

# DREAM CODER

6#334, Zisong Apt  
1037 Luoyu Rd, Wuhan, China, 430074  
☎ +86-18681776492/+1-6125162222  
✉ service@dreamcodergroup.com

## OBJECTIVE

Admission to Mechanical Engineering/Power Engineering graduate programs

## EDUCATION

- 2010.09–2014.06 **B.E. in Mechanical Engineering**, Peking University (PKU), Beijing, China
- GPA: 100/100
  - Rank: 1/23
  - IELTS 6.5 (R 7, L 7, S 7, W 7), GRE 325 (Verbal 160, Quantitative 165, AW 6.0)
  - Featured courses: Mechanical Design 92, Computer Control System Power Engineering 94, Computer Aided Technique 89, Technology of CAD 91, Analogue Electronics 90, Industrial Practice 90, Experiment on Foundation of Project Control 95

## PUBLICATION

- Yu, X., Biodegradable polymer microcapsules fabrication through a template-free approach. *Langmuir* 2011, 27, 10265–10273. (IF=4.186)
- Yu, X. (co-first), Generation of polymer nanocapsules via a membrane-extrusion emulsification approach. *Materials Letters* 2012, 77, 96–99. (IF=2.307)

## WORK EXPERIENCE

- 2013.03–present **Research Assistant**, State Key Laboratory of Coal Combustion, Advisor Prof. YAO, Hong
- Gas-solid Reaction Kinetics Analyzer Based on Micro-dual Bed Fuel-staging Thermal Transition China NSF Funding: 2011YQ120039
- Verified the flow field distribution stimulated by CFD
  - Tested the pressure distribution and particle trajectory in the flow field
  - Wrote the online data collection and processing program for the CO<sub>2</sub> detector, the detector together with the program was patented as new invention, **PATENT NO. 201310438571.9**
- 2013.05 **Modeling the Pulverized Coal Combustion in a Single Burner Furnace**
- Supervised by Prof. FANG, Qingyan
- Stimulated velocity field, temperature field, oxygen concentration field of the furnace with CFD
  - Optimized the combustion condition considering different impact factors

## INTERNSHIP

- 2013.07–2013.08 **Marketing Assistant, Pepsi China, Beijing**
- Marketing data analysis
- 2013.06–2013.07 **Operational Department Assistant, Xiangyang Power Plant, Xiangfan**
- Steam turbine maintenance

## SKILLS

VC/VB/Matlab/Access/SQL Server/Fluent/Gambit  
L<sup>A</sup>T<sub>E</sub>X