

Prof. MURAT KÖKSAL

Personal Information

Office Phone: [+90 312 297 6208](tel:+903122976208) Extension: 115

Fax Phone: [+90 312 297 6206](tel:+903122976206)

Email: koksalm@hacettepe.edu.tr

Web: <http://yunus.hacettepe.edu.tr/~koksalm/>

Address: Department of Mechanical Engineering, Hacettepe University, Beytepe, Ankara, Turkey, 06800.

Education Information

Doctorate, Dalhousie University, Faculty of Engineering, Department of Mechanical Engineering , Canada 1996 - 2001

Postgraduate, Middle East Technical University, Faculty Of Engineering, Department Of Mechanical Engineering, Turkey 1993 - 1996

Undergraduate, Middle East Technical University, Faculty Of Engineering, Department Of Mechanical Engineering, Turkey 1989 - 1993

Research Areas

Mechanical Engineering, Fluid Mechanics, Advanced Energy Technologies, Thermodynamics, Heat and Mass Transfer

Academic Titles / Tasks

Professor, Hacettepe University, Mühendislik Fakültesi, Makina Mühendisliği Bölümü, 2015 - Continues

Associate Professor, Hacettepe University, Mühendislik Fakültesi, Makina Mühendisliği Bölümü, 2009 - 2015

Associate Professor, University of Waterloo, Faculty of Engineering, Department of Mechanical and Mechatronics Engineering, 2012 - 2013

Assistant Professor, Hacettepe University, Mühendislik Fakültesi, Makina Mühendisliği Bölümü, 2006 - 2009

Assistant Professor, Dalhousie University, Faculty of Engineering, Department of Mechanical Engineering, 2001 - 2006

Research Assistant, Dalhousie University, Faculty of Engineering, Department of Mechanical Engineering, 1996 - 2001

Research Assistant, Middle East Technical University, Faculty Of Engineering, Department Of Mechanical Engineering, 1993 - 1996

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **Gas velocity distribution in conical spouted beds with high-density particles**
DOĞAN N., KÖKSAL M., KÜLAH G.
CANADIAN JOURNAL OF CHEMICAL ENGINEERING, 2021 (Journal Indexed in SCI)
- II. **A thermal model for Li-ion batteries operating under dynamic conditions**
Amini A., ÖZDEMİR T., EKİCİ Ö., BAŞLAMİŞLİ S. Ç. , KÖKSAL M.
APPLIED THERMAL ENGINEERING, vol.185, 2021 (Journal Indexed in SCI)
- III. **Experimental Assessment of the Lumped Lithium Ion Battery Model at Different Operating Conditions**
ÖZDEMİR T., Amini A., EKİCİ Ö., KÖKSAL M.
HEAT TRANSFER ENGINEERING, 2021 (Journal Indexed in SCI)

- IV. **Comment on "Deciphering conical spouted bed hydrodynamics using high intensity microphone"**
Yaman O., KÖKSAL M., KÜLAH G.
NUCLEAR ENGINEERING AND DESIGN, vol.353, 2019 (Journal Indexed in SCI)
- V. **Process modeling of an automotive pem fuel cell system**
Akroot A., EKİCİ Ö., KÖKSAL M.
INTERNATIONAL JOURNAL OF GREEN ENERGY, vol.16, no.10, pp.778-788, 2019 (Journal Indexed in SCI)
- VI. **Detecting stability of conical spouted beds based on information entropy theory**
Savari C., Sotudeh-Gharebagh R., KÜLAH G., KÖKSAL M., Mostoufi N.
POWDER TECHNOLOGY, vol.343, pp.185-193, 2019 (Journal Indexed in SCI)
- VII. **Surface-to-bed heat transfer for high-density particles in conical spouted and spout-fluid beds**
Yaman O., KÜLAH G., KÖKSAL M.
PARTICULOLOGY, vol.42, pp.35-47, 2019 (Journal Indexed in SCI)
- VIII. **A new correlation for minimum spouting velocity for conical spouted beds operating with high density particles**
Golshan S., Yaman O., KÖKSAL M., KÜLAH G., Zarghami R., Mostoufi N.
EXPERIMENTAL THERMAL AND FLUID SCIENCE, vol.96, pp.358-370, 2018 (Journal Indexed in SCI)
- IX. **Monitoring of liquid sprayed conical spouted beds by recurrence plots**
Savari C., KÜLAH G., KÖKSAL M., Sotudeh-Gharebagh R., Zarghami R., Mostoufi N.
POWDER TECHNOLOGY, vol.316, pp.148-156, 2017 (Journal Indexed in SCI)
- X. **3-D CFD modeling and experimental testing of thermal behavior of a Li-Ion battery**
Gümüşsu E., EKİCİ Ö., KÖKSAL M.
APPLIED THERMAL ENGINEERING, vol.120, pp.484-495, 2017 (Journal Indexed in SCI)
- XI. **Early Detection of Agglomeration in Conical Spouted Beds Using Recurrence Plots**
Savari C., KÜLAH G., Sotudeh-Gharebagh R., Mostoufi N., KÖKSAL M.
INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH, vol.55, no.26, pp.7179-7190, 2016 (Journal Indexed in SCI)
- XII. **Investigation of the Predicting Ability of Single-Phase Chemical Equilibrium Modeling Applied to Circulating Fluidized Bed Coal Gasification**
Kaya E., KÖKSAL M.
JOURNAL OF ENERGY RESOURCES TECHNOLOGY-TRANSACTIONS OF THE ASME, vol.138, no.3, 2016 (Journal Indexed in SCI)
- XIII. **Particle Velocity, Solids Hold-Up, and Solids Flux Distributions in Conical Spouted Beds Operating with Heavy Particles**
KÜLAH G., Sari S., KÖKSAL M.
INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH, vol.55, no.11, pp.3131-3138, 2016 (Journal Indexed in SCI)
- XIV. **CFD Simulations of Hydrodynamics of Conical Spouted Bed Nuclear Fuel Coaters**
LULE S. S., Çolak Ü., KÖKSAL M., KÜLAH G.
CHEMICAL VAPOR DEPOSITION, vol.21, pp.122-132, 2015 (Journal Indexed in SCI)
- XV. **Flow structure characterization in conical spouted beds using pressure fluctuation signals**
Mostoufi N., KÜLAH G., KÖKSAL M.
POWDER TECHNOLOGY, vol.269, pp.392-400, 2015 (Journal Indexed in SCI)
- XVI. **Characterization of gas-solid flow in conical spouted beds operating with heavy particles**
Sari S., KÜLAH G., KÖKSAL M.
EXPERIMENTAL THERMAL AND FLUID SCIENCE, vol.40, pp.132-139, 2012 (Journal Indexed in SCI)
- XVII. **Effects of operating and design parameters on the performance of a solid oxide fuel cell-gas turbine system**
Suther T., Fung A. S., KÖKSAL M., Zabihian F.
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.35, no.7, pp.616-632, 2011 (Journal Indexed in SCI)
- XVIII. **Effect of staged air on heat transfer in circulating fluidized beds**
KÖKSAL M., Golriz M. R., Hamdullahpur F.
APPLIED THERMAL ENGINEERING, vol.28, pp.1008-1014, 2008 (Journal Indexed in SCI)
- XIX. **CFD simulation of gas-liquid contacting in tubular reactors**

- Podila K., Al Taweel A. M. , KÖKSAL M., TROSHKO A., Gupta Y. P.
CHEMICAL ENGINEERING SCIENCE, vol.62, no.24, pp.7151-7162, 2007 (Journal Indexed in SCI)
- XX. **Quantifying the skin factor for estimating the completion efficiency of perforation tunnels in petroleum wells**
RAHMAN M., Mustafiz S., Koksals M., Islam M. R.
JOURNAL OF PETROLEUM SCIENCE AND ENGINEERING, vol.58, pp.99-110, 2007 (Journal Indexed in SCI)
- XXI. **Investigation of a novel perforation technique in petroleum wells - perforation by drilling**
Rahman M. A. , Mustafiz S., Biazar J., Koksals M., Islam M. R.
JOURNAL OF THE FRANKLIN INSTITUTE-ENGINEERING AND APPLIED MATHEMATICS, vol.344, no.5, pp.777-789, 2007 (Journal Indexed in SCI)
- XXII. **Heat transfer in a pulsed bubbling fluidized bed**
Zhang D., Koksals M.
POWDER TECHNOLOGY, vol.168, no.1, pp.21-31, 2006 (Journal Indexed in SCI)
- XXIII. **A shift transformation for fully conservative methods: turbulence simulation on complex, unstructured grids**
Hicken J., Ham F., Militzer J., Koksals M.
JOURNAL OF COMPUTATIONAL PHYSICS, vol.208, no.2, pp.704-734, 2005 (Journal Indexed in SCI)
- XXIV. **CFD simulation of the gas-solid flow in the riser of a circulating fluidized bed with secondary air injection**
Koksals M., HAMDULLAHPUR F.
CHEMICAL ENGINEERING COMMUNICATIONS, vol.192, no.9, pp.1151-1179, 2005 (Journal Indexed in SCI)
- XXV. **Thermal aspects of a circulating fluidized bed with air staging**
Koksals M., Golriz M., Hamdullahpur F.
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.29, no.10, pp.923-935, 2005 (Journal Indexed in SCI)
- XXVI. **Gas mixing in circulating fluidized beds with secondary air injection**
Koksals M., Hamdullahpur F.
CHEMICAL ENGINEERING RESEARCH & DESIGN, vol.82, pp.979-992, 2004 (Journal Indexed in SCI)
- XXVII. **Circulating fluidized bed hydrodynamics with air staging: an experimental study**
Ersoy L., Golriz M., Koksals M., Hamdullahpur F.
POWDER TECHNOLOGY, vol.145, no.1, pp.25-33, 2004 (Journal Indexed in SCI)
- XXVIII. **Bubble size control in a two-dimensional fluidized bed using a moving double plate distributor**
Koksals M., Vural H.
POWDER TECHNOLOGY, vol.95, no.3, pp.205-213, 1998 (Journal Indexed in SCI)

Refereed Congress / Symposium Publications in Proceedings

I. Thermal Behavior of a Li-Ion Battery in the Highway Driving Cycle

Amini A., Özelci B., ÖZDEMİR T., EKİCİ Ö., BAŞLAMIŞLI S. Ç. , KÖKSAL M.

ULIBTK'xx19 22th Congress of Thermal Sciences and Technology, 11 - 14 September 2019

Supported Projects

KOÇKAR B., KÖKSAL M., EKİCİ Ö., GÖRTAN M. O. , Project Supported by Higher Education Institutions, Formula Student Yarışmasına Katılmak Üzere Üretilen Yarış Aracının Geliştirilmesi, 2018 - 2021

SÜMER B., KÖKSAL M., YILDIRIM B., GÖRTAN M. O. , Project Supported by Higher Education Institutions, Makina Mühendisliği Bölümü Lisans Programı Deney Ölçüm ve Test Altyapısının Geliştirilmesi, 2017 - 2018

Köksal M., Külah G., TUBITAK Project, Gas-Particle Flow Dynamics and Bed-to-Surface Heat Transfer in Spout-Fluid Beds, 2015 - 2018

KOÇKAR B., GÖRTAN M. O. , BAŞLAMIŞLI S. Ç. , KÖKSAL M., EKİCİ Ö., ÜNVER Ö., YILDIRIM B., Project Supported by Higher

Education Institutions, Formula Student Yarışmasına Katılmak Üzere Yarış Aracı Tasarımı ve Üretimi, 2015 - 2017

EKİCİ Ö., KÖKSAL M., Project Supported by Higher Education Institutions, Li-Ion Pillerin Normal Çalışma Koşulları ve Sıcaklığa Bağlı Hata Modları İçin Testleri ve Modellenmesi, 2015 - 2017

Köksal M., Other Supported Projects, Experimental and Numerical Investigation of Gas and Solids Mixing in Circulating Fluidized Beds, 2002 - 2006

Köksal M., Other Supported Projects, Phase Doppler Particle Analyzer PDPA for Multiphase Flow Research, 2002 - 2002

Citations

Total Citations (WOS):382

h-index (WOS):13