Chih-Long Lin, associate professor, Lin2737.cafa@hinet.net, (07)6268881-111



Academic Record Ph.D, National Chen-Kung University, Institute of Aeronautics and Asrtronautics (80/9-85/6) Master, National Chen-Kung University, Institute of Aeronautics and Asrtronautics (78/9-80/6) Bachelor, National Chen-Kung University, Department of Aeronautics and Asrtronautics (74/9-78/6)

## **Professional Experience**

Research Assistant (85/7-86/6) Engineer, Navy Ship Development Center (86/10-90/10) Assistant Professor, CAFA (90/10-98/8) Associate Professor CAFA (98/8 -)

# Research

- 1. micro aerial vehicle
- 2. charring ablator

### **Specialities**

Fluid Mechanics, Thermodynamics, Aerodynamics, Gas Turbine Engine, Propulsion, Combustion, Computer aid Design.

#### **Publication List**

### A. Journal Paper

- 1. H.H. Chiu, C.L. Lin, 1996/1, Performance Characteristics of Hybrid Rockets for Space Applications, Space Technology, Vol.16,No.1, pp.1-14.
- 2. H.H. Chiu, C.L. Lin, 1997/1, Anomalous Group Combustion of Premixed Clusters, 26th International Symposium on Combustion, pp.1310-1318.
- 3. C.L. Lin, 1999/4, Use CAD to design propeller for ship, Navy Academic journal, pp.43-54.

- J. L. Lin and C. S. Yang, 2005/5, Heat Transfer Analysis of Charring Ablators Under Aerodynamic Heating, Journal of Aircraft Engineering and Aerospace Technology, Vol.77, no.5.,pp. 214-221.(SCI, EI)
- 5. J.L. Lin and C. Gau, Film Cooling Performance and Heat Transfer over an Inclined Film-Heated Surface with Slot Injection, Journal of Energy, Heat and Mass Transfer, Vol.27, pp.171-189, 2005.
- J.L.Lin, C.Y.Wei and C.Y. Lin, 2007/5, Aerodynamic Performance of Thin Wings at Low Reynolds Numbers, Journal of Aircraft Engineering and Aerospace Technology, Vol.79, no.3.,pp. 245-253. (SCI, EI)
- J.L.Lin, C.Y.Wei and C.Y. Lin, 2007/7, Design and testing of fixed-wing MAVs, Journal of Aircraft Engineering and Aerospace Technology, Vol.79, no.4, pp. 379-386. (SCI, EI)

8. Lin, J.L., Wei, C.Y. and Lin, C.Y., 2009/3, Aerodynamic Performance of Thin Wings at Low Reynolds Numbers, Aircraft Engineering and Aerospace Technology, Vol.81, no.1, pp.51-58, 2009 (SCI, EI)

9. J.L. Lin, 2009/7, Two-phase flow effect on hybrid rocket combustion, ACTA Astronautica, Vol. 65, pp. 1042–1057 (SCI, EI)

## **B.** Conference Paper

- H.H. Chiu, C.L. Lin, 1995/7, Numerical analysis of Spray Combustion in Hybrid Rocket, AIAA 95-2687, presented in 31st Joint Propulsion Conference and Exhibit, San Diego, California.
- H.H. Chiu, C.L. Lin, 1995/10, Performance Characteristics of Hybrid Rockets for Space Applications, IAF-95-S.1.01, 46th International Astronautical Congress, Oslo, Norway.
- H.H. Chiu, C.L. Lin, 1996/5, Anomalous Group Combustion Theory- Transient Duality in Group Combustion, 4th International Symposium on Special Topics in Chemical Propulsion: Challenges in Propellants and Combustion 100 years after Nobel, Stockholm, Sweden, pp.312-322.
- 4. S.L. Tsai, C.L. Lin, 1999/10, Specific Impulse Analysis of Hybrid Rockets, IAF-99-S.1.02, 50th International Astronautical Congress, Denmark.
- J.M. Char, C.L. Lin and C.L. Chiu, 2002/10, Numerical Simulation of Hybrid Rocket Combustor with Premixed Chamber, Conference on Aeronautics and Astronautics, CAFA, Gang Shang, S2-43.
- Wei, C. Y., Lin, J. L., and Tung, D.W., 2002/10, Characteristics of Vortex Shedding for Low-Reynolds-Number Airfoils, Conference on Aeronautics and Astronautics, CAFA, Gang Shang, S5-27.
- 7. C.P. Tu, C.C. Wang, C.L. Lin, C.I. Chen, 2002/10, Based on Estimator of Higher

Order Statistics and Neural Networks for Classification the Signals of Rotating Machinery, Conference on Aeronautics and Astronautics, CAFA, Gang Shang, S6-09.

- C.P. Tu, C.C. Wang, C.L. Lin, C.I. Chen, 2002/10, Structural Analysis Based on Blind System Identification and Wavelet Transform, Conference on Aeronautics and Astronautics, CAFA, Gang Shang, P-79.
- Wei, C. Y. and Lin, J. L., 2002/10, Modeling on Heat Transfer Effect of Melt-Layer in Hypersonic Aerodynamic Ablation, The CAFA Conference of Aeronautical and Astronautical Engineering, pp. 167-176.
- C.S. Yang, J.L. Lin and C. Gau, 2003/12, Film Cooling Performance and Heat transfer over an inclined Film-Cooling Surface, CCAS/AASRC joint Conference, Tainan.
- 11. J.L. Lin, C.S. Yang and C. Gau, 2003/12, Cooling Performance and Heat Transfer over an Inclined Film-cooled Surface at Different Divergent Angles with Respect to the Highly Turbulent Mainstream, 27<sup>th</sup> Conference of Applied Mechanics, Tainan.
- C.L. Lin, C.Y. Wei, Heat Transfer Analysis of Charring Ablators under Aerodynamic Heating, 2004 CAFA Conference of Aeronautics and Mechanics, Oct 15, 2004, GangShan, Taiwan.
- C.L. Lin, C.Y. Wei, C.Y. Lin and F.B. Shaw, Study on the aerodynamic characteristics of thin airfoil MAV, H09, 2005/12, AASRC/CCAS Joint Conference, Kaoshung.
- 15. C.M. Char, C.K. Shu, C.L. Lin and W.H. Tsan, Study on the solid-fuel iginition in a supersonic ramjet, H65, 2005/12, AASRC/CCAS Joint Conference, Kaoshung.
- 16. Shih-Chang Yang and J. L. Lin, Numerical Simulation of the Coupled Aerodynamic Heating and Charring Ablators Heat Transfer Model, THE 6TH ASIAN COMPUTAITIONAL FLUID DYNAMICS CONFERENCE, TAIWAN, OCTOBER 24~OCTOBER 27, 2005.
- 17. Shih-Chang Yang and J. L. Lin, Numerical simulation of the heat transfer characteristics of charring ablators, 16<sup>th</sup> conference on combustion, Chinese combustion institute.
- C.M. Char, C.K. Shu, C.L. Lin and W.H. Tsan, 2007/10, Investigation of solid fuel flowfield in a supersonic flow, The CAFA Conference of Aeronautical and Astronautical Engineering, Gang Shang, F-7.
- C.D. Chang, D.W. Zhou and C.L. Lin, 2008/8, Achieving Full Parallelism of Membrane Vibration System Using MD Retiming of Wave Digital Filters Technique, 15<sup>th</sup> CFD conference.
- 20. C. G. Liu, Chang Huey-Meei, Tain Pon-Lain, Lin Chu-Lung, Oct 15, 2007, "An

Experimental Analysis the Student's Learning Efficiency of Senior Students of ROCAFA by the Solution Focus Therapy and Physical Postures", 2007 CAFA Conference of Aeronautics and Mechanics, GangShan, Taiwan.

- 21. C. G. Liu, Chang Huey-Meei, Lin Chu-Lung, Fu Jan-Kaung, Dec 2007, "Experimental study on the effect of the physical posture on brain wave", 31<sup>th</sup> Conference of Applied Mechanics, , GangShan, Taiwan.
- 22. C. G. Liu, Chang Huey-Meei, Lin Chu-Lung, April 2008, "Experimental study on the effect of different posture on brain wave", The 15<sup>th</sup> Conference of the science of human body, mind and consciousness, Taipei, Taiwan.
- 23. C. G. Liu, Chang Huey-Meei, Lin Chu-Lung, Chen Sheng-Chgi," The EEG Study on the effect of posture feedback to brain α waves", 2008 BME CONFERENCE, Dec. 2008, paper No. 439.
- 24. C. G. Liu, Chang Huey-Meei, Fu Jan-Kaung, Lin Chu-Lung, Chen Sheng-Chgi," The EEG Study on the Effect of Posture Feedback and Bio-energy to Brain α Waves", Ming Chuan University's 2009 International Academic Conference -2009 Symposium on Biomedical Technology & Healthcare Management, 13 March 2009, Pages 57-68.
- 25. C.L. Lin, "Performance analysis of hybrid rockets with prevaporation zone," 2010 CAFA Conference of Aeronautics and Mechanics, GangShan, Taiwan.
- 26. C. G. Liu, Chang Huey-Meei, Lin Chu-Lung, 2010/4, "The effect of gesture and family on one's brain wave spectrum," 4<sup>th</sup> Intelligent Systems Conference on Engineering Application, Far-East Technical University.

#### C. Book, Technical Report:

1. C.L. Lin, 1991/6, The effect of turbulence intensity on film cooling effectiveness, Master Thesis.

2. C.L. Lin, 1996/6, Selected problems on interfacial transport phenomena in two-phase systems, Ph.D Thesis.

3. H.H. Chiu and C.L. Lin, 1996/10, Numerical analysis on hybrid rockets, NSC final report, NSC-85-2212-E-006  $\,^\circ$ 

4. H.H. Chiu and C.L. Lin, 1997/6, Numerical analysis on the scatter of bullet group, NSC final report.

5. H.H. Chiu and C.L. Lin, 1998/2, 1999/2, Design and analysis of hybrid rocket, NSC final report, NSC-86-2212-E-006  ${\,^\circ}$  NSC-87-2212-E-006  ${\,^\circ}$ 

6. C.L. Lin and C.C. Wang, 2002, Design and fabrication of MAVs, NSC final report,

## NSC 91-2815-C-013-001-E.

- 7. C.L. Lin and C.Y. Wei, 2003, Numerical simulation of the heat transfer of charring ablators, NSC final report, NSC 92-2623-7-013-002.
- 8. C.L. Lin, 2000/5, Stability and buoyancy criteria for navy ships, No. 1869.

# **D. Research Project:**

- "Establishment and Application of a Standard Model for Freshmen of ROCAFA to Elevate Student's Learning Efficiency," <u>Co-chairperson</u>, March 2006 ~ Nov. 2006, 2006 Military Education Research Project, NDM. (國防部 95.5.22 睦暌 0950002666 號令)
- "Experimental Research on Senior Students of ROCAFA to Elevate Student's Learning Efficiency," <u>Co-Chairperson</u>, March 2007 ~ Nov. 2007, 2007 Military Education Research Project, NDM. (國防部 96 選達字第 096002468 號)