



## Mortaza Zivdar Professor

Faculty : Engineering

Departments : chemical engineering

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Address : Dept.of chemical engineering , Faculty of Engineering,  
University of Sistan and Baluchestan, Daneshgah Ave., Zahedan,  
Iran.

## Education

- ✓ B.Sc, , - 1988
- ✓ MS, Chemical Engineering Processes Design, Amirkabir University of Technology - 1992
- ✓ PhD, Chemical Engineering Processes Design, Australia - 1998

## Courses

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|--------------------------------------|---|
| 1. engineering design economics      | 2. membranes and membrane processes     |
| 3. advanced numerical computation    | 4. scale - up in chemical engineering   |
| 5. Gas transmission and distribution | 6. predict the thermodynamic properties |

## Master Thesis

### 1. Mass transfer efficiency of structured packing by CFD analysis

[Mortaza Zivdar, Rahbar Rahimi]

نیمسال اول سال تحصیلی 98-99

### 2. investigation on increasing the thermal diffusion coefficient of tire bakeing blend wjth heat conductor fillers

[Mortaza Zivdar, ]

نیمسال اول سال تحصیلی 98-99

### 3. feasibility of high pressure natural gas transmission

[Mortaza Zivdar]

نیمسال اول سال تحصیلی 98-99

### 4. H<sub>2</sub>S

[Rahbar Rahimi, Mortaza Zivdar]

نیمسال اول سال تحصیلی 95-94

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## Journals Papers

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### 2022

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#### 1. New design and optimization of an industrial three-phase boot separator using the coupled CFD-RSM models

Zohreh Khalifat, Mortaza Zivdar, Rahbar Rahimi

BRAZILIAN JOURNAL OF CHEMICAL ENGINEERING Volume: (39) 583 - 599

#### 2. Murphree vapor efficiency prediction in SCC columns by computational fluid dynamics analysis

Mortaza Zivdar,

Chemical Product and Process Modeling Volume: (17) 273 - 292

### 2021

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#### 3. Investigating the Natural Gas Transmission in Supercritical Condition

Mortaza Zivdar, Moslem Abrofarakh

Volume: (20) 50 - 63

#### 4. Natural Gas Transmission in Dense Phase Mode

Mortaza Zivdar, Moslem Abrofarakh

Journal of Gas Technology Volume: (7) 45 - 52

### 2020

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#### 5. Simulation of an Industrial Three Phase Boot Separator Using Computational Fluid Dynamics

Zohreh Khalifat, Mortaza Zivdar, Rahbar Rahimi

Journal of Gas Technology Volume: (6) 30 - 42

### 2019

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#### 6. Investigation on the Catalytic Conversion of Hydrogen Sulfide to Methyl Mercaptan as a Novel Method for Gas Sweetening Experimental and Modeling Approaches

Seyedabdolmajid Khaksar, Mortaza Zivdar, Rahbar Rahimi

Journal of Natural Gas Science and Engineering Volume: (61) 97 - 105

#### 7. CFD Modeling to Predict Mass Transfer in Multicomponent Mixtures

, Rahbar Rahimi, Mortaza Zivdar, Mohammad Kalbassi

Chemical Product and Process Modeling Volume: (14) 1 - 15

#### 8. Application of CFD for Troubleshooting and Hydrodynamic Analysis in an Industrial Three-Phase Gravity Separator

Zohreh Khalifat, Mortaza Zivdar, Rahbar Rahimi

Journal of Gas Technology Volume: (5) 57 - 75

### 9. Preparation and characteristics' evaluation of zeolite/activated carbon composite granules, using high shear mixer granulator

Elham Narooei, Davod Mohebbi Kalhori, Abdolreza Samimi, Mortaza Zivdar

Materials Research Express Volume: (6) 125532-1 - 125532-12

### 10. A comparative study of the effect of compost/woodchips mixture, natural zeolite and zeolite/activated carbon mixture as packing materials on the biofilter performance

Elham Narooei, Davod Mohebbi Kalhori, Abdolreza Samimi, Mortaza Zivdar

Advances in Environmental Technology Volume: (5) 67 - 75

### 11. A Green Route for Wasted Sulfur Consumption: Kinetic Modelling of Methyl Mercaptan Synthesis from Refinery H<sub>2</sub>S Streams over the K<sub>2</sub>WO<sub>4</sub>/Al<sub>2</sub>O<sub>3</sub> Catalyst

Seyedabdolmajid Khaksar, Mortaza Zivdar, Rahbar Rahimi

Advances in Environmental Technology Volume: (5) 213 - 219

## 2018

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### 12. Response surface methodology in optimization of a divided wall column

, Rahbar Rahimi, Mortaza Zivdar

KOREAN JOURNAL OF CHEMICAL ENGINEERING Volume: (35) 1414 - 1422

### 13. CFD modeling of multiphase flow in reactive distillation column

Maryam Mazarei sotoodeh, Mortaza Zivdar, Rahbar Rahimi

CHEMICAL ENGINEERING AND PROCESSING Volume: (129) 1 - 9

### 14. Hydrodynamic study of different configurations of sieve trays for a dividing wall column by using experimental and CFD methods

, Rahbar Rahimi, Mortaza Zivdar

CHEMICAL ENGINEERING AND PROCESSING Volume: (129) 162 - 170

### 15. New Design and Optimization for Replacing Dimethyl Disulfide with Wasted Disulfide Oil in Olefin Furnaces

Erfan Ziarifar, Rahbar Rahimi, Mortaza Zivdar

ENERGY and FUELS Volume: (32) 11375 - 11382

### 16. Pressure drop in randomly packed absorption tower in transient Flow regime

, Rahbar Rahimi, Mortaza Zivdar

Journal of Gas Technology Volume: (3) 38 - 47

### 17. Using disulfide oil as coke inhibitor to reduce environmental hazards in olefin heaters

Erfan Ziarifar, Rahbar Rahimi, Mortaza Zivdar

Advances in Environmental Technology Volume: (4) 183 - 186

## 2017

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### 18. CFD Simulation of Dry and Wet Pressure Drop and Flow Patern in Catalytic Structured Packings

Maryam Mazarei sotoodeh, Mortaza Zivdar, Rahbar Rahimi

Journal of Chemical and Petroleum Engineering Volume: (51) 27 - 37

## 2015

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### 19. Modeling and Simulation of a Divided Wall Column for 1,3 Butadiene Purification

Rahbar Rahimi, , Mortaza Zivdar, ,

Iranian Journal of Chemical Engineering Volume: (12) 60 - 67

### 20. Modeling and Simulation of a DividedWall Column for 13 Butadiene

Rahbar Rahimi, Mohamad Soudmand, Mortaza Zivdar, ,

Iranian Journal of Chemical Engineering Volume: (12) 60 - 67

## 2013

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### 21. Hydrodynamic characteristic of conical cap tray experimental studies on dry and total pressure drop weeping and entrainment

Rahbar Rahimi, Mortaza Zivdar

CHEMICAL ENGINEERING AND PROCESSING Volume: (64) 17 - 23

### 22. CFD simulation of concap tray hydrodynamics

, Rahbar Rahimi, taleb zarej, Mortaza Zivdar

Journal of Chemical and Petroleum Engineering Volume: (47) 39 - 50

## 2010

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### 23. Unsteady state simulation of bubbling fluidized bed by CFD

Seyyed Hossein Hosseini, Rahbar Rahimi, Mortaza Zivdar, Abdolreza Samimi

Volume: (21) 13 - 30

### 24. CFD studies of solids hold-up distribution and circulation patterns in gas-solid

Seyyed Hossein Hosseini, Goodarz Ahmadi, Rahbar Rahimi, Mortaza Zivdar, Mohsen Nasr Esfahany

POWDER TECHNOLOGY Volume: (200) 202 - 215

2009

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[25. Computational fluid dynamic simulation of MVG tray hydraulics](#)

Taleb Zarei, Rahbar Rahimi, Mortaza Zivdar

KOREAN JOURNAL OF CHEMICAL ENGINEERING Volume: (26) 1213 - 1219

[26. CFD simulation of gas-solid bubbling fluidized bed containing FCC particles](#)

, Rahbar Rahimi, Mortaza Zivdar, Abdolreza Samimi

KOREAN JOURNAL OF CHEMICAL ENGINEERING Volume: (26) 1405 - 1413

[27. Numerical Simulation of Hydrodynamics parameters of the Packed Columns Effects of Geometrical Characteristics on Pressure Drop](#)

masoud haghshenas, Mortaza Zivdar, Rahbar Rahimi,

WORLD APPLIED SCIENCES JOURNAL Volume: (11) 1439 - 1445

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## Conferences Papers

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### 2022

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#### 1. Simulation and Control of C9-C10 Aromatics Splitter Column of Bouali Sina Petrochemical Company

The 12th international conference Distillation & Absorption 2022

Mortaza Zivdar, Seyed morteza Mirhosseini, Mohammad amin Mokhtari, M. Abdollahi

### 2021

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#### 2. CFD analysis of a de-humidifier unit

3rd international Congress on Water Desalination

SHAHABUDIN KHORSHIDI, Mohammad amin Mokhtari, Mortaza Zivdar

### 2020

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#### 3. Separation of Ziziphora Essence by Organic and Acidic Solvents

The 11th International Chemical Engineering Congress & Exhibition (IChEC 2020)

Morteza Fanoudi, Mortaza Zivdar, M. Taghi Goldani

### 2019

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#### 4. Hydrodynamic Analysis of Three-phase Industrial Boot Separator

Zohreh Khalifat, Mortaza Zivdar, Rahbar Rahimi

### 2018

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#### 5. CFD Study of 11 Diethoxy Butane Production in a Reactive Distillation Column

The 10th International Chemical Engineering Congress and Exhibition.

Maryam Mazarei sotoodeh, Mortaza Zivdar, Rahbar Rahimi

#### 6. Experimental and CFD investigation for predicting weeping from sieve trays of Divided Wall Column

2nd International Biennial Oil, Gas and Petrochemical Conference

, Rahbar Rahimi, Mortaza Zivdar

#### 7. Effects of flow direction on a sieve tray of Divided Wall Column

2nd International Biennial Oil, Gas and Petrochemical Conference

, Rahbar Rahimi, Mortaza Zivdar

### 2005

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#### 8. Evaluation of Mass-Transfer Characteristics of a Structured Packing for Production and Separation of Food Flavours

7th world congress of chem eng. 2005

Mortaza Zivdar

## Executive activities

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مدیر گروه

from 1398/04/04 - to 1400/06/20

معاون آموزشی دانشکده مهندسی

from 1395/07/01 - to 1397/06/23

## Research Project

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2017

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1. Investigation of the Optimum Method for Determination of Oil- Gas Minimum Miscibility Pressure in En

Mortaza Zivdar, - 2017

2002

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2. Modeling and simulation of spinning cone columns for production of food flavors

Mortaza Zivdar, Rahbar Rahimi - 2002