

دکتر بهنام خوش اندام

دانشیار

دانشکده مهندسی شیمی، نفت و گاز

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خلاصه

انتشار مقالات تحقیقاتی در:

- تحقیقات آزمایشگاهی و محاسباتی در زمینه واکنش های گاز-جامد غیر کاتالیستی و کاتالیستی، روش های جداسازی و سنتز سوخت ها
- مدل سازی ریاضی نفوذ و واکنش شیمیایی در محیط های متخلخل

تحصیلات

دکتری

(۱۳۷۶-۱۳۸۳)

دانشگاه صنعتی امیرکبیر (پلی تکنیک تهران)
مهندسی شیمی - پدیده های انتقال و عملیات جداسازی
عنوان رساله:
بررسی واکنش ها بین گاز متان و اکسید های کبالت، منگنز و کروم

کارشناسی ارشد (۱۳۷۴-۱۳۷۶)

دانشگاه صنعتی امیرکبیر (پلی تکنیک تهران)
مهندسی شیمی
عنوان پایان نامه:
بررسی مسیر حرکت ذرات در هیدروسیکلون ها جهت جداسازی مایع- جامد
و محاسبه فاکتور جداسازی

کارشناسی (۱۳۶۶-۱۳۷۱)

دانشگاه علم و صنعت ایران
مهندسی شیمی - طراحی فرایندهای نفت
عنوان پروژه نهایی:
انتخاب فرایند و طراحی لازم جهت جداسازی مخلوط مایعات استحصالی در
منطقه خانگیران

تجارب حرفه ای

تحقیقاتی

- محقق گروه شیمی مواد، دانشکده علم مواد و متالورژی، دانشگاه کمبریج (۱۳۸۱-۱۳۸۲)

آموزشی

- دانشکده مهندسی شیمی، نفت و گاز، دانشگاه سمنان (تاکنون - ۱۳۸۴)

مدرس

در مقطع کارشناسی:

- انتقال جرم
- عملیات واحد ۱ و ۲
- مکانیک سیالات ۱
- محاسبات پایه ای در فرایندهای شیمیایی
- پدیده های انتقال

- محاسبات عددی
- برنامه نویسی کامپیوتر

در مقطع کارشناسی ارشد و دکتری:

- انتقال جرم پیشرفته
- ریاضیات پیشرفته (در مقطع دکتری)
- واکنش های گاز-جامد (در مقطع دکتری)
- محاسبات عددی پیشرفته
- جداسازی چند جزئی
- مدل سازی ریاضی
- احتراق پیشرفته
- مکانیک سیالات در میکروکانال ها (در مقطع دکتری)
- پدیده های انتقال در محیط ها متخلخل

- گروه مهندسی، دانشگاه آزاد اسلامی (۱۳۸۰-۱۳۷۶)

مدرس

در مقطع کارشناسی:

- انتقال جرم
- انتقال حرارت ۲
- عملیات واحد ۲
- اصول مهندسی احتراق
- خوردگی

- پالایشگاه خانگیران (۱۳۶۹)

مدرس

- خوردگی در صنایع گازی

- شرکت مهندسی لار

مدرس

- نرم افزار MATLAB

تجربه راهنمایی پروژه ها

مقطع کارشناسی ارشد:

- P. Bahrami, "Simulation of crystallization process by cellular automata method", 2013
- S. Sayyad, "Naphthalene sublimation technique used in porous media", 2013
- M. Nouri Shirazi, "Mathematical modelling of cobalt oxide reduction with methane in a fluidized-bed reactor", 2013
- H. Zahedi Sohi, "Cellular automata modeling of non-catalytic gas-solid reactions", 2012
- M. Mataji, "Producing activated carbon from walnut shell to adsorb amine impurities", 2012
- P. Shaban Nashtae, "Producing tungsten carbide from tungsten oxide", 2011
- S. Maroufi, "Non-catalytic gas-solid reactions in fluidized bed reactors (FBRs)", 2010

- M. R. Shahbazi, "Bio-diesel producing from palm oil", 2009
- E. Allameh, "Syngas production from methane using non-catalytic gas-solid reactions", 2009
- L. Allahgholi, "Mathematical modeling of packed bed reactor for carbonation reaction of CaO with CO₂", 2008

- H. R. Darzi, "Mathematical modeling of non-catalytic gas-solid reactions-multicomponent diffusion and bulk flow effect", 2007

مقطع کارشناسی:

- S. Suki, M. Abolhassani, "Adsorption with activated carbon", 2012
- B. Mirzaee, M. Javaheri, "Simulation of absorption process in packed columns", 2012
- H. Saatchi, "Simulation of non-catalytic gas-solid reactions in packed-bed reactors- a GUI preparation in MATLAB", 2011
- M. Mohammadi, "Kinetics and simulation of fermentation bioreactor for bio-ethanol production", 2011
- S. Gohari, M. H. Mozaffarian, "Making a cylindrical furnace", 2011
- R. Ashraf, "Naphthalene sublimation technique", 2011
- Z. Amiri Rigi, "Production of sandpaper", 2010
- A. Farrokhi, K. Momenian, "Thin-film evaporator design for used-engine oil reclamation", 2010
- M. A. Hossein Nejad Ariani, "Production of antifreeze and investigation of its recovery process", 2009
- A. Nemati, "Engine oil reclamation- the methods", 2008
- N. Monirimanesh, "Mathematical modelling of SOFC fuel cell", 2008
- S. Maroufi, "Mathematical modelling of non-catalytic gas-solid reactions", 2007

- M. Shahrabi, "Designing Thin Film Evaporators (TFEs) applicable in waste engine oil reclamation, 2007

تجربه برنامه نویسی کامپیوتر

- شرکت لاستیک کرمان (۱۳۷۸-۱۳۸۰)
برنامه نویسی کامپیوتر

توسعه نرم افزار user-friendly جهت مدلسازی ریاضی فرایند های پخت، گرمایش میکروویو و پساپخت لاستیک

مقالات

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دوره های تخصصی

دوره گرمایش میکروویو و فرکانس رادیویی، دانشگاه کمبریج