, Haldor Topsøe A/S, and Denis Cieutat and Raymond Eyguessier, Air Liquide
- _____ **AM-97-19 RIGOROUS ON-LINE MODEL (ROM) FOR CRUDE UNIT OPTIMIZATION** - Gerald Platt, Simulation Sciences Inc., and Kazuhiro Hamatsu, Kinji Hashimoto, Ryuji Kaneko, and Motohiko Miyagawa, Japan Energy Corporation
- _____ **AM-97-20 IMPROVEMENTS IN REFINERY LOSS CONTROL** - Julie A. Valentine, Micro Motion, Inc., and Raul E. Videla, YPF Luyan DeCuyo Refinery
- _____ **AM-97-21 DEBOTTLENECKING ECONOMICS – MAXIMIZING PROFITABILITY WITH MINIMUM CAPITAL** - Donald F. Schneider, Stratus Engineering, Inc.
- _____ **AM-97-22 THE IMPACT OF NEW COMPUTER AND COMMUNICATION TECHNOLOGY ON REFINERY OPERATIONS** - Douglas C. White, Profitpoint Solutions Inc.
- _____ **AM-97-23 OIL LOSS MONITORING USING SITE-WIDE DATA RECONCILIATION** - Peter Downs and Brian Eukel, KBC Advanced Technologies, Inc.
- _____ **AM-97-24 THE ILLUSORY FLEXIBILITY OF THE COMPLEX MODEL: A GRAPHICAL ANALYSIS OF THE IMPLICATIONS OF THE COMPLEX MODEL FOR REFINERY BLENDING FLEXIBILITY** - William W. Cason, Mayor, Day, Caldwell & Keeton, L.L.P.
- _____ **AM-97-25 SULFUR, NITROGEN, AND AROMATICS REMOVAL FROM FUELS: A COMPARISON OF PROCESSING OPTIONS** - David C. Martindale, George J. Antos, Kenneth Baron, and Rick V. Bertram, UOP
- _____ **AM-97-26 GLOBAL TRENDS – IMPACT OF FUEL REFORMULATION** - George H. Unzelman, HyOx Incorporated
- _____ **AM-97-27 COST EFFECTIVE SOLUTIONS FOR REDUCTION OF BENZENE IN GASOLINE** - Kerry L. Rock, CDTECH®, and Vincent J. D’Amico, ABB Lummus Global
- _____ **AM-97-28 THE ECONOMICS OF GASOLINE REFORMULATION: REFINING ECONOMICS, EMISSIONS STANDARDS, AND THE COMPLEX MODEL** - David S. Hirshfeld and Jeffrey A. Kolb, MathPro Inc.
- _____ **AM-97-29 PASSIVATE VANADIUM ON FCC CATALYSTS FOR IMPROVED REFINERY PROFITABILITY** - David L. Stonecipher, Nalco/Exxon Energy Chemicals L.P., William F. Minyard, Nalco/Exxon Energy Chemicals Ltd., and Dennis C. Kowalczyk, Refining Process Services, Inc.
- _____ **AM-97-30 CONCLUSIONS OF ONE YEAR MIO PROCESS COMMERCIAL PRACTICE** - Xiao-xiang Zhong, Yu Pan, and Cai-ying Li, Research Institute of Petroleum Processing (RIPP), SINOPEC
- _____ **AM-97-31 CRACKING FCC PARADIGMS: PART ONE - CATALYST PERFORMANCE IS FEEDSTOCK DEPENDENT** - Robert H. Harding, Xinjin Zhao, and Joanne Deady, Grace Davison

- _____ **AM-97-32 FCC UNIT OPTIMIZATION USING THE MAGNACAT® PROCESS** - Terry L. Goolsby, and Howard F. Moore, Ashland Petroleum Company, Dennis C. Kowalczyk, Refining Process Services, and Mario L. Zampieri and B. Karl Bussey, The M. W. Kellogg Company
- _____ **AM-97-33 FCC PROFITABILITY: UNCOVERING THE HIDDEN VALUES EVALUATING THE DIFFERENCES BETWEEN HARD AND SOFT DOLLARS** - Clifford D. Avery, R. Kevin Dodds, and Keith R. Kreider, Akzo Nobel Catalysts
- _____ **AM-97-34 NAAQS PROCESS AND IMPACT** - Thomas L. Wylie, Sun Company, Inc.
- _____ **AM-97-35 GLOBAL WARMING: A CASE OF THE CART BEFORE THE HORSE** - Gerald T. Westbrook, TSBV Consultants
- _____ **AM-97-36 STORM WARNINGS AHEAD: EVOLUTION OF NATIONAL LABOR POLICY IN THE CLINTON ADMINISTRATION'S SECOND TERM** - James V. Carroll, III, Littler, Mendelson, Fastiff, Tichy & Mathiason, P.C.
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- _____ **AM-97-38 REFINING CHALLENGES: THE ROLE OF I.T.** - J. A. "Chip" Nemesi, IBM
- _____ **AM-97-39 BASE OIL QUALITY NEEDS — WORLDWIDE BY LUBRICANT SEGMENT** - William R. Downey, Kline & Company, Inc. (Paper available after April 1, 1997.)
- _____ **AM-97-40 THE RELATIONSHIP OF BASE OIL VOLATILITY TO OIL LOSS IN AUTOMOTIVE APPLICATIONS** - Barry C. Deane, and Eugene Choi, Exxon Research and Development Laboratories, and Ken Crosthwait, Exxon Company USA
- _____ **AM-97-41 OEM DEVELOPMENTS - ATF FOR BETTER TRANSMISSION DURABILITY** - William C. Ward, Jr., John J. Nunnari, and Kathleen A. Murray, The Lubrizol Corporation
- _____ **AM-97-42 IMPACT OF BASE OIL TRENDS ON FUTURE LUBRICANT FORMULATIONS – THE ADDITIVE PERSPECTIVE** - Margaret Lemmon, Kirk J. Metzger, and John Taracha, The Lubrizol Corporation
- _____ **AM-97-43 ISO 9000 IMPROVES QUALITY – FACT OR FICTION** - James D. "Mike" Burnett, Jr., Ergon, Inc.
- _____ **AM-97-44 ReVAP: PHILLIPS/MOBIL MODIFIED CATALYST TECHNOLOGY FOR HF VOLATILITY REDUCTION** - Larry Shoemaker, Keith Hovis, Ken Hoover, Bruce Randolph, Ph.D., and Marty Pfile, Phillips Petroleum Company
- _____ **AM-97-45 NExETHERS — A NEW TECHNOLOGY FOR COMBINED MTBE, TAME AND HEAVIER ETHERS PRODUCTION** - Matti Koskinen, Esa Tamminen, and Harri Järvelin, Neste Oy, Engineering, and Ian M. Stewart, and Ralph Ragsdale, Bechtel Corp.
- _____ **AM-97-46 DEVELOPMENT OF OLIGOMERIZATION PROCESS FOR CONVERTING LIGHT OLEFINIC FRACTIONS INTO MORE VALUABLE PRODUCTS AS A HIGH-OCTANE GASOLINE, KEROSENE AND GAS OIL** - Kazuhisa Nakanishi,

Takayuki No, and Yoshiharu Ohmoto, KOA OIL Co., Ltd.

_____ **AM-97-47 MOTOR FUEL ALKYLATION ADVANCES BEYOND LIQUID ACID CATALYSIS** - John C. Sheckler and Robert J. Schmidt, UOP

_____ **AM-97-48 IMPROVING REFORMATE QUALITY FOR BTX USING THE MOBIL REFORMATE UPGRADING PROCESS** - Charles M. Sorensen, Mohsen N. Harandi, Ajit V. Sapre, Mobil Technology Company, and David G. Freyman, Mobil Oil Corporation

_____ **AM-97-49 CRITERION CATALYST COMPANY FINDS SOLUTIONS TO HIGH SEVERITY ARHDS OPERATION** - Richard D. Street, and Safa E. George, Criterion Catalyst Company, Shaun Boardman, Criterion Catalyst Company LTD, Opinder K. Bhan, Shell Oil Company/Westhollow Technology Center, and Jos den Ouden, Shell International Chemicals

_____ **AM-97-50 ECONOMIC BENEFITS OF ROSE/FLUID COKING INTEGRATION** - V. K. Patel, The M. W. Kellogg Company, E. M. Roundtree, Exxon Research and Engineering Company, and H. D. Sloan, The M. W. Kellogg Technology Company

_____ **AM-97-51 EVALUATION OF RESID CONVERSION OPTIONS** - Bruce E. Reynolds, Jason L. Rogers, and Ruth A. Broussard, Chevron Research and Technology Company

_____ **AM-97-52 EUREKA IN COMBINATION WITH TEXACO GASIFICATION IMPROVES REFINERY INTEGRATION** - R. Watari and S. Shimizu, Chiyoda Corporation, and E. A. Reich, Texaco Development Corporation

_____ **AM-97-53 BASE OILS TO MEET FUTURE LUBRICANT REQUIREMENTS: ILSAC GF-3 AND BEYOND** - Mark Sztenderowicz and Brent Lok, Chevron Products Company

_____ **AM-97-54 HIGH OCTANE ALKYLATE FROM FIELD BUTANES: THE SNAMPROGETTI ISOETHER PROCESS** - Roberto Trotta, Marco Di Girolamo, Ermanno Pescarollo, and Mario Marchionna, Snamprogetti S.p.A., and Michael J. Hyland, Snamprogetti USA

_____ **AM-97-55 NEW, HIGH PERFORMANCE CATALYSTS FOR THE ISOMERIZATION OF n-C₄ AND n-C₅/C₆** - Mark de Boer, Pieter Jan Nat, and Emiel H. van Broekhoven, Akzo Nobel Catalysts b.v.

_____ **AM-97-56 CDU AND FCCU OPTIMIZATION USING NIR TECHNOLOGY** - Al Kania, Applied Automation, Inc.

_____ **AM-97-57 ON-LINE ANALYSIS OF HF ACID USING NEAR-INFRARED SPECTROSCOPY** - Randall L. Heald, Bruce B. Randolph, and Alan D. Eastman, Phillips Petroleum Company

_____ **AM-97-58 MINIMUM INVESTMENT REVAMPS: PROCESS DESIGN AND ACHIEVING ATTRACTIVE ECONOMICS** - Scott W. Golden, Process Consulting Services Inc.

_____ **AM-97-62 REDEFINING THE CONTEXT OF REFINERY PACESETTER PERFORMANCE** - Martin C. Stetzer, Price Waterhouse L.L.C.

_____ **AM-97-63 SA ONSTREAM - A KEY TO IMPROVING OPERATIONAL RELIABILITY** - Richard D. Ricketts and William L. Glasscock, Solomon Associates, Inc., Bonz Hart and David Potts, Meridium, Inc., and Curtis Plumlee, Plumlee Associates, Inc.

_____ **AM-97-64 OMBINE MAK HYDROCRACKING AND FCC TO UPGRADE HEAVY OILS -**
Michael G. Hunter, Arthur R. Gentry, and Richard B. Miller, The M. W. Kellogg
Technology Company, David A. Pappal, The Mobil Technology Company, and Mehmet
Y. Asim and Lucas R. Groeneveld, Akzo Nobel Chemicals Inc.

_____ **AM-97-65 THE FUTURE OF FLUID CATALYTIC CRACKING -** Warren S. Letzsch, and Dilip
Dharia, Stone & Webster Technology Corporation, and Jay Ross, Stone & Webster
Engineering Corp.

_____ **AM-97-66 COMMERCIAL EVALUATION OF NEW NON-PLATINUM COMBUSTION
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Additives

_____ **AM-97-67 DIESEL HYDROPROCESSING WITH SYNSAT TECHNOLOGY –
COMMERCIAL EXPERIENCE -** G.L. Hamilton and M.C. Baldassari, ABB Lummus
Global Inc., E.L. Granniss, Criterion Catalyst Company, L.P., and D. Dave, Criterion
Catalyst Company, Ltd.

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