

## **EDUCATION**

- 2014-Present    **Imperial College London**  
Mechanical Engineering, PhD Candidate (to be awarded on Aug. 1<sup>st</sup> 2018)  
Advisor: Professor Rune Peter Lindstedt
- 2010-2013      **Institute of Mechanics, Chinese Academy of Sciences, Beijing, China**  
Master's Degree in Fluid Mechanics, (admission exam-exempted).  
**GPA 89.35/100    Rank 1 of 72**  
Advisor: Professor Chen, Lihong
- 2006-2010      **Tongji University, Shanghai, China**  
Bachelor of Engineering Degree in Engineering Mechanics  
**GPA 4.47/5        Rank 3 of 39**
- 

## **SCHOLARSHIPS AND AWARDS**

- 2014-2017      Imperial College London PhD Scholarship (50 awarded a year at Imperial)
- 2017            Dean's Fund, Faculty of Engineering, Imperial College
- 2014            Faculty for the Future Finalist (Schlumberger Foundation)
- 2013            Brown University Fellowship, Applied Mathematics.
- 2013            Outstanding Graduate in Beijing (2/72)
- 2013            Outstanding Graduate in the University of Chinese Academy of Sciences (2/72)
- 2012            National Scholarship for Postgraduates (1/40)
- 2011            Outstanding Student Leader and Outstanding Student in the Graduate University of Chinese Academy of Sciences (2/72)
- 2010            Best Undergraduate Thesis awarded by Tongji University (1/39)
- 2006-2007      National Motivational Scholarship (2/39)
- 2006-2009      Three-time Tongji University Excellent Student Scholarship
- 

## **RESEARCH EXPERIENCE**

- 04/2014      **Department of Mechanical Engineering, Imperial College London, UK**  
-present      **Serving as a research assistant in the modelling of turbulent flames.**  
Current Project: Turbulent combustion at high Reynolds numbers using second-moment methods and transported *pdf* modelling.
- 09/2010-02/2014    **Institute of Mechanics, Chinese Academy of Sciences, Beijing, China**  
Served as a research assistant on the supersonic combustion project.  
Master's thesis: *Investigation on Simplified Modelling and Its Application to Dual-Mode Scramjet Combustor* (in Chinese).
- 02/2010-06/2010    **Institute of Mechanics, Chinese Academy of Sciences, Beijing, China**  
Completed an undergraduate internship in the Scramjet Group.  
Bachelor's thesis: *Investigation on Cavity Flow field and Mixing of Transverse Fuel Jets in Supersonic Flow* (in Chinese).
- 07/2009-09/2009    **Institute of Mechanics, Chinese Academy of Sciences, Beijing, China**  
Elected as a summer intern by the "Excellent Undergraduate Students Program".  
Assisted experiments in PIV measurements and wrote a report entitled *Progress on Micropropulsion*.

06/2009-  
07/2009

**China Ship Scientific Research Center, Wuxi, China**

Completed a summer internship by assisting experiments on ship structural mechanics.

---

## PUBLICATIONS AND CONFERENCES

1. **L. TIAN**, R.P. LINDSTEDT, “Impact of molecular mixing and scalar dissipation closures on turbulent flames approaching blow-off”, submitted to *Combustion and Flame*.
2. **L. TIAN**, R.P. LINDSTEDT, “Evaluation of reaction progress variable – mixture fraction statistics in partially premixed flames”, Proceedings of the Combustion Institute, 2018, *Article in press*, <https://doi.org/10.1016/j.proci.2018.06.129>.
3. **L. TIAN**, R.P. LINDSTEDT, “The impact of dilatation, scrambling, and transport in turbulent premixed flames”, *Combustion Theory and Modelling*, 2017, 21(6): 1114-1147.
4. **L. TIAN**, L.H. CHEN, Q. CHEN, X.Y. CHANG, “Engine performance analysis and optimization of a dual-mode scramjet with varied inlet conditions” *Acta Mechanica Sinica*, 2016, 32(1): 75-82.
5. **L. TIAN**, L.H. CHEN, Q. CHEN, F. LI, X.Y. CHANG, “Quasi-one-dimensional multimodes analysis for dual-mode scramjet,” *Journal of Propulsion and Power*, 2014, 30(6): 1559-1567.
6. **L. TIAN**, R.P. LINDSTEDT, “The impact of dilatation and scrambling effects in premixed turbulent flames”, the 36<sup>th</sup> International Symposium on Combustion, 2016.7, Seoul, Korea.
7. **L. TIAN**, L.H. CHEN, Q. CHEN, F. LI, X.Y. CHANG , “Modeling and measurements of heat release distributions in dual-mode scramjets,” the 18<sup>th</sup> AIAA/3AF International Space Planes and Hypersonic Systems and Technologies Conference, 2012.9, Tour, France (*indexed by EI/ISTP*).
8. **L. TIAN**, R.P. LINDSTEDT, “Transported PDF modelling and analysis of partially premixed flames”, the 8<sup>th</sup> European Combustion Meeting, 2017.4, Dubrovnik, Croatia.
9. **L. TIAN**, R.P. LINDSTEDT, “Modelling of pressure dilatation and transport terms in premixed turbulent flames”, the 11<sup>th</sup> European Fluid Mechanics Conference, 2016.9, Seville, Spain.
10. **L. TIAN**, R. P. LINDSTEDT, “Redistribution and dilatation effects in turbulent premixed opposed jet flames ”, the 7<sup>th</sup> European Combustion Meeting, 2015.3, Budapest, Hungary.
11. **L. TIAN**, L.H. CHEN, “Heat release distribution in a dual-mode scramjet combustor”, (in Chinese), the 5<sup>th</sup> National Conference on Hypersonic Technology, 2012.11, Guilin, China.
12. **L. TIAN**, L.H. CHEN, “simplified modeling for penetration heights of liquid jets in supersonic cross flow” (in Chinese), the 4<sup>th</sup> National Conference on Hypersonic Technology, 2011.12, Sanya, China.
13. C. L. LI, L.H. CHEN, H.B. GU, **L. TIAN**, Y. LIANG, “Experimental study for penetration height of liquid jets in supersonic flow” (in Chinese), the 14<sup>th</sup> National Conference on Shock and Shock Tube, 2010.7, Huangshan, China.

---

## SKILLS

- Proficient in CFD programming (Fortran, VB, C++ and MATLAB) and CFD software (Fluent, CFD++)
- Skilled in High Performance Computing (MPI and OpenMP programming)
- Experienced in optical methods (schlieren, shadowgraph and mie scattering) and familiar with advanced diagnostics (TDLAS)
- Skilled in graphic design software (Photoshop)