

مرتضی مافی

مرتبه علمی: استادیار

آدرس: تهران- کیلومتر ۱۷ اتوبان کرج- بلوار پژوهش- پژوهشگاه شیمی و مهندسی شیمی ایران

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تحصیلات:

- دکتری مهندسی شیمی دانشگاه علم و صنعت، ایران
- کارشناسی ارشد مهندسی شیمی از دانشگاه صنعتی شریف، ایران
- کارشناسی مهندسی شیمی از دانشکده فنی دانشگاه تهران، ایران

زمینه های مورد علاقه در تحقیق:

- طراحی و ساخت تجهیزات پایلوتی
- شبیه سازی برش های نفتی
- ترمودینامیک و تعادل فازی و تعیین خواص فیزیکی
- چند منظوره سازی صنایع
- جداسازی، استخراج با سیال فوق بحرانی تقطیر و غشایی
- جداسازی توسط مایعات یونی

برخی از پروژه های انجام شده و در دست انجام:

- ساخت پایلوت تقطیر چند منظوره
- تولید منوکلرو استیک اسید در مقیاس پایلوت و صنعتی
- استخراج با سیال فوق بحرانی، استخراج اوژنول از گل میخک
- ساخت مجموعه استخراج فوق بحرانی
- روغن زدایی از پارافین واکس
- پارافین زدایی از روغن
- گرانول سازی کود ترکیبی NPK
- فرآیندهای جداسازی غشایی برای جداسازی در فازهای گاز و مایع
- شبیه سازی برش های نفتی
- بررسی امکان تغییر فرمولاسیون بنزین در کشور
- فرآیندهای جداسازی غشایی برای جداسازی در فازهای گاز و مایع
- بازیافت NMP از ضایعات مجتمع پتروشیمی و افزایش خلوص NMP تجاری برای مصارف ویژه
- جذب گاز در محلول های امولسیونی
- ساخت افروندی پیپرازین
- ساخت پایلوت چند منظوره جذب گازها

مقالات منتشر شده:

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3. M. Mafi, M. R. Dehghani, B. Mokhtarani, " Novel liquidliquid equilibrium data for six ternary systems containing IL, hydrocarbon and thiophene at 25C", *Fluid Phase Equilibria* 412 (2016) 21-28
4. B. Mokhtarani, M. Mafi , M. Keshavarz, H.R. Mortaheb, K. Tabar Heidar, "Biofiltration of BTEX in a Mixture Bed of Bagasse and Activated Carbon using *Aspergillus Fungi*" *J. Iran Chem. Eng.* (2014).
5. Babak Mokhtarani, Javad Musavi, Mehdi Parvini, Morteza Mafi, Ali Sharifi, Mojtaba Mirzaei, "Ternary (liquid–liquid) equilibria of nitrate based ionic liquid + alkane + benzene at 298.15 K: Experiments and correlation", *Fluid Phase Equilibria* 341 (2013) 35–41
6. H.R. Mortaheb, A.A. Nozaeim, M. Mafi, B. Mokhtarani, "Absorption of carbon dioxide in emulsions of aqueous monoethanolamine/diethanolamine solutions in kerosene/n-heptane", *Chemical Engineering Science*, Volume 82, 12 September 2012, Pages 44-51
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11. H.R. Mortaheb, M. Mafi, A. Zolfaghari, B. Mokhtarani, N. Khodapanah, F. Ghaemmaghami, "Absorption of ethylene from ethylene-ethane gaseous mixture by AgNO₃ solution in a semi-continuous process", *Can. J. Chem. Eng.* 87 (2009) 957– 964.
12. B. Mokhtarani, A. Sharifi, H.R. Mortaheb, M. Mirzaei, M. Mafi, F. Sadeghian, "Density and viscosity of 1-butyl-3-methylimidazolium nitrate with ethanol, 1-propanol, or 1-butanol at several temperatures", *J. Chem. Thermodyn.* 41 (2009) 1432–1438.
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- 2- A.A. Nozaeim, H.R. Mortaheb., M. Mafi, Mokhtarani B., Mortazavi M., Salehi Shahrabi S., "Study on absorption of CO₂ in different absorbents under pressure by a batch reactor", 13th Iranian National Chemical Engineering Congress & 1st International Regional Chemical and Petroleum Engineering, Kermanshah, Iran, 25-28,October, 2010
- 3- B. Mokhtarani 1, M. Mafi, H.R. Mortaheb, K. Tabar Heidar and A. Sabzi, "Removal of BTEX Mixture by a Compost Bed Biofilter", 13th Iranian National Chemical Engineering Congress & 1st International Regional Chemical and Petroleum Engineering, Kermanshah, Iran, 25-28,October, 2010
- 4- B. Mokhtarani * , H.R. Mortaheb, M. Mafi, and M.H. Amini, " Cheese Whey Protein Separation in Aqueous TwoPhase Systems of Polymer Salt", 13th Iranian National Chemical Engineering Congress & 1st International Regional Chemical and Petroleum Engineering, Kermanshah, Iran, 25-28,October, 2010
- 5- A. Zolfaghari, H.R. Mortaheb, F. Meshkini, M. Mafi "Removal of NMP by photocatalytic degradation in a mixed reactor", , The 6th International Chemical Engineering Congress & Exhibition (IChEC 2009), Kish Island (2009).
- 6- H.R. Mortaheb, M. Mafi, B. Mokhtarani, A. Sharifi, M. Mirzaee, N. Khodapanah, "Study on Gas Absorption form a Gaseous Mixture into Silver Nitrate Solution in Ionic Liquid of [Bmim]NO₃", 12th Iranian Chemical Engineering Congress , Tabriz (2008).
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