Ning Tian

1000 Emery Rd, Lawrence, US • 66044 • ning.tian@ku.edu • +1(785)551-9499

Education

Ph.D *Mechanical Engineering, University of Kansas*

M.S. *Engineering Thermal Physics, Northwestern Polytechnical University (NPU), China GPA 85.10/100 March 2015*

B.S. *Thermal and Power Engineering, Northwestern Polytechnical University, China GPA 85.43/100 June 2012*

Project Experience

- **A novel study on the cooling technology of high-temperature turbine blade trailing edge** *supported by Hot Components Cooling Technique Laboratory sponsored by Shenyang Engine Design & Research Institute, Supervisor Prof. Huiren Zhu, March 2014 to March 2015*
  - ▷ design several types of novel inter cooling passage in the trailing edge of turbine blade
  - ▷ establish a complex experimental setup and use narrow-band thermochromic liquid crystals for measurement
  - ▷ develop Matlab programs to calculate the Nusselt number on the target wall
  - ▷ obtain the effect of the Reynolds number on the Nusselt number at a constant nozzle-plate spacing
- **Simulation of flow and heat transfer of inclined impingement in the trailing edge of turbine blade** *sponsored by National Grand Fundamental Research 973 Program of China, Supervisor Prof. Huiren Zhu, July to December 2013*
  - ▷ designed several novel inclined impingement channels with better heat transfer characterisitcs than traditional pin-fin channel in the trailing edge of turbine blade
- **Numerical analysis of heat transfer characteristics of C-SiC composite material cooled by kerosene** *sponsored by the National Natural Science Foundation of China, Supervisor Pr. Huiren Zhu, October 2012 to January 2013*
  - ▷ analyzed effect of hole spacing and kerosene velocity on heat transfer characteristics of C-SiC by Fluent 12.1
- **A study of external heat transfer characteristics of turbine blade** *supported by Short Duration Transonic Blowdown Heat Transfer and Film Cooling Wind Tunnel sponsored by the National Natural Science Foundation of China cooperated with Dr. Hongcai Li, Supervisor Prof. Huiren Zhu, March 2012 to June 2012*
  - ▷ investigated the influence of the Reynolds number and pressure ratio on pressure coefficient, heat transfer coefficient and recovery temperature of turbine blade experimentally and numerically
- **An exploration of adsorption capacity of Mg-Al hydrotalcite for fluoride ion** *supported by Innovation Laboratory for Energy Saving and Emission Reduction sponsored by National Innovation Experiment Program for University Students, Supervisor Mr. Yu Sha, October 2010 to June 2012*
  - ▷ prepared Mg-Al hydrotalcite and studied the effect of PH value on its adsorption ability for fluoride ion

Professional Memberships and Activities

- **Vice president**, set up *the Student Branch of Shaanxi Society of Engineering Thermophysics, March to September 2014*
- **Attendee**, made a presentation at *5th International Symposium on Jet Propulsion & Power Engineering, September 2014*
- **Instructor**, taught Heat Transfer at *Power Engineering Department, Xi'an Electric Power College, March to July 2013*
- **Intern**, participated in production practice at *AVIC South Aviation Industry Co., Ltd., August 2011*
- **Intern**, took part in cognition practice at *AVIC Xi'an Aero-engine Co., Ltd., May 2009*

Extracurricular Activities

- **Volunteer** at *4th International Symposium on Jet Propulsion & Power Engineering*, Xi'an, *September 2012*
- **Class president** of *Class 20120706 of School of Power and Energy of NPU, September 2012 to June 2015*
- **Vice class president** of *Class 7282 of School of Power and Energy of NPU, March 2009 to June 2012*
- **Member** of *Table Tennis Team of School of Power and Energy of NPU, April 2009 to June 2012*
- **Minister** of *Liaison Department of English Association of NPU, March 2010 to July 2012*
- **Volunteer** at *Xi'an China International Horticultural Exposition* 2011, *August 2011*
- **Volunteering tutor** at *Xinfeng Primary School in Zhangye, Gansu, China, July 2009*

Publication and Patent

- **Ning Tian**, Huiren Zhu, Meihua Zhang (2014). Numerical analysis of flow and heat transfer of inclined impingement in the trailing edge of turbine blade. In *International Symposium on Jet Propulsion and Power Engineering*, Xi'an, China, Paper 2014-ISJPPE-3008.
- Huiren Zhu and **Ning Tian**, "An inclined impingement cooling channel", Chinese Patent Application 201410487786.4, September 22, 2014.

Honors and Awards

- University-wide Outstanding Graduate Award of NPU **(5/100)**, *2012*
- Excellent Volunteer of the International Horticultural Exposition 2011 Xi'an **(1/1000)**, *2011*
- Outstanding Young Volunteer of Shaanxi Province, *2011*
- National Endeavor Scholarship **(3/100)**, *2010*
- Second Prize of NPU Undergraduate Mathematical Contest in Modeling, *2010*
- Scholarship for Excellent Student of NPU, *2009-2010*

Records of Standard Tests

- TOFEL total score 96 (reading 28 listening 21 speaking 22 writing 25), *December 2014*
- GRE total score 318 (verbal reasoning 150 quantitative reasoning 168 analytical writing 3.5), *October 2013*
- National computer rank examination certificate (Grade 3), certificate number 35316101293526, *March 2010*