



خالد بن ابراهيم عبدالله الحميزي

العمل الحالي: عميد كلية الهندسة - جامعة الملك سعود

العنوان : قسم الهندسة الكيميائية – كلية الهندسة

جامعة الملك سعود – ص.ب. ٨٠٠ الرياض ١١٤٢١

المملكة العربية السعودية

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العمل : أستاذ – قسم الهندسة الكيميائية – جامعة الملك سعود

الشهادات الدراسية :

- بكالوريوس في الهندسة الكيميائية – جامعة الملك سعود (١٤٠٦-١٤٠٧ هـ)
- ماجستير في الهندسة الكيميائية – جامعة مينيسوتا – الولايات المتحدة (١٩٩٠ م)
- دكتوراة في الهندسة الكيميائية – جامعة مينيسوتا - الولايات المتحدة (١٩٩٤ م)

الأعمال الإدارية

المناصب والمجالس

- عميد كلية الهندسة ١٤٣٢-الآن
- عضو مجلس جامعة الملك سعود ١٤٣٢-الآن
- عضو مجلس أمناء جامعة الأعمال والتكنولوجيا – جدة ١٤٣٤-الآن
- وكيل عمادة الدراسات العليا ١٤٢٨-١٤٣١ هـ
- عضو مجلس عمادة الدراسات العليا ١٤٢٨-١٤٣١ هـ
- عضو المجلس العلمي بجامعة الملك سعود – ممثل لكلية الهندسة ١٤٢٨-١٤٣١ هـ
- رئيس قسم الهندسة الكيميائية ١٤٢٤-١٤٢٨
- عضو مجلس قسم الهندسة الكيميائية – جامعة الملك سعود ١٤١٥- .
- عضو مجلس كلية الهندسة – جامعة الملك سعود ١٤١٩-١٤٢٠ هـ
- عضو مجلس مركز البحوث – كلية الهندسة ١٤٢٣-١٤٢٤ هـ
- عضو مجلس إدارة الهيئة الوطنية لتنفيذ اتفاقية حظر الأسلحة الكيميائية ممثلاً لوزارة التعليم العالي ١٤١٨-١٤٢٢ هـ

اللجان

- -مقرر لجنة التعيينات بالمجلس العلمي -جامعة الملك سعود ١٤٢٨-١٤٣١هـ.
- -عضو لجنة الخطة الإستراتيجية لعمادة البحث العلمي - جامعة الملك سعود ١٤٣١هـ.
- -مقرر لجنة اعداد خطة أكاديمية لكليات الهندسة بجامعة الملك سعود بناء على خطة جامعة سنغافورة الوطنية - وكالة الجامعة للشؤون التعليمية والأكاديمية ١٤٢٩ هـ
- -عضو لجنة تقويم أداء اعضاء هيئة التدريس - كلية الهندسة ١٤٢٨-١٤٢٩هـ
- -عضو لجنة اعداد الخطة الأكاديمية لكلية الهندسة - ١٤٢٩هـ
- عضو لجنة تفعيل دور الواجبات المنزلية في المقررات الدراسية - وكالة الجامعة للشؤون الأكاديمية والتعليمية ١٤٢٨-١٤٢٩هـ
- عضو لجنة مراجعة الخطة الأكاديمية بقسم الهندسة الكيميائية -١٤٢٩هـ
- عضو لجنة المحررين في مجلة جامعة الملك سعود -العلوم الهندسية ١٤٢٢-١٤٢٤هـ.
- عضو في لجنة إعداد برنامج التعليم التعاوني بكلية الهندسة ١٤١٩-١٤٢٠هـ.
- مقرر لجنة إعداد الجداول - قسم الهندسة الكيميائية ١٤١٥-١٤١٩هـ. ١٤٢١-١٤٢٤هـ.
- مقرر لجنة المعامل والأجهزة - قسم الهندسة الكيميائية ١٤١٩-١٤٢١هـ
- عضو في لجنة إعداد التقرير السنوي - قسم الهندسة الكيميائية ١٤١٨-١٤١٩هـ
- عضو في لجنة مشاريع التخرج - - قسم الهندسة الكيميائية ١٤١٩-١٤٢٠هـ.
- مقرر للجنة التنظيمية لندوة "هندسة المواد" المنعقدة بقسم الهندسة الكيميائية ١٤٢٠هـ.
- مقرر للجنة التنظيمية لدورة "التحكم في الصناعات الكيميائية" " المنعقدة بقسم الهندسة الكيميائية ١٤٢٢هـ.

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Prof. Alhumaizi is working now as the Dean of the College of Engineering, King Saud University, Riyadh, Saudi Arabia since 2010.

Degrees

1. Ph. D. – Chemical Engineering, University of Minnesota, Minnesota, U.S.A, 1994, Thesis Title : “Dynamics of an autocatalytic reaction in a membrane Reactor”
2. M.S. - Chemical Engineering, University of Minnesota, Minnesota, U.S.A, 1990, Thesis Title : “Feedback control of a countercurrent moving bed reactor”
3. B.S. - Chemical Engineering, King Saud University, Saudi Arabia

Academic Appointments

1. Professor and Dean, College of Engineering, 2010-present
2. Professor and Vice-Dean, Deanship of the Graduate Studies, 2007-2010
3. Professor and Head, Chemical Engineering Department, 2005-2007
4. Associate Professor and Head, Chemical engineering, 2003-2005
5. Assistant Professor, Chemical engineering 1994-2000

Research Interests: chemical and biochemical Processes synthesis, Control, Modeling and Simulation,

Publication and Books: Co-Author of five books, and more than 40 scientific papers.

CONSULTING WORK: Consulted for SABIC company (period 1998-2008) and King Abdulazeez City for Science and Technology (period 2000-2003) in the area of chemical reactors modeling and reaction kinetics, and for Ministry of Higher Education for the period 2006-2010.

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PUBLISHED SCIENTIFIC PAPERS

1. Moustafa A. Soliman, Khalid Alhumaizi, Dynamics of a coating film flow on horizontal cylinders with van der Waals forces, *Mathematical and Computer Modelling*, 06; 57(s 11–12):2984–2997, 2013.
2. Emad Ali, AbdelHamid Ajbar, Khalid Alhumaizi, DYNAMICS OF RECOMBINANT DNA CULTURES UNDER TIME VARYING FEED CONDITIONS, *Chemical Engineering Communications - CHEM ENG COMMUN* 01/2012; 199(9):1155-1168.
3. Abdelhamid Ajbar, Khalid Alhumaizi, Mustafa Soliman, Modeling and simulations of a reformer used in direct reduction of iron, *Korean Journal of Chemical Engineering (Impact Factor: 1.06)*. 01/2011; 28(12):2242-2249. DOI:10.1007/s11814-011-0122-5
4. M. Al-haj Ali, A. Ajbar, E. Ali, K. Alhumaizi, Study of cyclic operation of RO desalination process, *The Canadian Journal of Chemical Engineering (Impact Factor: 1)*. 11/2010; 89(2):299 - 303. DOI:10.1002/cjce.20407
5. Abdelhamid Ajbar, Khalid Alhumaizi, Ahmed Ibrahim, Mohammad Asif, Hydrodynamics of gas fluidized beds with mixture of group D and B particles, *The Canadian Journal of Chemical Engineering (Impact Factor: 1)*. 05/2010; 80(2):281 - 288. DOI:10.1002/cjce.5450800213
6. M. Alhaj Ali, A. Ajbar, E. Ali & K. Alhumaizi, Robust model-base control of a tubular reverse-osmosis desalination unit, *Desalination*, V.255, 1-3, 31,page 126-136, 2010.
7. M. Alhaj Ali, Emad. Ali A. Ajbar, K. Alhumaizi, Control of molecular weight distribution of polyethylene in gas-phase fluidized bed reactors, *Korean J. Chem. Eng.*,27(1), 364-372, 2010
8. M. Alhaj Ali, A. Ajbar, E. Ali & K. Alhumaizi, Modeling the Transient Behavior of an Experimental Reverse Osmosis Tubular Membrane”, *Desalination*, V. 245,pp. 194-204, 2009.
9. K. Alhumaizi & A. Abahusain, Analysis and simulation of cross-flow reactor for ethylene epoxidation, *Chemical Product & Process modeling*, 2007, Vol.2, Issue 1.
10. K. Alhumaizi, Flux-limiting solution techniques for simulation of reaction diffusion convection system, *Communications in Nonlinear Science and Numerical Simulation*, 2007, Volume 12, Issue 6, p. 953-965.
11. K. Alhumaizi and A. Ajbar “Optimization of An Unstructured First-Order Kinetic Model of Cyclically Operated Bioreactors”, *Journal of Environmental Engineering*, Volume 132, Issue 5, pp453-462, May2006 .
12. Ajbar, K. Alhumazi and M. Asif, “Improvement of the Fluidizability of Cohesive Powders Through Mixing with Small Proportions of Group A Particles”, *Canadian Journal of Chemical Engineering*, 2005, V.83, pp 930-943.
13. K. Alhumaizi, E. Ali & A. Ajbar, “Study of Some Unique Features of Ratio-Dependent Models for Predator-Prey-Substrate Interactions In Continuous Cultures”, *Chemical Engineering Communication*, 2006, Vol.193, No.10,pp1164-1184
14. Jebiril B., K. Alhumaizi K, A. Idris, A. Ibrahim, Simulation of turbo-expander for recovering of natural gas liquids from natural gas, *Saudi Aramco Journal of Technology*, Fall 2005, pp9-14
15. M. A. Rakib and K. I. Alhumaizi, “Modeling of a Fluidized Bed Membrane Reactor for the Steam Reforming of Methane: Advantages of Oxygen Addition for Favorable Hydrogen Production”, *Energy& Fuels*, 19 (5), 2129 -2139, 2005.

16. K. Alhumaizi "A Moving Collocation method for the Solution of the Transient Convection-Diffusion-Reaction Problems", Journal of Computational and Applied Mathematics, 2006, vol.193, Issue 2, pp 484-496.
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18. Al-Kinany M.C., B.Y. Jebril, S.H. Al-Khowiter, M.A. Al-Dousary, H.M. Al-Megren,, S.M. Al-Zaharni & K. Alhumaizi "Low temperature transalkylation of o-diethylbenzene with benzene to ethylbenzene using triflic acid as a catalyst", Chemical engineering and Processing, 44, 2005, 841-846.
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20. Ali, E. & K. Alhumaizi, "Advanced control strategy for a chemical polymerization reactor", ICGST International journal on automatic control and System Engineering, V1, Dec. 2004, pp34-55.
21. Alhumaizi K., "Comparison of finite difference methods for the numerical simulation of reacting flow", Computers and Chemical Engineering, 2004, 28, 1759-1769.
22. Ali, E., K. Alhumaizi and A. Ajbar "Multivariable Control of a Simulated Industrial Gas-Phase Polyethylene Reactor", Ind. Eng. Chem. Res. 2003, 42, 2349-2364.
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24. Abashar M.E.E., K.Alhumaizi and A.M. Adris, "Investigation of methane steam reforming in fluidized bed membrane reactors", Trans IChemE, 2003, Vol.18 251-258.
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27. Ajbar A., K. Alhumaizi, A. Ibrahim, and M. Asif, "Hydrodynamics of gas fluidized beds with mixture of group D and B particles", Canadian J. of Chemical Eng., Vol. 80, 2002, 281-288.
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29. Ajbar, K Alhumaizi and S.S.E.H Elnashaie "Classification of static and dynamic behavior in a fluidized-bed catalytic reactor", Chemical Engineering Journal, 54, 2001, 503-516.
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32. Alhumaizi K.and A. E. Abasaheed " Modeling, Simulation and bifurcation analysis of a mutation autocatalytic reactor", J. King Saud Univ., Vol. 13, Eng. Sci. (1), 2001.
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