

Resume of **AHMED E. ABASAEED**

PERSONAL DATA

Legal Name: Ahmed Abasaeed Elhag Elfaki
Scientific Name: A. E. Abasaeed
Mailing Address: Chemical Engineering Department,
King Saud University, PO Box 800
Riyadh 11421, Saudi Arabia.
Work Tel. ++966-11-4676856
Work Fax: ++966-11-4678770
Home: ++966-11-4682911
Mobile: ++966-50-7275840
Email address: abasaeed@ksu.edu.sa; aeabasaeed@hotmail.com
Web Page: <https://fac.ksu.edu.sa/abasaeed>

Current Rank Professor, Chemical Engineering Department, King Saud University,
PO Box 800, Riyadh 11421, K. Saudi Arabia.

Marital Status Married with four children.

Languages English and Arabic.

Nationality Sudanese.

EDUCATION

1987 **Ph.D.** - Auburn University, Alabama, U.S.A. Ph.D. thesis " Kinetic and Process Studies on Free and Solid Acid Catalyzed Hydrolysis of Biomass Substrates".
Major : Chemical (Biochemical) Engineering. **Minor** : Environmental Engineering.

1982 **M.S.** - University of Florida, Gainesville, Florida, U.S.A **Major** : Chemical Engineering. **Minor** : Applied Mathematics.

1978 **B.S. Honors** Chemical Engineering, University of Khartoum, Sudan.

CERTIFICATES & AWARDS

2014 Certificate of Appreciation and Gratitude from the College of Engineering, King Saud University and BAE Systems Company for "Supervising the second best final year graduation project" in the department of Chemical Engineering.

2014 Awarded "Excellence in Teaching" in the Chemical Engineering Department, College of Engineering, King Saud University.

2013 Certificate of Appreciation and Gratitude from the College of Engineering, King Saud University and BAE Systems Company for "Supervising the distinguished, best final year graduation project" in the department of Chemical Engineering.

2013 Certificate of Appreciation and Gratitude from the Chemical Engineering Club for participating and contributing to the successes of the club.

2012 Awarded "Al-Masmak Distinction Plate" by the Rectorate for Graduate Studies and Scientific Research for excellence in research and registration of patents. The

- ceremony was honored by the presence of H.R.H. Prince Sattam Bin Abdulaziz, Governor of Riyadh.
- 2012 Certificate of Appreciation and Gratitude from the College of Engineering, King Saud University and BAE Systems Company for “Supervising the distinguished, best final year graduation project” in the department of Chemical Engineering.
- 2011 Certificate of Appreciation and Gratitude from the College of Engineering, King Saud University for “Supervising the distinguished best final year graduation project” in the department of Chemical Engineering.
- 2010 Certificate of a Training Course on "How to Prepare the Educational Institution for Accreditation Visit", King Saud University, Riyadh, Saudi Arabia.
- 2009 Certificate of Appreciation from the Dean of the College of Engineering for Positive Role in and Contribution towards College obtaining ABET Accreditation in Academic Year 2009/2010, King Saud University, Riyadh, Saudi Arabia.
- 2009 Certificate of distinguished research execution "Utilization and Processing of Dates for Production of Fruit Sugar (Fructose), Project # AT-22-94" From King Abdulaziz City for Science & Technology, Riyadh, Saudi Arabia.
- 2005 Certificate of Appreciation from the Chairman of the Chemical Engineering Department for Academic & Research Excellence at the Department. King Saud University, Riyadh, Saudi Arabia
- 1980 AETTCC - Alternative Energy Technologies Training Course Certificate, University of Florida, Gainesville, Florida, U.S.A.
- 1978 Prize of Best Student in Results, Final Year Chemical Engineering, University of Khartoum, Sudan.
- 1977 Prize of Best Student in Performance, Third Year Chemical Engineering, University of Khartoum, Sudan.

OCCUPATIONS

- 1999- Present Professor, Chemical Engineering Department, King Saud University, PO Box 800, Riyadh 11421, K. Saudi Arabia.
- 1995-1999 Associate Professor, Chemical Engineering Department, King Saud University, PO Box 800, Riyadh 11421, K. Saudi Arabia.
- 1990-1995 Assistant Professor, Chemical Engineering Department, King Saud University, PO Box 800, Riyadh 11421, K. Saudi Arabia.
- 1990-1994 Associate Research Professor, Energy Research Institute, National Council for Research, Khartoum, Sudan (seconded to KSU).
- 1988-1990 Senior Researcher, Energy Research Institute, National Council for Research, Khartoum, Sudan.
- 1987-1989 Assistant Professor (part-time), Chemical Engineering Department, University of Khartoum, Khartoum, Sudan.
- 1983-1988 Researcher, Energy Research Institute, National Council for Research, Khartoum, Sudan.
- 1983-1987 Graduate Research & Teaching Assistant, Chemical Engineering Department, Auburn University, Auburn, Alabama, U.S.A.
- 1981-1983 Senior Research Assistant, Energy Research Institute, National Council for Research, Khartoum, Sudan.
- 1978-1981 Research Assistant, Energy Research Institute, National Council for Research, Khartoum, Sudan.

EXPERIENCE

Teaching

1990-Present Chemical Engineering Department, King Saud University, Saudi Arabia.
Teaching/taught the following courses:

1. Chemical Engineering Principles -1, **ChE 201**.
2. Chemical Engineering Principles -2, **ChE 202**.
3. Thermodynamics & Heat Transfer for Agri. Eng. Students, **ChE 211**.
4. Chemistry of Engineering Materials, **ChE 239**.
5. Computerized Material & Energy Balances, **ChE 302**.
6. Thermodynamics for Petroleum Engg. Students, **ChE 304**.
7. Chemical Engineering Thermodynamics -1, **ChE 307**.
8. Fluid Mechanics (Momentum transfer), **ChE 312**.
9. Seniors' Design Projects, **ChE 400, 498, 499, 496, 497**.
10. Chemical Engineering Laboratory -1, **ChE 402**.
11. Reaction Engineering (I), **ChE 404**.
12. Biochemical Engineering, **ChE 422**.
13. Catalysis & Heterogeneous Reactors, **ChE 426**.
14. Advanced Heterogeneous Reactors, **ChE 502, ChE544** (M. Sc. courses).
15. Advanced Biochemical Engineering, **ChE 551** (M. Sc. course).
16. Industrial Pollution, **ENVS 561** (M. Sc. course).
17. Advanced Reaction Engineering, **ChE 602** (Ph. D. course).
18. Advanced Topics in Chemical Engineering, **ChE 634** (Ph. D. course).

1987-1989 Chemical Engineering Department, University of Khartoum, Sudan (part-time). Taught the following courses:

1. Transfer Processes (III), Heat Transfer, **ChE 411**.
2. Transfer Processes (IV), Heat Transfer, **ChE 421**.
3. Reaction Engineering and Reactor design (I), **ChE 513**.
4. Reactor Design (II), **ChE 523**.
5. Computations in Chemical Engineering, **ChE 326**.
6. Biomass Energy, **RE 06** (M. S. course).

1983-1987 Graduate research and teaching assistant, Chemical Engineering Department, Auburn University, U.S.A.

1. Assisted in research projects of senior students, **ChE 587**.
2. Graded graduate students homeworks in Mathematics, **ChE 600**.
3. Graded graduate students homeworks in transport phenomena, **ChE 610**.
4. Assisted in writing research proposals soliciting funds from various industries and organizations.

1978-1980 Teaching Assistant (part-time), Chemical Engineering Department, University of Khartoum, Sudan.

1. Co-supervised final year design project in Chemical Engineering.
2. Tutored and graded students homeworks in Mathematics (first, second and

- third year engineering students).
3. Supervised laboratory work in Heat Transfer and Unit Operations.

Post-Graduates Supervision & Examinations

- 1- Emad Eddeen M. Hilal "Heterogeneous Modeling and Optimization for the Fuel Alcohol Fermentation Process", Chemical Engineering Department, King Saud University. December 1991 (Examiner).
- 2- Abdulaziz M. Al-Mutlaq "Static and Dynamic Bifurcation Behavior of Industrial Fluid Catalytic Cracking (FCC) Units". Chemical Engineering Department, King Saud University. December 1998 (M.S. Supervisor).
- 3- Fadi M. Tarabzouni "Modeling and Simulation of the Dynamics of an Ethylene Dimerization Reactor", Chemical Engineering Department, King Saud University. December 1998 (Examiner).
- 4- Abdulaziz M. Aljodai "Modeling and Bifurcation of 1,2 Dichloroethane Production by Ethylene Oxychlorination in a fluidized Bed Reactor" Chemical Engineering Department, King Saud University. December 1999 (Examiner).
- 5- Mohamed O. Abdullatif "Atmospheric Corrosion Behavior of some Steel Alloys", Chemical Engineering Department, King Saud University. December 2000 (Examiner).
- 6- Majed R. Al-Motairy "Modeling and Simulation of Butene Dehydrogenation to Butadiene in a Packed-Bed Membrane Reactor". Chemical Engineering Department, King Saud University. Graduated June 2003 (M.S. Supervisor).
- 7- Ahmed S. A. Al-Fatesh "Dry Reforming of Methane over Supported Nickel Catalysts". Chemical Engineering Department, King Saud University. Graduated June 2003 (Examiner).
- 8- Abdulaziz A. Abahussain "Modeling and Simulation of Ethylene Oxidation to Ethylene Oxide in a Fixed Bed and Cross-Flow Reactor", Chemical Engineering Department, King Saud University. May 2004 (Examiner).
- 9- Alwaleed H. M. Alawan "Theoretical Investigation of Stability of Recombinant DNA Cultures in a Continuous Stirred Tank Reactor", Chemical Engineering Department, King Saud University. June 2004 (Examiner).
- 10- Abdalla S. Almozaini "Steady State Modeling of the Activated Sludge Process in Riyadh Sewage Treatment Plant", Chemical Engineering Department, King Saud University. Graduated October 2004 (M.S. Cosupervisor).
- 11- Mohammed K. Al-Mesfer "Oxidative Dehydrogenation of Propane to Propylene over Supported Ni-Mo Metal Oxide Catalysts", Chemical Engineering Department, King Saud University. Graduated January 2007 (M.S. Supervisor).
- 12- Moreefa M. Al-Enzi, "Oxidation of Cyclohexane by Hydrogen Peroxide over Keggin-Type Heteropoly-Anions Catalysts", Chemistry Department, College of Science, King Saud University. Graduated June 2007 (Examiner).
- 13- Fahad S Al-Harhi, "Modeling and Simulation of a Reactive Distillation Unit for Production of MTBE", Chemical Engineering Department, King Saud University. Graduated July 2008 (M.S. Supervisor).
- 14- Saeed M. Al-Shihri "Aromatization of Propane over Modified H-ZSM-5 Zeolite", Chemical Engineering Department, King Saud University. Graduated April 2008 (M.S. Cosupervisor).
- 15- Ibrahim Z. Al-Musa, "Environmental Pollution of Solid Wastes Resulting from

- Industrial Activities: Applied Study on the 2nd Industrial City in Riyadh", Naif Arab University for Security Sciences. Graduated July 2008 (Examiner).
- 16- Anas A. Al-Suraihi, "Plotting Contour Maps of Air Pollution with Suspended Particulates at Riyadh City", Masters of Science in Environmental Studies, King Saud University. Graduated July 2008 (Examiner).
 - 17- Khalid R. Al-Harhi, "Formation and Destruction of Ozone in Troposphere", Masters of Science in Environmental Studies, King Saud University. Graduated July 2008 (Examiner).
 - 18- Saad M. Al-Qahtani, "Synthesis of a Catalyst for the Production of Isobutene by Isobutane Dehydrogenation Reaction", Chemistry Department, College of Science, King Saud University. Graduated July 2008 (Examiner).
 - 19- Abdulrazzaq R. Al-Shammari, "Development of Zirconium Oxide Catalysts for Isomerization of n-Butane", Chemical Engineering Department, King Saud University. Graduated July 2008 (Examiner).
 - 20- Sami M. Al-Obaid, "Evaluation of Chlorination in a Water Purification Station in Riyadh", Masters of Science in Environmental Studies, King Saud University. Graduated July 2009 (Examiner).
 - 21- Ahmed S. Al-Arifi, "Effect of Chlorination on Biological in a Water Purification Station in Riyadh", Masters of Science in Environmental Studies, King Saud University. Graduated July 2008 (Examiner).
 - 22- Ahmed S. AlFatesh, "Development of Catalysts for Dry Reforming of Methane" Chemical Engineering Department, King Saud University. Graduated Jan. 2010 (Ph.D. Cosupervisor).
 - 23- M. H. Gaily, "Simultaneous Production of Fructose and Bioethanol through Bioconversion of Dates Sugars", Chemical Engineering Department, University of Khartoum, Sudan, August 2010 (Ph.D. Cosupervisor).
 - 23- Abdalla M. Al-Amro, "Recycling of Plastics Wastes", Masters of Science in Environmental Studies, King Saud University. Graduated July 2010 (M.S. Supervisor).
 - 25- M. D. Putra, "Oxidative Dehydrogenation of Propane to Propylene over γ -Al₂O₃ Supported V-Mo Catalysts", Chemical Engineering Department, King Saud University. Graduated July 2010 (M.S. Cosupervisor).
 - 26- H. A. Al-Nafeesa, "Preparation and Characterization of Layered Double Hydroxides Containing Divalent Mg and Ni and Trivalent Al and Cr", Chemistry Department, College of Science, King Saud University. Graduated February 2011 (Examiner).
 - 27- M. A. Othman, "Tuning Layered Double Hydroxides Materials for the Removal of Hydrogen Sulfide gas", Civil Engineering Department, King Saud University. Graduated June 2013 (Ph.D. Cosupervisor).
 - 28- M. Kaavessina, "Synthesis and Characterization of Biodegradable Poly (Lactic Acid) and Its Engineering Application", Chemical Engineering Department, King Saud University. Graduated June 2013 (Examiner).
 - 29- M. A. Zeinelabdeen "Production of Fructose and Bioethanol from Dates Syrups", Chemical Engineering Department, King Saud University. Graduated June 2014 (M.S. Supervisor)
 - 30- M. D. Putra "Process Investigations on Production of Fructose and SCP from Dates Syrup by Selective Fermentation", Chemical Engineering Department, King Saud University. Graduated June 2014 (Ph.D. Supervisor).

- 31- M. A. Naeem, "Dry Reforming of Methane on Nano Supported Ni Catalysts", Chemical Engineering Department, King Saud University. Graduated June 2014 (M.S. Examiner)
- 32- W. U. Khan, "Catalyst Development for Production of Hydrogen via Catalytic Decomposition of Methane", Chemical Engineering Department, King Saud University. Graduated June 2015 (M.S. Examiner)
- 33- M. H. Elsafi, "Lactic Acid Production from Wasted Date", College of food and Agriculture Sciences, King Saud University. Graduated June 2017 (MS Co-supervisor)

Research

1978-1994 Energy Research Institute (ERI), Energy Research Council (ERC), National Center for Research (NCR), Khartoum, Sudan, December (seconded on a leave-without-pay to King Saud University 1990-1994). Major responsibilities and achievements include the followings:

1. Establishment of the Biomass department at the institute.
2. Surveyed the use of Biomass as a potential source of energy in Sudan.
3. Surveyed the Sudan's energy resources (renewable and traditional). The results of the survey were submitted through the institute to the International Energy Conference.
4. Project Leader, Briquetting of Carbonized Cotton Stalks, Sudan Renewable Energy Project (SREP), USAID sponsored project, ERC.
5. Project Leader, Small-Scale Carbonization, Special Energy Program (SEP), GTZ (Germany) sponsored project, ERC.
6. Overall Project Leader, Conservation of Wood in Bakeries, GTZ (Germany) sponsored project, National Energy Administration (NEA), Ministry of Energy.
7. Overall Project Leader, Conservation of Energy in Brick-Kilns Industry, GTZ (Germany) sponsored project, NEA.
8. Project Leader, Ethanol Production and Applications in Sudan, RERI, ERC.

FUNDED PROJECTS

2015-2017 Utilization of Dates' Syrups for the Production of Fructose and Single Cell Protein using a Glucose-Selective Yeast Strain, Project # 13-BIO1530-02, *Sponsored by NSTIP, KSU, KACST* (with Arfat Anis, Mohamed H. Gaily and Ashraf Yousuf). Approved 1323000 SR (Not started yet due to funding).

2015-2017 Development of a Nanocatalyst for the Dry Reforming of Methane, Project # 13-PET1056-02, *Sponsored by NSTIP, KSU, KACST* (with Anis Faheeha and Ahmed Al-fatesh). Approved 1757000 SR (Not started yet due to funding).

2010-2013 Large Scale Selective Fermentation of Saudi Dates' Syrups into Fructose and Bioethanol. Project # 08-ADV391-02. Sponsored by *National Plan of science and technology*, KSU, KACST. (with S. M. Al-Zahrani, H. K. Atiyeh, M. H. Gaily and Ashraf Yousuf). 1997000 SR (Completed)

- 2007-2008 Isomerization and kinetics of glucose into fructose. . *Sponsored by the Research Center, College of Engineering, King Saud University, Saudi Arabia.* (with M. H. Gaily). 36000 SR (Completed).
- 2004-2007 Utilization and Processing of Dates for Production of Fruit Sugar (Fructose), Project # AT-22-94 *Sponsored by King Abdul Aziz City for Science and Technology (KACST), Saudi Arabia* (with S. M. Al-Zahrani, M. H. Gaily and Al-Hussein Assiry). 1050000 SR. *The project team was awarded the certificate of Excellence in Research Execution by KACST in 2009.* (Completed)
- 2003-2006 Aromatization of LPG, *Sponsored by Prince Abd Allah Research Institute, Saudi Arabia* (with S. M. Al-Zahrani). 600000 SR (Completed).
- 2002-2004 Techno-Econo-Environmental Study on Utilization of Saudi Wheat Straw, *Sponsored by Prince Abd Allah Research Institute, Saudi Arabia* (with A. H. Fakeeha). 105000 SR (Completed).
- 2001-2002 Recycling of used lubricating oil *Sponsored by the Research Center, College of Engineering, King Saud University, Saudi Arabia* (with S. M. Al-Zahrani and N. O. Elbashir). 41000 SR (Completed).
- Utilization of Fluidized Beds for Coating Fertilizers, *Sponsored by the Research Center, College of Engineering, King Saud University, Saudi Arabia* (with K. M. Wagialla and S. M. Al-Zahrani). 40000 SR (Completed).
- 2000-2001 Analysis of Mutating Autocatalytic Reactions, *Sponsored by the Research Center, College of Engineering, King Saud University, Saudi Arabia* (with K. I. Alhumaizi). 20000 SR (Completed).
- 1996-2001 Oxidative Dehydrogenation of Lower Hydrocarbons, *sponsored by SABIC R&D, Saudi Arabia* (with S. M. Al-Zahrani and N. O. Elbashir, 1996-1999 extended to 2001). 2300000 SR (Completed).
- 1997-1999 Layer Inversion Behavior of Binary-Solid Liquid Fluidized Beds. *Sponsored by the Research Center, College of Engineering, King Saud University, Saudi Arabia* (with M. Asif). 20000 SR (Completed).
- 1997-1998 Development of a Controlled-Release Fertilizers Delivery System using Polymeric Membranes, *Sponsored by the Research Center, College of Engineering, King Saud University, Saudi Arabia* (with S. M. Al-Zahrani). 50000 SR (Completed).
- 1987-1989 Briquetting of Carbonized Cotton Stalks, Sudan Renewable Energy Project (SREP), *USAID sponsored project, ERC, Sudan* (with Y. Abd-Allah, A. Siddig, A. M. Hassan & A. Elamin).
- Small-Scale Carbonization, Special Energy Program (SEP), *GTZ (Germany) sponsored project, ERC, Sudan* (with A. Adam, A. Siddig & A. Abbas).

Ethanol Production and Applications in Sudan, *sponsored by RERI, ERC*, (with S. Abd-Elrahman).

Conservation of Wood in Bakeries, *GTZ (Germany) sponsored project*, National Energy Administration (NEA), Ministry of Energy (A. Azhari, T. Mustafa).

1987-1988 Conservation of Energy in Brick-Kilns Industry, *GTZ (Germany) sponsored project*, NEA, Ministry of Energy, Sudan, (with M. Rashad, O. Musad & E. Elsheikh).

1985-1987 Kinetic and Modeling Studies on Acid Hydrolysis of Hardwood Cellulose TVA Project No. TVA - TV - 69192A, *sponsored by Tennessee Valley Authority at Muscle Shoals, AL, U.S.A.* (with Y. Y. Lee).

OTHER PROFESSIONAL ACTIVITIES

2016-present	Member of the “3 rd strategic plan” team, College of Engineering, King Saud University
2010-present	Coordinator of the Academic Plans Unit, College of Engineering, King Saud University, Saudi Arabia
2015-present	Member of consulting committee of the Innovation Center, College of Engineering
2007-present	Coordinator of the Academic Committee, Chemical Engineering Department, King Saud University, Saudi Arabia
2005-present	Member of the ABET Accreditation Committee, Chemical Engineering Department, College of Engineering, King Saud University, Saudi Arabia.
2013-present	Member of the Academic Guidance Committee, Chemical Engineering Department, College of Engineering, King Saud University, Saudi Arabia.
2004-present	Member of the PhD Comprehensive Examination Committee, Chemical Engineering Department, College of Engineering, King Saud University, Saudi Arabia.
2002-2003	Member of the Faculty Promotion Committee, Chemical Engineering Department, King Saud University, Saudi Arabia
2000-2002.	Coordinator of the Department Performance Annual Report Committee, and member of the Faculty Promotion Committee, Chemical Engineering Department, King Saud University, Saudi Arabia.
1995-1999	Coordinator of the Department Performance Annual Report Committee, and member of the Academic Committee, Chemical Engineering Department, King Saud University, Saudi Arabia.
1994-1995	Coordinator of Summer Training, Graduating Students, and Department Performance Annual Report Committee, Chemical Engineering Department, King Saud University, Saudi Arabia.
1992-1994	Coordinator of the Seniors’ Project Committee and Member of the Equipment and Laboratory Committee, Chemical Engineering Department, King Saud University, Saudi Arabia.
1990-1992	Member of the Summer Training and Graduating Students Affairs Committee and Member of the Books and Periodicals Committee, Chemical Engineering Department, King Saud University, Saudi Arabia.
1987-1989	Member of the National Energy Planning Committee, Sudan.

Member of the National Energy Conservation Committee, Ministry of Energy, Sudan.

Member of the New and Renewable Energy Committee, Ministry of Energy, Sudan.

Co-supervisor and External Examiner to M.S. Students at University of Khartoum, Sudan.

OTHER QUALIFICATIONS AND ACHIEVEMENTS

1. Consultant to the Faculty of Engineering, Omdurman Islamic University, Sudan, "Curriculum Development of Engineering Program", 2012 to 2015.
2. Team Member of the "KSU Excellence in Petrochemical Initiative" that visited Sheffield and Cambridge Universities, UK, 2014.
3. Consultant to the general supervisor of KSU academic project (Mozahimia branch). 2013-2014.
4. KSU Team Member of the project "A Framework for Assessing Learning Outcomes in Engineering". A project funded by the National Center for Assessment in Higher Education (NCAHE), Ministry of Higher Education, Saudi Arabia, 2011-2012.
5. Consultant to the Faculty of Engineering, University of Khartoum, Sudan, "Development Program of the Faculty of Engineering", 2010 to 2011.
6. Founding Member and Contributor to the establishment of the Expatriates University, Khartoum, Sudan (2003 – present). The university has acquired approval from all relevant authorities in Sudan and received its first batch in 2010.
7. Served as the President of the Board of Directors of the company that owns the major shares in Expatriates University (2011-2014).
8. Member of the Board of Trustees of the Expatriates University 2011-2017.
9. Fellow of Global School for Advanced Sciences (GSAS), "catalysis, Doha, Qatar, 2013.
10. Invited Speaker by the Gulf Cooperation and Industrial Consultancies to deliver a paper "Future Trends in Industry: Technologies, Means and Investment", 10th Industrialists Conference, Kuwait, December 3-4 (2005).
11. Computer programming and use of laboratory analytical instruments and interpretation of data.
12. Published in many high-impact ISI scientific journals (Bioresource Technology; Water Research; Chemical Engineering Science, Industrial and Engineering Chemistry, Research; Applied Catalysis A: General; Journal of Molecular Catalysis; Catalysis Communications; Catalysis Today; Catalysis Letters; Journal of Hazardous Materials; Chinese Journal of Catalysis; Fractals; Chaos, Solitons and Fractals; Journal of Polymer Science; Fuel Processing Technology; Chemical Engineering & Technology; Chemical Engineering & Processing: Process Intensification; Journal of Industrial & Engineering Chemistry; Bioprocess Engineering; Biotechnology Letters; Journal of Membrane Science; International Journal of Hydrogen Energy).
13. Reviewed to many international journals that are highly recognized in their field of specialty.
14. Reviewed Research Proposals and Final Reports to various funding agencies.
15. Served as an assessor to faculty members seeking promotion to the ranks of Professors and Associate Professors for many local and international universities.
16. Listed in **Who's Who in World**, 18th edition (2000).
17. Listed in **Who's Who in Science and Engineering**, 8th Edition (2005-2006).

18. Listed in **Who's Who in Science and Engineering**, 9th Edition (2006-2007).
19. Organizer of, Contributor to and Evaluator to a number of workshops, short-courses, conferences and symposia held in Saudi Arabia.
20. Invited Participant to the Forum of Sudanese Specialists Working Abroad, 2003.

MEMBERSHIP OF PROFESSIONAL SOCIETIES

- 1- Ex-member of or invited member to American Institute of Chemical Engineers (**AIChE**), Saudi Computer Society (**SCS**), New York Academy of Science (**NYAS**), American Association for Advancement of Science (**AAAS**) American Chemical Society (**ACS**).
- 2- Member of the Steering Board of Directors for The **Arab Union of Scientists and Researchers**, AUSR, (www.ausr.org), (2005-present).
- 3- Honorary member of the **Arab Healthy Water Association**, AHWA, (2006-present).

CURRENT RESEARCH INTERESTS

- 1- Production of Fructose from Dates.
- 2- Dry reforming of methane
- 3- Oxidative Dehydrogenation of Lower Alkanes.
- 4- Modeling and Simulation of Chemical and Biochemical Engineering Processes.

PATENTS

1. M. A. Othman, W. M. Zahid and **A. E. Abasaheed**, "Adsorbent material, process for its preparation and use thereof", European Patent Office **EP2808079 B2** (December 14, 2016).
2. M. A. Othman, W. M. Zahid and **A. E. Abasaheed**, "Adsorbent material, process for its preparation and use thereof", USA Patents **US 9,393,547** (July 19, 2016).
3. I. M. El Nashef, M. H. Gaily, S. M. Al-Zahrani and **A. E. Abasaheed**, "Method for Separating Fructose and Glucose", USA Patents **US 7,942,972** (May 17, 2011).
4. S. M. Al-Zahrani, **A. E. Abasaheed**, N. O. Elbashir and M. Abdulwahed, "Catalysts for Production of Olefins by Oxidative Dehydrogenation and Methods of Making and Using the Same", USA Patents **US 7,256,319** (August 14, 2007).
5. S. M. Al-Zahrani, **A. E. Abasaheed**, N. O. Elbashir and M. Abdulwahed, "Catalysts Systems for the Oxidative Dehydrogenation of Hydrocarbons", USA Patents **US 6,541,418** (April 1, 2003).
6. S. M. Al-Zahrani, **A. E. Abasaheed**, N. O. Elbashir and M. Abdulwahed, "New Catalyst Composition for Oxidative Dehydrogenation of Hydrocarbons, e.g., Propane, to Produce Olefins, e.g., Propylene, n-Butene and/or Isobutene", European Patent Office **EP1166869** (January 2, 2002), **EP1516666-A1** (March 23, 2005), **EP1516666-B1** (March 7, 2007), **DE60127192-E** (April 19, 2007), **DE60127192-T2** (November 22, 2007).
7. S. M. Al-Zahrani, **A. E. Abasaheed**, N. O. Elbashir and M. Abdulwahed, "Oxidative

Dehydrogenation Catalyst, for Producing Olefins, Comprises Bismuth, Nickel and alumina”, European Patent Office **EP1103302 A1** (May 30, 2001), **EP1103302-B1** (April 11, 2007), **DE60034295-E** (May 24, 2007), **ES2283260-T3** (November 1, 2007), **DE60034295-T2** (January 3, 2008).

8. S. M. Al-Zahrani, **A. E. Abasaheed**, M. Abdulwahed and N. O. Elbashir “Method of Producing Olefins by Oxidative Dehydrogenation”, **GC0000364** (March 31, 2007).

BOOKS

1. W. A. Al-Masry and **A. E. Abasaheed** "Introductory Bioprocess Engineering" (in Arabic مقدمة في هندسة العمليات الحيوية) (King Saud University Press, September 2004).
2. **A. E. Abasaheed** and S. M. Al-Zahrani "Fundamentals of Catalytic Reaction Engineering" (in Arabic أساسيات هندسة التفاعلات المحفزة) (August 2004).
3. F. S. Al-Harthi, I. S. Almutaz and **A. E. Abasaheed**, “Modeling and Simulation of RD unit for Production of MTBE”, Lambert Academic Publishing, UK (August 2011).

PUBLICATIONS

- W. M. Zahid, M. A. Othman, **A. E. Abasaheed**, “Enhanced sulfur removal by a tuned composite structure of Cu, Zn, Fe, and Al elements”, *Journal of Hazardous Materials*, **331**, 273-279 (2017).
- M. D. Putra, A. Darmawan, I. Wahdini, **A. E. Abasaheed**, “Extraction of chlorophyll from pandan leaves using ethanol and mass transfer study”, *Journal of the Serbian Chemical Society*, **82**, 921-931 (2017).
- W. D. P. Rengga, A. Chafidz, M. Sudibandriyo, M. Nasikin, **A. E. Abasaheed**, “Silver Nano-particles Deposited on Bamboo-based Activated Carbon for Removal of Formaldehyde”, *Journal of Environmental Chemical Engineering*, **5**, 1657-1665 (2017).
- M. D. Putra, A. K. Sulieman **A. E. Abasaheed**, M. H. Gaily, S. M. Al-Zahrani, M. A. Zeinelabdeen, H. K. Atiyeh, “A green process for simultaneous production of fructose and ethanol via selective fermentation”, *Journal of Cleaner Production*, **162**, 420-426 (2017).
- A. H. Fakeeha, W. U. Khan, A. S. Al-Fatesh, A. A. Ibrahim, **A. E. Abasaheed** "Production of Hydrogen from Methane over Lanthanum Supported Bimetallic Catalysts" *International Journal of Hydrogen Energy*, **41(19)**, 8193-8198 (2016)
- A. H. Fakeeha, A. S. Al- Fatesh, W. U. Khan, A. A. Ibrahim, R. L. Al-Otaibi, **A. E. Abasaheed**, "Suitability of Titina Oxide and Magnesia Oxide as Support for Methane Decomposition Catalyst using Iron as Active Materials" *Journal of Chemical Engineering of Japan*, **49(6)**, 552-562 (2016).

- A. H. Fakeeha, A. A. Ibrahim, W. U. Khan, **A. E. Abasaheed**, A. S. Al-Fatesh "Hydrogen Production by Catalytic Methane Decomposition over Ni, Co, and Ni-Co/Al₂O₃ Catalyst", *Petroleum Science & Technology*, **34(19)**, 1617-1623 (2016).
- W. U. Khan, A. H. Fakeeha, A. S. Al-Fatesh, A. A. Ibrahim, **A. E. Abasaheed**, "La₂O₃ supported bimetallic catalysts for the production of hydrogen and carbon nanomaterials from methane", *International Journal of Hydrogen Energy*, **41(2)**, 976-983 (2016).
- A. H. Fakeeha, M. A. Naeem, **A. E. Abasaheed**, W. U. Khan, A. S. Al-Fatesh, "Coke Suppression by Holmium Promoter in Dry Reforming of Methane", *Journal of the Chemical Society of Pakistan*, **38(3)**, 388-397 (2016).
- A. H. Fakeeha, A. A. Ibrahim, M. A. Naeem, W. U. Khan, **A. E. Abasaheed**, R. L. Alotaibi, A. S. Al-Fatesh, "Methane decomposition over Fe supported catalysts for hydrogen and nano carbon yield", *Catal. Sustain. Energy*, **2**, 71-82 (2015).
- A. E. Abasaheed**, A. S. Al-Fatesh, M. A. Naeem, A. A. Ibrahim and A. H. Fakeeha, "Catalytic performance of CeO₂ and ZrO₂ supported Co catalysts for hydrogen production via dry reforming of methane", *International Journal of Hydrogen Energy*, **40(21)**, 6818-6826 (2015).
- A. A. Ibrahim, M. A. Naeem, A. H. Fakeeha, W. U. Khan, A. S. Al-Fatesh and **A. E. Abasaheed**, "Production of synthesis gas via dry reforming of methane over Co-based catalysts: Effect on H₂/CO ratio and carbon deposition", *Chem. Eng. & Technol.*, **38(8)**, 1397-1405 (2015).
- M. D. Putra, A. E. Abasaheed, S. M. Al-Zahrani, H. K. Atiyeh, M. H. Gaily, A. K. Sulieman and M. A. Zeinelabdeen, "Kinetic Modeling and Enhanced Production of Fructose and Ethanol in Reformulated Inoculum Media", *J. Chem. Eng. Commun.*, **202(12)**, 1618-1627 (2015).
- A. S. Al-Fatesh, M. A. Naeem, A. H. Fakeeha and **A. E. Abasaheed**, "The effect of Sc promoter on the performance of Co/TiO₂-P25 catalyst in dry reforming of methane", *Bull. Korean Chem. Soc.* **36(8)**, 2081-2088 (2015).
- A. S. Al-Fatesh, M. A. Naeem, A. H. Fakeeha, W. U. Khan, A. A. Ibrahim, **A. E. Abasaheed**, "Effect of support Cox free hydrogen and carbon nanofibers production from methane over Fe Catalysts. 12th European Congress on Catalysis-EuropaCat-X1, Kazan, Russia, 30 August–4 September, (2015).
- A. A. Ibrahim, A. S. Al-Fatesh, W. U. Khan, A. H. Fakeeha and **A. E. Abasaheed**, "Catalytic Methane Decomposition using Iron-Lanthanum Catalysts: Effect of Fe Loading on activity Performance" 12th European Congress on Catalysis-EuropaCat-X1, Kazan, Russia, 30 August–4 September, (2015).
- A. H. Fakeeha, W. U. Khan, A. A. Ibrahim, R. Al-Otaibi, A. S. Al-Fatesh, M. A. Soliman and A. E. Abasaheed, "Alumina Supported Iron Catalyst for Hydrogen Production:

- Calcination Study”, *Int’l Journal of Advances in Chemical Engg., & Biological Sciences*, **2**, 139-141 (2015)
- A. H. Fakeeha, W. U. Khan, A. S. Al-Fatesh, **A. E. Abasaheed** and M. A. Naeem, “Production of hydrogen and carbon nanofibers from methane over Ni–Co–Al catalysts”, *International Journal of Hydrogen Energy*, **40**, 1774-1781 (2015)
- M. D. Putra and **A. E. Abasaheed**, “Prospective Production of Fructose and Ethanol for Food and Fuel Market by Selective Fermentation of Date Syrups”, *Applied Engineering in Agriculture*, **31**(3), 497-504 (2015).
- A. Fakeeha, W. Khan, A. Al-Fatesh, A. Ibrahim and **A. Abasaheed**, “Hydrogen Production from Methane over Lanthanum Supported Bimetallic Catalysts”, 6th International Conference on Hydrogen Production, UOIT, Oshawa, Ontario, Canada, May 3-6 (2015).
- A. H. Fakeeha, W. U. Khan, A. A. Ibrahim, R. L. Al-Otaibi, A. S. Al-Fatesh, M. A. Soliman, and **A. E. Abasaheed**, “Alumina Supported Iron Catalyst for Hydrogen Production : Calcination Study *Int’l Journal of Advances in Chemical Engg., & Biological Sciences*, **2**, 139-141 (2015).
- A. A. Ibrahim, A. H. Fakeeha, A. S. Al-Fatesh, **A. E. Abasaheed** and W. U. Khan, “Methane decomposition over iron catalyst for hydrogen production”, *International Journal of Hydrogen Energy*, **40**(24), 7593-7600 (2015).
- M. D. Putra, **A. E. Abasaheed**, E. M. Ali, A. K. Sulieman, M. H. Gaily and, M. A. Zeinelabdeen, “Utilization of Pitted Dates for the Production of Highly Concentrated Fructose Syrups by *S. cerevisiae*”, *Chem. Eng. Trans.*, **38**, 397-402 (2014).
- M. A. Zeinelabdeen, **A. E. Abasaheed**, M. H. Gaily, A. K. Sulieman, and M. D. Putra, “Effect of Temperature on the Production of Fructose and Bioethanol from Date Syrup using *Saccharomyces cerevisiae* ATCC 36859”, 8th International Science Conference, Amsterdam, The Netherlands, August 7-8, 2014, *International Science Index*, **8**, 380-384 (2014).
- M. A. Naeem, A. S. Al-Fatesh, **A. E. Abasaheed** and A. H. Fakeeha, “Hydrogen production from methane dry reforming over nickel-based nanocatalysts using surfactant-assisted or polyol method”, *International Journal of Hydrogen Energy*, **39**, 17009-17023 (2014).
- W. U. Khan, A. H. Fakeeha, M. A. Naeem, A. S. Al-Fatish, A. I. Aidid and **A. E. Abasaheed**, “Catalytic decomposition of methane over La₂O₃ supported mono- and bimetallic catalysts”, *Applied Mechanics and Materials*, **625**, 275–279 (2014).
- A. A. Ibrahim, A. H. Fakeeha, **A. E. Abaseed**, M. A. Naeem, A. S. Al-Fatesh , “Study of synthesis gas production via CO₂ reforming of CH₄ over supported cobalt catalysts” 8th International Conference on Environmental Catalysis, Asheville, North Carolina, United States of America, 24 - 27 August 2014.

- A. H. Fakeeha, M. A. Naeem, W. U. Khan, **A. E. Abasaheed** and A. S. Al-Fatesh, "Reforming of methane by CO₂ over bimetallic Ni-Mn/ γ -Al₂O₃ catalyst", *Chinese Journal of Chemical Physics*, **27**(2), 214–220 (2014).
- M. D. Putra, **A. E. Abasaheed**, S. M. Al-Zahrani, M. H. Gaily, A. K. Sulieman, M. A. Zeinelabdeen and H. K. Atiyeh, "Production of Fructose from Highly Concentrated Date Extracts using *Saccharomyces cerevisiae* ATCC 36858", *Biotechnol. Lett.* **36**, 531-536 (2014).
- M. A. Naeem, A. S. Al-Fatesh, **A. E. Abasaheed**, A. H. Fakeeha, "Activities of Ni-Based Nano Catalysts for CO₂–CH₄ Reforming Prepared By Polyol Process", *Fuel Processing Technology*, **122**, 141-152 (2014).
- A. E. Abasaheed**, A. S. Al-Fatesh, M. A. Naeem, A. A. Ibrahim, A. H. Fakeeha, "Production of Hydrogen Via Dry Reforming of Methane over Co-Containing Catalysts", 20th World Hydrogen Energy Conference 2014, WHEC2014, Gwangju, Korea, June 15-20 (2014).
- M. D. Putra, **A. E. Abasaheed**, M. A. Zeinelabdeen, M. H. Gaily and A. K. Sulieman, "Selective Fermentation of Pitted Dates by *S. cerevisiae* for the Production of Concentrated Fructose Syrups and Ethanol", *Journal of Physics: Conference Series*, **495**, 1-7 (2014).
- A. A. Ibrahim, A. H. Fakeeha, A. S. Al-Fatesh and **A. E. Abasaheed**, "Methane Decomposition over Iron Catalyst for Hydrogen Production", International Conference on Clean Energy 2014 (ICCE 2014), Istanbul, Turkey, June 8- 12 (2014).
- A. H. Fakeeha, M. A. Naeem, **A. E. Abasaheed**, W. U. Khan, A. S. Al-Fatesh, "Highly Coke-Resistant Novel Ni-Ho/ZrO₂ Catalyst for Dry Reforming of Methane", International Conference on Clean Energy 2014 (ICCE 2014), Istanbul, Turkey, June 8- 12 (2014).
- A. H. Fakeeha, W. U. Khan, A. S. Al-Fatesh and **A. E. Abasaheed**, "Production of Hydrogen from Methane over Alumina Supported Ni-Co Catalysts", 20th World Hydrogen Energy Conference 2014, WHEC2014, Gwangju, Korea, June 15- 20 (2014).
- W. U. Khan, , A. H. Fakeeha, A. S. Al-Fatesh M. A. Naeem, A. I. Ibrahim and **A. E. Abasaheed**, "Catalytic Decomposition of Methane Over La₂O₃ Supported Mono- and Bimetallic Catalysts", International Conference on Process Engineering and Advanced Material (ICPEAM2014), , Kuala Lumpur, Malaysia, 3-5 June (2014).
- A. S. Al-Fatesh, M. A. Naeem, W. U. Khan, **A. E. Abasaheed** and A. H. Fakeeha, "Effect of Nano-support and Type of Active Metal on Reforming of CH₄ with CO₂", *J. Chin. Chem. Soc.*, **61**, 461-470 (2014)
- A. S. Al-Fatesh, M. A. Naeem, A. H. Fakeeha, and **A. E. Abasaheed**, "Role of La₂O₃ as Promoter and Support in Ni/ γ -Al₂O₃ Catalysts for Dry Reforming of Methane", *Chinese Journal of Chemical Engineering*, **22**(1) 28—37 (2014).

- M. D. Putra, **A. E. Abasaheed**, E. M. Ali, A. K. Sulieman, M. H. Gaily and, M. A. Zeinelabdeen, "Utilization of Pitted Dates for the Production of Highly Concentrated Fructose Syrups by *S. cerevisiae*", International Conference on Industrial Biotechnology (IBIC 2014), Rome, Italy, June 8-11 (2014).
- M. D. Putra, **A. E. Abasaheed**, M. A. Zeinelabdeen, M. H. Gaily and A. K. Sulieman, "Selective Fermentation of Pitted Dates by *S. cerevisiae* for the Production of Concentrated Fructose Syrups and Ethanol", The 2nd International Conference on Science & Engineering in Mathematics, Chemistry and Physics 2014 (ScieTech 2014), Jakarta, Indonesia, January 13-14 (2014).
- M. A. Zeinelabdeen, **A. E. Abasaheed**, M. H. Gaily, A. K. Sulieman and M. D. Putra, "Coproduct of Fructose and Ethanol from Dates by *S. cerevisiae* ATCC 36859", *World Academy of Science, Engineering and Technology*, **82**, 1473-1476 (2013).
- M. A. Naeem, A. S. Al-Fatesh, W. U. Khan, **A. E. Abasaheed**, and A. H. Fakeeha, "Syngas Production from Dry Reforming of Methane over Nano Ni Polyol Catalysts", *International Journal of Chemical Engineering and Applications*, **4**, 315-320 (2013).
- M. A. Othman, W. M. Zahid and **A. E. Abasaheed**, "Selectivity of Layered Double Hydroxides and Their Derivative Mixed Metal Oxides as Sorbents of Hydrogen Sulfide", *J. Haz. Mat.*, **254-255**, 221-227 (2013).
- M. A. Zeinelabdeen, **A. E. Abasaheed**, M. H. Gaily, A. K. Sulieman and M. D. Putra, "Coproduct of Fructose and Ethanol from Dates by *S. cerevisiae* ATCC 36859", International Conference on Agricultural, Biotechnology, Biological and Biosystems Engineering (ICABBBE 2013), Bali, Indonesia, October 30-31 (2013).
- A. K. Sulieman, M. H. Gaily, M. A. Zeinelabdeen, M. D. Putra, and **A. E. Abasaheed**, "Production of Bioethanol Fuel from Low-grade-Date Extract", *International Journal of Chemical Engineering and Applications*, **4**, 140-143 (2013).
- M. A. Naeem, A. S. Al-Fatesh, W. U. Khan, **A. E. Abasaheed**, and A. H. Fakeeha, "Syngas production from dry Reforming of methane over nano Ni polyol catalysts", 4th International Conference on Chemical Engineering and Applications, Paris, France, October 12-13 (2013).
- A. S. Al-Fatesh, M. A. Naeem, A. H. Fakeeha, and **A. E. Abasaheed**, "CO₂ reforming of methane to produce syngas over γ -Al₂O₃ supported Ni-Sr catalysts", *Bull. Chem. Soc. Jpn.*, **86** (6), 742-746 (2013).
- W. U. Khan, M. A. Naeem, A. H. Fakeeha, A. S. Al-Fatesh and **A. E. Abasaheed**, "Ni-Co Bimetallic catalyst for catalytic decomposition of methane", Middle East Process Engineering Conference and Exhibition, Bahrain, September 29-October 02 (2013).
- A. E. Abasaheed**, "Solid-catalyzed Gas Reactions: Oxidative Dehydrogenation of Alkanes and Dry Reforming of Methane", *Global School for Advanced Studies, GSAS*, Doha, Qatar January 6-8 (2013).

- M. D. Putra, S. M. Al-Zahrani and **A. E. Abasaheed**, "Effect of Sr Loading on Oxidehydrogenation of Propane to Propylene over Al₂O₃-Supported V-Mo Catalysts", *J. Energy Chemistry*, **22**, 778-782 (2013).
- M. H. Gaily, A. K. Sulieman, and **A. E. Abasaheed**, "Kinetics of a Three-Step Isomerization of Glucose to Fructose Using Immobilized Enzyme", *International Journal of Chemical Engineering and Applications*, **4**(1), 31-34 (2013).
- A. H. Fakeeha, W. U. Khan, A. S. AL-Fatesh and **A. E. Abasaheed**, "Stability of zeolite-supported Ni catalysts for dry reforming of methane", *Chinese J. Catal.* **34**, 764-768 (2013).
- M. D. Putra, M. K. Al-Mesfer, **A. E. Abasaheed** and S. M. Al-Zahrani, "Oxydehydrogenation of Propane over Supported Nickel-Molybdenum-Oxide Based Catalysts", *J. Chem. Eng. of Japan*, **46**(6) 389-395 (2013).
- A. K. Sulieman, M. H. Gaily, M. A. Zeinelabdeen, M. D. Putra, and **A. E. Abasaheed**, "Production of Bioethanol Fuel from Low-grade-Date Extract", 2nd International Conference on Chemical and Process Engineering (ICCPE 2013), Kuala Lumpur, Malaysia, June 8-9 (2013).
- A. H. Fakeeha, A. S. Al-Fatesh and **A. E. Abasaheed**, "Modification of alumina support with TiO₂-P25 in CO₂ reforming of CH₄", *J. Ind. Eng. Chem.***18**(1), 212-217 (2012).
- A.H. Fakeeha, A.S. Al-Fatesh, and **A.E. Abasaheed**, "Ni/Y-Zeolite Catalysts for Carbon Dioxide Reforming of Methane", *Advanced Materials Research*, **550-553**, 325-329 (2012).
- M. D. Putra, S. M. Al-Zahrani and **A. E. Abasaheed**, "Kinetics Study of Oxidehydrogenation of Propane over Alumina-Supported Sr-V-Mo Catalysts", *Catalysis Communications*, **26**, 98-102 (2012).
- Ahmed S. Al-Fatesh, Anis H. Fakeeha and **Ahmed E. Abasaheed**, "Effect of Mn Promoter on Ni-Based Catalysts Supported on γ -Al₂O₃", The 6th Jordan International Chemical Engineering Conference (JChEC 06), Amman-Jordan, March 12-14, (2012).
- Ahmed S. Al-Fatesh, Anis H. Fakeeha and **Ahmed E. Abasaheed**, "Synthesis gas production by dry reforming of methane on a La promoted Ni/Al₂O₃ catalyst", 7th International Conference on Environmental Catalysis, Lyon, France, 2-6 September (2012).
- A. H. Fakeeha, A. S. Al-Fatesh, A. A. Ibrahim and **A. E. Abasaheed**, "Effect of Calcium promoter on Ni-based catalysts supported on α -Al₂O₃ and TiO₂-P25", *Applied Mechanics & Materials*, **204-208**, 3909-3913 (2012).
- M. H. Gaily, A. K. Sulieman, M. A. Zeinelabdeen, S. M. Al-Zahrani S M, H. K. Atiyeh and **A. E. Abasaheed**, "The Effects of Activation Time on the Production of Fructose and Bioethanol from Date's Extract", *African Journal of Biotechnology*, **11**, 8212-8216 (2012).

- A. S. Al-Fatesh, A. H. Fakeeha and **A. E. Abasaheed**, " Effect of Pd on CH₄ reforming with CO₂ catalyzed by Ni over mixed Titian –Alumina support", *Adv. Mater. Res*, **476-478**, 513-518 (2012).
- M. D. Putra, S. M. Al-Zahrani and **A. E. Abasaheed**, "Oxidehydrogenation of Propane to Propylene over Sr-V-Mo Catalysts: Effects of Reaction Temperature and Space Time", *J. Ind. Eng. Chem.* **18**, 1153-1156 (2012)
- A. S. Al-Fatesh, A. H. Fakeeha and **A. E. Abasaheed**, " Effects of promoters on methane dry reforming over Ni catalyst on a mixed (α -Al₂O₃+TiO₂-P25) support", *Int. J. Phys. Chem.***6**, 8083-8092 (2012).
- A.H. Fakeeha, A.S. Al-Fatesh, and **A.E. Abasaheed**, "Ni/Y- Zeolite Catalysts for Carbon Dioxide Reforming of Methane", 2012 International Conference on Chemical Engineering and Advanced Materials, Guangzhou, China, July 13-15, (2012).
- A. H. Fakeeha, A. A. Ibrahim, A. S. A. Al Fatesh and **A. E. Abasaheed**, "CO₂ reforming of CH₄ for Mitigation of greenhouse gases", *Res. J. Chem. Environ.*,**15**, 836-841 (2011).
- A. H. Fakeeha, A. S. Al-Fatesh, A. A. Ibrahim and **A. E. Abasaheed**, "Effect of Calcium promoter on Ni-based catalysts supported on α -Al₂O₃ and TiO₂-P25", ICCMME 2011: Advances in Chemical Engineering, Beihai, China, 23-25 December (2011).
- A. S. Al-Fatesh, A. H. Fakeeha and **A. E. Abasaheed** " Effect of Pd on CH₄ reforming with CO₂ catalyzed by Ni over mixed Titian –Alumina support", ICCMME 2011: Advances in Chemical Engineering, Beihai, China, 23-25 December (2011).
- M. D. Putra, S. M. Al-Zahrani and **A. E. Abasaheed**, "Oxidative Dehydrogenation of Propane to Propylene Over Al₂O₃-Supported Sr-V-Mo Catalysts", *Catal. Commun.* **14**, 107-110 (2011).
- A. S. Al-Fatesh, A. H. Fakeeha and **A. E. Abasaheed** "Effects of Selected Promoters on Catalyst Performance in Methane Dry Reforming", *Chinese J. Catal.* **32**, 1604-1609 (2011).
- A. H. Fakeeha, A. A. Ibrahim, A. S. A. Al Fatesh A.S.A. and **A. E. Abasaheed**, "CO₂ reforming of CH₄ for Mitigation of greenhouse gases", 5th International Congress of Chemistry and Environment (*ICCE-2011*), Malaysia (2011).
- A. S. Al-Fatesh, A. A. Ibrahim, A. H. Fakeeha and **A. E. Abasaheed**, " Activity and Carbon Formation of a Low Ni-Loading Alumina-Supported Catalyst", *J. Chem. Eng. of Japan*,**44(5)**, 328-335 (2011).
- A. S. Al-Fatesh, A. A. Ibrahim, A. H. Fakeeha, **A. E. Abasaheed**, and M. R. Siddiqui "Oxidative CO₂ Reforming of CH₄ over Ni/ α -Al₂O₃ Catalyst", *J. Ind. Eng. Chem.***17(3)**, 479-483 (2011).

- M. H. Gaily, B. M. Elhassan, **A. E. Abasaheed** and S. M. Al-Zahrani, "A Direct Process for the Production of Fructose from Dates Extract", *Inter. J. Food Engng.* **6(3)**, Article 3 (2010).
- M. H. Gaily, B. M. Elhassan, **A. E. Abasaheed** and M. Al-Shrhan, "Isomerization and Kinetics of Glucose into Fructose", *IJET-IJENS*, **3**, 1-5 (2010).
- A. S. Al-Fatesh, A. A. Ibrahim, A. H. Fakeeha, M. A. Soliman, M. R. Siddiqui and **A. E. Abasaheed**, "Coke Formation during CO₂ Reforming of CH₄ over Alumina Supported Nickel Catalysts", *Appl. Cata. A:General*, **364**, 150-155 (2009).
- A. S. Al-Mozini, I. S. Al-Mutaz and **A. E. Abasaheed**, "Modeling of Riyadh Sewage Treatment Plant: 1- Model Development & Verification", *International Journal of Engineering*, **22**, 211-220 (2009).
- F. S. Al-Harthi, I. S. Al-Mutaz and **A. E. Abasaheed**, "Production of MTBE using Reactive Distillation Technology", *3rd International Conference on Modeling, Simulation and Applied Optimization, ICMSAO'09*, American University of Sharjah, UAE, January 20-22, (2009).
- M. K. Al-Mesfer, S. M. Al-Zahrani and **A. E. Abasaheed**, "Oxidehydrogenation of Propane over Ni-Mo Supported Metal Oxides Catalysts", *7th Saudi Engineering Conference*, Riyadh, November (2007).
- A. S. Al-Mozini, I. S. Al-Mutaz and **A. E. Abasaheed**, "A Steady State Mathematical Model for Riyadh Sewage Treatment Plant", *7th Saudi Engineering Conference*, Riyadh, November (2007).
- Y. A. Abakr and **A. E. Abasaheed**, "Experimental Evaluation of a Conical-Screw Briquetting Machine for the Briquetting of Carbonized Cotton Stalks in Sudan", *J. Eng. Sci & Technol.*, **1(2)**, 212-220 (2006).
- B. Y. Jibril, M. C. Al-Kinany, S. H. Al-Khowaiter, S. A. Al-Drees, H. A. Al-Megren, M. A. Al-Dosari, R. H. Al-Rasheed, S. M. Al-Zahrani and **A. E. Abasaheed**, "Performances of new Kieselguhr-supported transition metal oxide catalysts in propane oxydehydrogenation", *Catalysis Communications*, **7**, 79-85 (2006).
- Y. A. Abakr and **A. E. Abasaheed**, "Experimental Evaluation of a Novel Briquetting Machine for the Briquetting of Carbonized Cotton Stalks in Sudan", *Proceedings of 2nd International Green Energy Conference*, Ontario, Canada, June 25-29 (2006).
- A. E. Abasaheed**, "Future Trends in Industry: Technologies, Means and Investment", *10th Industrialists Conference*, Kuwait, December 3-4 (2005).
- S. M. Alzahrani, N. O. Elbashir, **A. E. Abasaheed**, and M. Abdulwahed, "Oxidehydrogenation of Isobutane over Supported Transition Metals", *Conference of Chemical Reactor Engineering X: Innovations in Chemical Reactor Engineering*, Mexico, August 28 – September 2 (2005).

- S. M. Al-Zahrani, B. Y. Jibril and **A. E. Abasaheed**, "Propane Oxydehydrogenation to Propylene Over Molybdenum-Based Catalysts", *Conference of Chemical Reactor Engineering X: Innovations in Chemical Reactor Engineering*, Mexico, August 28 – September 2 (2005).
- B. Y. Jibril , N. O. Elbashir, S. M. Al-Zahrani and **A. E. Abasaheed**, " Oxidative Dehydrogenation of Isobutane on Chromium Oxide-Based Catalysts" *Chem. Eng. & Proc.* **44**, 835-840 (2005).
- S. M. Alzahrani, N. O. Elbashir, **A. E. Abasaheed**, and M. Abdulwahed "Oxidative Dehydrogenation of Isobutane over Transition and Rare Earth Metal Oxides Supported on Al₂O₃", *J. Mol. Catal. A: Chemical*, **218**, 179-186 (2004).
- B. Y. Jibril , S. M. Al-Zahrani, **A. E. Abasaheed** and R. Hughes," Propane Oxidative Dehydrogenation on Cs-doped Cr-Mo-Al-O Catalyst: Kinetics and Mechanism" *Chem. Eng. Journal*, **103**, 59-67(2004).
- S. M. Alzahrani, N. O. Elbashir, **A. E. Abasaheed**, and M. Abdulwahed "Performance of Supported Transition and Rare-Earth Metal-Oxides in Oxidative Dehydrogenation of Isobutane " *The 2nd Workshop on Catalysis Applications in the GCC Countries*, New trends in the Chemistry of Catalysts: Sharjah, UAE, December 13-15 (2004)
- B. Y. Jibril , S. M. Al-Zahrani, **A. E. Abasaheed**., "The Role of Molybdenum on the Performance of Cr-Mo-Al-O catalysts in Oxidative dehydrogenation of Propane" *The 2nd Workshop on Catalysis Applications in the GCC Countries*, New trends in the Chemistry of Catalysts: Sharjah, UAE, December 13-15 (2004)
- S. M. Alzahrani, N. O. Elbashir, **A. E. Abasaheed**, and M. Abdulwahed "Isobutane Oxydehydrogenation on Supported Tungstate Catalysts" *The 2nd Workshop on Catalysis Applications in the GCC Countries*, New trends in the Chemistry of Catalysts: Sharjah, UAE, December 13-15 (2004)
- B. Y. Jibril , S. M. Al-Zahrani, **A. E. Abasaheed**., "Oxydehydrogenation of Propane on Supported Tungstate Catalysts" Accepted for presentation in the 16th International Congress of Chemical and Process Engineering (CHISA 2004) , Praha, Czech Republic, 22-26 August (2004).
- M. C. Al-Kinany, S. Al-Drees, S. M. Al-Zahrani, **A. E. Abasaheed** and B. Y. Jibril, "Performances of Transition Metals-MCM-41 Catalysts in Propane Oxydehydrogenation", Accepted for presentation in the 13th International congress on catalysis, Paris, 11-16 July (2004).
- S. M. Al-Zahrani, N. O. Elbashir, **A. E. Abasaheed** and M. Abdulwahed, Oxydehydrogenation on Supported Tungstate Catalysts, Accepted to be presented at SABIC technical exchange meeting (STM6), Saudi Arabia (2004).
- B. Y. Jibril , S. M. Alzahrani, **A. E. Abasaheed**, and R. Hughes, "Effects of Reducibility on Propane Oxidative Dehydrogenation over γ - Al₂O₃ Supported Chromium oxide-

- based Catalysts”, *Catal. Lett.*, **87**, 121-132 (2003).
- S. M. Alzahrani, B. Y. Jibril and **A. E. Abasaheed**, “Selection of Optimum Chromium Oxide-Based Catalysts for Propane Oxidehydrogenation”, *Catal. Today*, **81**, 507-516 (2003).
- B. Y. Jibril , S. M. Alzahrani, **A. E. Abasaheed**, and R. Hughes, “Oxidative Dehydrogenation of Propane over Supported Chromium-Molybdenum oxides Catalysts”, *Catal. Commun.*, **4**, 579-584 (2003).
- N. O. Elbashir, S. M. Alzahrani, **A. E. Abasaheed**, and M. Abdulwahed “Alumina-Supported Chromium-Based Mixed Oxides Catalysts in Oxidative Dehydrogenation of Isobutane to Isobutene”, *Chem. Eng. & Processing*, **42**, 817-823 (2003).
- B. Y. Jibril, S. M. Al-Zahrani, **A. E. Abasaheed**, M. C. Al-Kinany and S. Al-Drees, “Oxidative Properties of Transition Metals MCM-41 Catalysts in Propane Oxydehydrogenation”, *PETROTECH 2003*, The Fourth Middle East Refining and Petrochemicals Exhibition and Conference, Bahrain, September 29 – October 1 (2003).
- S. M. Alzahrani, B. Y. Jibril and **A. E. Abasaheed**, “Activities of γ - Al_2O_3 Supported Metal Oxides Catalysts in Propane Oxidative Dehydrogenation”, *Cat. Lett.* **85**, 57-67 (2003).
- B. Y. Jibril , S. M. Alzahrani, **A. E. Abasaheed**, and R. Hughes, “Performance of Chromium-Molybdenum based Catalysts in Oxidative Dehydrogenation of Propane”, *13th Annual Saudi-Japanese Symposium on Catalysts in Petroleum Refining & Petrochemicals*, Saudi Arabia, December 14-15 (2003).
- B. Y. Jibril , S. M. Alzahrani, **A. E. Abasaheed**, and R. Hughes, “Oxidative Dehydrogenation of Propane over Molybdenum-based Catalysts”, *17th International Symposium on Chemical Reaction Engineering (ISCRE17)*, Hong Kong, China, August, 25-28 (2002).
- N. O. Elbashir, S. M. Al-Zahrani, **A. E. Abasaheed** and M. Abulwahid "Oxidative Dehydrogenation of Isobutane Over Transition and Rare-Earth Metal-Oxides Supported on Al_2O_3 ." *AIChE 2002-Annual Meeting, Indianapolis, Indiana, USA*, November (2002).
- B. Y. Jibril, S. M. Al-Zahrani and **A. E. Abasaheed**, “Promise of Propane Oxidative Dehydrogenation as an Alternative to Dehydrogenation”, *5th International Conference and Exhibition on Chemistry in Industry*, Bahrain, October 14-16 (2002).
- N. O. Elbashir, S. M. Alzahrani, M. I. Abdul Mutalib and **A. E. Abasaheed**, “A Method of Predicting Effective Solvent Extraction Parameters for Recycling of Used Lubricant Oils”, *Chem. Eng. & Processing*, **41**, 765-769 (2002).
- S. M. Alzahrani, B. Y. Jibril and **A. E. Abasaheed**, “Keggin-Type Heteropolyoxotungstate as a

- Catalyst in Propane Oxidative Dehydrogenation”, *J. Mol. Catal. A: Chemical* **175**, 259-265 (2001).
- B. Y. Jibril, S. M. Alzahrani and **A. E. Abasaheed**, “Propane Oxidative Dehydrogenation over Metal Pyrophosphate Catalysts”, *Catal. Lett.*, **74**, 145-148 (2001).
- S. M. Alzahrani, N. O. Elbashir, **A. E. Abasaheed**, and M. Abdulwahed “Catalytic Performance of Chromium Oxide Catalysts Supported on Al_2O_3 in Oxidative Dehydrogenation of Isobutane to Isobutene ”, *Ind. Eng. Chem. Res.*, **40**, 781-784 (2001).
- B. Y. Jibril , S. M. Alzahrani and **A. E. Abasaheed**, “Propane Oxidative Dehydrogenation on Supported Keggin-Type Polyoxo-Tungstate Catalyst”, *11th Annual Symposium on Catalysts in Petroleum Refining & Petrochemicals*, Saudi Arabia, October 13-14, (2001).
- S. M. Al-Zahrani, N. O. Elbashir, **A. E. Abasaheed**, M. Abdulwahid and B.Y. Jibril, “Oxidative Dehydrogenation of Isobutane to Isobutene on $\text{Cr}_2\text{O}_3/\text{Al}_2\text{O}_3$ Catalyst: Effects of Supports and Precursors”, *17th North American Catalysis Society Meeting*, Toronto, Ontario, Canada. June 3-8, (2001).
- S. M. Al-Zahrani, B.Y. Jibril, **A. E. Abasaheed**, “Oxidative Dehydrogenation of Propane over a V-Sb-O/ Al_2O_3 Catalyst”, *17th North American Catalysis Society Meeting*, Toronto, Ontario, Canada. June 3-8, (2001).
- B. Y. Jibril , S. M. Alzahrani, **A. E. Abasaheed**, and R. Hughes, “Oxidative Dehydrogenation of Propane over Supported Cs/CrMo Catalysts”, *4th World Congress on Oxidation Catalysis*, Berlin, Germany, September 16-21 (2001).
- N. O. Elbashir, S. M. Alzahrani, M. I. Abdul Mutalib and **A. E. Abasaheed**, “Evaluation of Solvent Extraction System for Recycling of Used Motor Oils”, *PETROTECH 2001. The Third Middle East Refining and Petrochemicals Exhibition and Conference*, Bahrain, Oct. 29-31 (2001).
- S. M. Alzahrani, B. Y. Jibril and **A. E. Abasaheed**, “Reactivity of Keggin-Type Polyoxotungstate in Oxidative Dehydrogenation of Propane”, *PETROTECH 2001. The Third Middle East Refining and Petrochemicals Exhibition and Conference*, Bahrain, Oct. 29-31 (2001).
- K. I. Alhumaizi and **A. E. Abasaheed**, "Modeling, Simulation and Bifurcation Analysis of a Mutating Autocatalytic Reaction", *JKSU, Eng. Sci.* **13**(1) 73-83 (2000).
- S. S. E. H. Elnashaie, R. P. Chambers, P. Garhyan, **A. E. Abasaheed**, G. A. Ibrahim, and S. A. Alhaddad, “Integrated Multidisciplinary Approach for Efficient Production of Fuel Ethanol from Cellulosic Materials”, *AIChE 2000 annual meeting on Exchanging Ideas for Innovation*, Los Angeles, CA, USA, Nov. 12-17 (2000).
- B. Y. Jibril, S. M. Alzahrani and **A. E. Abasaheed**, “Propane Oxidative Dehydrogenation on Binary Oxide Catalysts”, *10th Annual Symposium on Catalysts in Petroleum Refining*

and Petrochemicals, Dhahran, Saudi Arabia, Nov. 19-20 (2000).

- S. M. Alzahrani, B. Y. Jibril and **A. E. Abasaheed**, "Propane Oxidative Dehydrogenation over Alumina-Supported Metal Oxides", *16th Canadian Symposium on Catalysis*, Banff, Canada, May 23-26 (2000).
- A. H. Fakeeha, B. Y. Jibril and **A. E. Abasaheed**, "A Parametric Study on Oxygen Mass Transfer in a Plunging Jet Loop Reactor with a Downcomer", *First Saudi Technical Conference and Exhibition STCEX2000*, Riyadh, Saudi Arabia, 18-22 November (2000).
- S. S. E. H. Elnashaie, **A. E. Abasaheed**, A. E. Ajbar, N. F. Mohamed, M. M. Kamal, N. M. Ghasem, M. E. Abashar and S. S. Elshishini, "Chaos, Chaos Control and the Unsteady State Operation of Fluidized Bed Catalytic Reactors. Industrial Examples", *AIChE 2000 annual meeting on Exchanging Ideas for Innovation*, Los Angeles, CA, USA, Nov. 12-17 (2000).
- S. M. Alzahrani, N. O. Elbashir, **A. E. Abasaheed**, and M. Abdulwahed "Oxidative Dehydrogenation of Isobutane over Pyrophosphate Catalytic Systems", *Catal. Lett.* **69**, 65-70 (2000).
- S. M. Alzahrani, B. Y. Jibril and **A. E. Abasaheed**, "Propane Oxidative Dehydrogenation over Alumina-Supported Metal Oxides", *Ind. Eng. Chem. Res.* **39**, 4070-4074 (2000).
- K. I. Alhumaizi and **A. E. Abasaheed**, "On Mutating Autocatalytic Reactions in a CSTR. Part I: Multiplicity of Steady States", *Chem. Engng. Sci.* **55**(18), 3919-3928 (2000).
- W. A. Al-Masry, B. Y. Jibril and **A. E. Abasaheed**, "Correlations for the Effects of Bed Depth and Temperature on Slow Pyrolysis of Coal", *J. Saudi Chem. Soc.* **4**(1), 119-127 (2000).
- A. E. Abasaheed**, "Bifurcation and Chaos for a Mutating Autocatalytor in a CSTR", *Bioprocess Eng.* **22**(4), 337-346 (2000).
- W. A. Al-Masry and **A. E. Abasaheed**, "A robust Model for Wastewater Treatment in Sequencing Batch Reactors", In *Environmental Monitoring and Biodiagnostics of Hazardous Contaminants*. Ed. M. Healy, D. L. Wise and M. Moo-Young, Kluwer Academic Publishers. 329-339 (2000).
- A. E. Abasaheed**, "Sensitivity Analysis on a Sequencing Batch Reactor Model: II. Effect of Stoichiometric and Operating Parameters", *J. Chem. Technol. & Biotechnol.* **74**, 451-499 (1999).
- E. M. Ali, **A. E. Abasaheed** and S. M. Al-Zahrani, "Improved Regulatory Control of Industrial Gas Phase Ethylene Polymerization Reactors", *Ind. Eng. Chem. Res.*, **38**, 2383 (1999).
- A. E. Abasaheed**, "A Non-Structured, Pseudo-Homogeneous Model for the Activated Sludge Process", *Bioprocess Eng.* **21**, 181 (1999).

- W. A. Al-Masry and **A. E. Abasaheed**, "A Robust Model for Wastewater Treatment in Sequencing Batch Reactors", *J. Saudi Chem. Soc.* **3**, 99 (1999).
- A. H. Fakeeha, B. Y. Jibril, G. Ibrahim and **A. E. Abasaheed**, "Medium Effects on Oxygen Mass Transfer in a Plunging Jet Loop Reactor with a Downcomer", *Chem. Engng. Proc.*, **38**, 259 (1999).
- S. M. Alzahrani, **A. E. Abasaheed** and N. O. Elbashir "Oxidative dehydrogenation of Lower Alkanes". A research project (3 years) sponsored by SABIC R&D. Final report was submitted to SABIC R&D (1999).
- A. E. Abasaheed**, M. Asif and A. H. Fakeeha "Zeolite-Catalyzed Hydrolysis of Inulin in a Fluidized Bed Reactor", *Bioprocess Eng.* **20**, 343 (1999).
- A. E. Abasaheed**, S. S. E. H. Elnashaie and S. S. Elshishini "Digital Simulation and Optimization of Industrial Fluid Catalytic Cracking Units using a 4-lump Kinetic Model" *JKSU, Eng. Sci.* **11**, 175 (1999).
- S. M. Alzahrani and **A. E. Abasaheed** Development of a controlled release fertilizer delivery system using polymeric membranes. A research project (No. 4/417 - 18 months) sponsored by the Research Centre at the College of Engineering, King Saud University and the Saudi Basic Industries Corporation, SABIC. Final report was submitted on April (1998).
- W. A. Al-Masry and **A. E. Abasaheed**, "On the Scale-up of External Loop Airlift Reactors: Newtonian Systems", *Chem. Engng. Sci.*, **53**, 4085 (1998).
- S. M. Al-Zahrani and **A. E. Abasaheed** "On the Utilization of Fluidized Bed Reactors for Oxidative Coupling of Methane", *Dev. Chem. Eng. & Minerals Proc. J.* **6**, 197 (1998).
- A. E. Abasaheed** and S. S. E. H. Elnashaie "On the chaotic behavior of Externally forced Industrial Fluid Catalytic Cracking Units", *Chaos, Solitons & Fractals* **9**, 455 (1998).
- A. E. Abasaheed** and S. M. Al-Zahrani "Modeling of Fluidized Bed Reactors for the Polymerization Reactions of Ethylene and Propylene" *Dev. Chem. Eng. & Minerals Proc. J.* **6**, 121 (1998).
- M. Asif and **A. E. Abasaheed**, "Modeling of Glucose Isomerization in a Fluidized Bed Immobilized Enzyme Bioreactor, *Bioresource Technol.* **64**, 229 (1998).
- S. M. Al-Zahrani and **A. E. Abasaheed**, "Methane Oxidative Coupling in a Fluidized Bed Reactor: A Comprehensive Model", 15th International Symposium on Chemical Reaction Engineering (ISCRE15), New Port Beach, Ca, USA, Sep. 13-15 (1998).
- E. M. Ali, **A. E. Abasaheed** and S. M. Al-Zahrani, "Optimization and Control of Industrial Gas Phase Ethylene Polymerization Reactors", *Ind. Eng. Chem. Res.* **37**, 3414 (1998).

- S. S. E. H. Elnashaie, **A. E. Abasaheed** and G. Ibrahim, "On the Practical Relevance of Bifurcation and Chaos in Chemical and Biochemical Reaction Engineering", *Fractals*, **5**, 549 (1997).
- A. E. Abasaheed** and S. S. E. H. Elnashaie "The Effects of External Disturbances on the Performance and Chaotic Behavior of Industrial FCC Units", *Chaos, Solitons & Fractals*, **8**, 1941 (1997).
- A. E. Abasaheed**, "Sensitivity Analysis on a Sequencing Batch Reactor Model: I. Effect of Kinetic Parameters", *J. Chem. Technol. & Biotechnol.* **70**, 379 (1997).
- A. E. Abasaheed** "Effect of Catalyst Circulation Rate on the Bifurcation Behavior of an Industrial FCC Unit", *Arabian J. Sci. Eng.*, **21**, 239 (1996).
- A. E. Abasaheed** and Y. Y. Lee, "Kinetics of Inulin Hydrolysis by Zeolite LZ-M-8", *Hung. J. Ind. Chem.*, **24**, 149 (1996).
- A. H. Fakeeha, **A. E. Abasaheed** and E. A. M. Jamal, "Enzymatic Hydrolysis of Ball-milled Saudi Wheat Straw", *JKAU: Eng. Sci.* **8**, 37-45 (1996).
- A. E. Abasaheed** and S. S. E. H. Elnashaie "Periodicity and Aperiodicity in Externally Forced Industrial FCC Units", *Proceedings of the International Conference on Bifurcation and Chaos in Chemical Engineering, CFIC96*, (Eds. M. Giona and G. Biardi), Italy, 489-499, September. 2-5 (1996).
- S. M. Al-Zahrani and **A. E. Abasaheed** "Modeling and Simulation of a Fluidized-Bed Reactor for Oxidative Coupling of Methane", *IASTED International conference*, Australia, May 6-9 (1996).
- S. M. Al-Zahrani and **A. E. Abasaheed** "Mathematical Modeling and Economic Evaluation of Natural Gas Conversion into High Valuable Products in a Fluidized Bed Reactor" , *The second Symposium of Technologies, Economics & Investment Opportunities in the Petrochemical Industries in the Kingdom of Saudi Arabia*, KACST, Riyadh, Saudi Arabia, October 27-29 (1996).
- S. S. E. H. Elnashaie, **A. E. Abasaheed** and S. S. Elshishini "Digital Simulation of Industrial Fluid Catalytic Cracking Units: V. Static and Dynamic Bifurcation Behavior" *Chem. Engng. Sci.*, **50**, 1635-1644 (1995).
- A. E. Abasaheed** and Y. Y. Lee, "Fructose Production Via Inulin Hydrolysis by a Novel Catalyst", *Chem. Engng. & Technol.*, **18**, 440 (1995)
- G. Ibrahim and **A. E. Abasaheed**, "Modeling of Sequencing Batch Reactors" *Water Research*, **29**, 1761 (1995).
- A. E. Abasaheed**, S. S. E. H. Elnashaie, S. S. Elshishini and A. Al-Mutlaq " Static and Dynamic Bifurcation Behavior of an Industrial Fluid Catalytic Cracking (FCC) Unit", *Fourth Saudi Engineering Conference*, Jeddah, Vol. **5**, 233-239 (1995).

- A. E. Abasaheed** and S. S. E. H. Elnashaie " Fuel-Ethanol Production by a Novel Packed Bed Membrane Fermentor" *Fourth Saudi Engineering Conference*, Jeddah, Vol. **5**, 105-110 (1995).
- A. E. Abasaheed** and G. Ibrahim " Modeling and Simulation of Sequencing Batch Reactors" *Fourth Saudi Engineering Conference*, Jeddah, Vol. **5**, 91-96 (1995).
- A. E. Abasaheed**, S. S. E. H. Elnashaie, N. M. Ghasem and A. M. Talib "Static and Dynamic Bifurcation Behavior for Ethylene Polymerization in a Fluidized Bed Reactor" *Fourth Saudi Engineering Conference*, Jeddah, Vol. **5**, 185-190 (1995).
- M. Asif and **A. E. Abasaheed** "Heterogeneous Modeling of a Fluidized Bed Bioreactor for Isomerization of Glucose into Fructose" *Fourth Saudi Engineering Conference*, Jeddah, Vol. **5**, 97-103 (1995).
- S. S. E. H. Elnashaie, A. Almutalg, S. S. Elshishini and **A. E. Abasaheed**, "Modeling, Simulation and Bifurcation of an Industrial Fluid Catalytic Cracking (FCC) Unit", *International Conference on Advances in Strategic Technologies, ICAST'95*, Malaysia, Pg. 19-28, June 12-15 (1995).
- S. S. E. H. Elnashaie, A. Almutalg, S. S. Elshishini and **A. E. Abasaheed**, "On the Bifurcation Behavior of Industrial Fluid Catalytic Cracking Units", *Egyptian-Syrian First Chemical Engineering Conference*, October (1995).
- A. E. Abasaheed** and S. S. E. H. Elnashaie, "The Use of Heterogeneous Models to Design and Optimize Packed Bed Membrane Fermentors" *7th international symposium on synthetic membranes in science and industry*. Tubingen, Germany (1994).
- A. E. Abasaheed**, " Novel Bioreactors with Selective Membranes", *The Joint Seminar on "Biotechnology, Membrane Separation, and Fuel Cells"*. Petroleum and Petrochemicals Research Institute, Saudi Arabia, 15-17 January (1994).
- A. E. Abasaheed** and S. S. E. E. Elnashaie, "A Novel Configuration for Packed Bed Membrane Fermenters for Maximizing Ethanol Productivity and Concentration", *J. Membrane Science*, **82**, 75 (1993).
- A. E. Abasaheed** and S. S. E. E. Elnashaie, "Heterogeneous Modeling of Packed Bed Fermentor with Permselective Membranes", *J. Membrane Science*, **76**, 165 (1993).
- A. E. Abasaheed**, "Correlation of the Transient Thermal Effects on Acid Hydrolysis of Cellulose", *Hung. J. Ind. Chem.* **20**, 127 (1992).
- A. E. Abasaheed**, "Briquetting of Carbonized Cotton Stalk", *Energy*, **17**, 877 (1992).
- A. E. Abasaheed** and M. E. Mansour, "Thermal Effects on Acid Hydrolysis of Cellulose", *Bioresource Technology*, **40**, 221 (1992).

- S. S. E. H. Elnashaie and **A. E. Abasaheed**, " A Compartmental Model for the Investigation of the Advantages of Selective Membranes on the Performance of Alcoholic Fermentation Processes in Immobilized Packed Bed Fermenters". *Proceedings of the 1st International Conference on Chemistry in Industry*, Bahrain, 14-16 November (1992).
- A. E. Abasaheed**, " Technology Transfer: Is it a Solution or a Problem", *Proceedings of the Third Saudi Engineering Conference*, K. Saudi Arabia (1991).
- A. E. Abasaheed**, "Correlation of the Transient Thermal Effects on Maximum Xylose Yield in Acid Hydrolysis of Hemicellulose", *Sci. Int.*, **3**, 273 (1991).
- A. E. Abasaheed**, Y. Y. Lee and J. R. Watson, "Effect of Transient Heat Transfer and Particle Size on Acid Hydrolysis of Hardwood Cellulose", *Bioresource Technology* , **35**, 15 (1991).
- A. E. Abasaheed**, "Cellulose Hydrolysis by Trifluoroacetic Acid", *Sci. Int.* **2**, 307 (1991).
- S. S. Shomo and **A. E. Abasaheed**, " R&D Experience of Sudan in Renewable Energy", *Regional Symposium on Planning and Execution of R&D Projects*, Cairo, Egypt, November (1989).
- A. E. Abasaheed**, E. Adam, A. M. Hassan, A. Sidig, " Small Scale Carbonization in Gezira Scheme", *GTZ project, ERC Publications*, Khartoum, Sudan, August (1989).
- A. E. Abasaheed**, Y. Abdalla, A. M. Hassan, A. Sidig, A. Elamin, " Briquetting of Carbonized Cotton Stalks: Gezira Experience", *SREP (USAID) project, ERC Publications*, Khartoum, Sudan, June (1989).
- A. Hood, G. Ali, and **A. E. Abasaheed**, " Use of Cotton Stalks as Household Fuel in the Sudan", *The International Conference on Applications of Solar and Renewable Energy*, Cairo, Egypt, 19-22 March (1989).
- G. Ali, **A. E. Abasaheed**, and A. Hood, " Improved Stoves: Design, Production, and Dissemination: Sudan Case", *The International Conference on Applications of Solar and Renewable Energy*, Cairo, Egypt, 19-22 March (1989).
- L. Tillman, **A. E. Abasaheed**, Y. Y. Lee and R. Torget, "Effect of Transient Variation of Temperature on Acid Hydrolysis of Aspen Hemicellulose", *Applied Biochemistry and Biotechnology*, **20**, 107, (1989).
- A. E. Abasaheed** and Y. Y. Lee, " Observations on Cellulose Hydrolysis by Trifluoroacetic Acid", *The International Conference on Applications of Solar and Renewable Energy*, Cairo, Egypt, 19-22 March (1989).
- A. E. Abasaheed**, A. Elamin, A. Sidig, A. M. Hassan, " Briquetting of Carbonized Cotton Stalks in Rahad Scheme", *SREP (USAID) project, ERC Publications*, Khartoum, Sudan January (1988).

- A. E. Abasaheed**, " Cotton Stalks : A Useful Waste", *VITA NEWS*, 10 (1988).
- A. Hood and **A. E. Abasaheed**, " The Role of R & D Institutions in Stove Commercialization and Dissemination", *Proceedings of the Regional Stove Workshop on Commercialization and Dissemination*, Khartoum, Sudan, 125-152, December (1988).
- A. E. Abasaheed**, A. Hood and G. Ali " Assessment of ERC Experience in Briquetting Carbonized Agricultural Residues, Part (I). Technology Development", *Proceedings of International Workshop on Biomass Fuel Briquetting in Developing Countries*. Khartoum, Sudan, Paper # 17 October (1988).
- G. Ali, **A. E. Abasaheed**, and A. Hood, " Assessment of ERC Experience in Briquetting Carbonized Agricultural Residues, Part II, Commercialization and Dissemination Issues", *Proceedings of International Workshop on Biomass Fuel Briquetting in Developing Countries*. Khartoum, Sudan, Paper # 18 October (1988).
- L. Tillman, **A. E. Abasaheed**, Y. Y. Lee " Thermal Effects on Acid Hydrolysis of Aspen Hemicellulose", *Presented at the 10th Symposium on Biotechnology for Fuels and Chemicals and at the Biochemical Conversion Program, Annual Review Meeting*, Solar Energy Research Institute (SERI), U.S.A., October 13-15 (1987).
- Y. Y. Lee and **A. E. Abasaheed**, " Kinetic and Modeling Studies on Acid Hydrolysis of Hardwood Cellulose", *TVA Project No. TVA - TV - 69192A*, Presented and Submitted to Tennessee Valley Authority at Muscle Shoals, AL, U.S.A., April (1987).
- R. Narayanan and **A. E. Abasaheed**, "The Effects of Domain Size and Fluid Conditions at the Boundary on Convection Inside an Annulus Heated from Below", *Int. Comm. Heat & Mass Transfer*, **12**, 287, (1985).