

# QICHEN SONG

Zisong6#325, Huazhong Univ. of Sci. & Tech., Wuhan, 430074, China    ☎ +86 131 6323 8726    ✉ kitchensong@gmail.com

## EDUCATION

**Huazhong University of Science and Technology (HUST), 2011.09-present**

Major: Thermal Energy and Power Engineering

Degree: Bachelor of Engineering, expected 2015.06

Overall GPA: 92.2/100    Overall Rank: 1/366

### Standard Tests

TOFEL: 107 (R29 L30 S23 W25)

GRE: V152+Q170+AW4.0

## RESEARCH EXPERIENCE

### Research on coupling between different vibrational modes in graphene

2014.09-present

Advisor: Prof. Nuo Yang, Dr. Meng An    *Nano Heat Group*

- Manipulating temperature gradient in separated directions
- Investigating coupling between different vibration modes and their contributions to thermal conductivity

### Research on modulation of thermal conductivity in folded graphene

2013.11-2014.09

Advisor: Prof. Nuo Yang    *Nano Heat Group*

- Independently wrote code of nonequilibrium molecular dynamics (NEMD)
- Designed innovative structure to reduce the thermal conductivity significantly
- Obtained size-independent thermal conductivity that characterizes large-sized folded graphene's thermal properties

### Research on the temperature and flow field analysis of sapphire crystal growth

2013.08-2013.11

Advisor: Prof. Haisheng Fang    *Multiscale Process Modeling Lab*

- Analyzed the velocity field by using Computational Fluid Dynamics software
- Used Discrete Phase Model to investigate the distribution of inert impurities
- Simplified the complex system and found a new way to improve sapphire's quality

### Team leader on designing the device utilizing wave energy in small watersheds

2013.05-2013.08

Advisor: Prof. Jun Xiang

- Designed the innovative component to collect and convert the wave energy
- Successfully optimized the structure by modeling and effectively improved the conversion efficiency
- Made the prototype of the device

## PATENT

Q.C. Song et al, "An electricity generating device by utilizing small wave energy" (submitted 2014)

## HONORS AND AWARDS

### National Scholarship (Three times)

2012,2013,2014

Top 1% among all competitors, awarded by Ministry of Education of PRC

### Outstanding Student of Huazhong Univ. of Sci. & Tech.

2012-2014

Top 1% among all 2nd & 3rd year students, one of the top honor for undergraduates

### Merit Student (Three times)

2012,2013,2014

Top 4% among all competitors, issued by HUST

### Excellent Award in the 3rd National Water Resource Innovation Design Competition

2013.07

## INTERNSHIP EXPERIENCE

### Summer Intership at Shangu Power Co.,Ltd., Xi'an

2014.06

- Learned the manufacturing process of tail gas turbine
- Learned the CFD calculation for compressor and turbine design

## COMPUTER SKILLS

FORTRAN90(MPI), C++, Fluent, AutoCAD, MATLAB/Simulink,  $\text{\LaTeX}$