

EDUCATION	<b>Stanford University</b> <ul style="list-style-type: none"><li>• <i>Doctor of Philosophy</i>, Mechanical Engineering</li><li>• <i>Doctor of Philosophy Minor</i>, Aerospace Engineering</li><li>• <i>Master of Science</i>, Mechanical Engineering</li></ul>	2008 – present
	<b>Indian Institute of Technology Madras</b> <ul style="list-style-type: none"><li>• <i>Bachelor of Technology</i>, Mechanical Engineering</li></ul>	2004 – 2008
RESEARCH INTERESTS	Combustion, Chemical kinetics, Surrogate fuels	
RESEARCH EXPERIENCE	<b>Cornell University</b> <i>Post-doctoral associate, Sibley school of Mechanical and Aerospace Engineering</i> Working with Dr. Perrine Pepiot, on <ul style="list-style-type: none"><li>• Analyzing multi-component fuel effects in flames using simulations</li></ul>	2014 – present
	<b>Stanford University</b> <i>Research Assistant, Flow Physics and Computational Engineering</i> Worked with Dr. Heinz Pitsch, on <ul style="list-style-type: none"><li>• Proposing surrogates for jet fuels</li><li>• Formulating a consistent mechanism for the oxidation of surrogate components<ul style="list-style-type: none"><li>• Substituted aromatics, <i>n</i>-dodecane, and methylcyclohexane</li></ul></li></ul>	2008 – 2013
	<b>Indian Institute of Technology Madras</b> <i>Bachelor's Project</i> Worked with Prof. N. R. Panchapakesan, Department of Aerospace Engineering, on Aerodynamics of flow around rectangular cylinders.	2007 – 2008
	<b>TVS Motors, Hosur, India</b> <i>Summer Internship</i> An analytical model for a mono-tube hydraulic shock absorber damper	2006
	<b>Indian Institute of Science, Bangalore</b> <i>Summer Research Fellowship program</i> Worked with Prof. Jaywant H. Arakeri, Department of Mechanical Engineering, Experiments to study natural convection in a tall vertical pipe	2005
	<b>Indian Institute of Technology Madras</b> <i>Junior Year Project</i> Worked with Prof. Venkatarathnam, Department of Mechanical Engineering, Enabled virtual instrumentation using LabVIEW as a software tool	2005
TEACHING EXPERIENCE	<b>Stanford University</b> <i>Teaching Assistant for "ME351A: Fluid Mechanics", Course instructor: Dr. Lester Su</i> Responsibilities: <ul style="list-style-type: none"><li>• Held office hours and graded assignment sheets</li><li>• Assigned problems for the assignments and exams</li></ul>	2012

## PUBLICATIONS

Krithika Narayanaswamy, Perrine Pepiot, and Heinz Pitsch,  
 “Jet Fuels and Fischer-Tropsch fuels - Surrogate definition and chemical kinetic modeling”  
*Combustion and Flame*, in preparation.

Krithika Narayanaswamy, Heinz Pitsch, and Perrine Pepiot  
 “A chemical mechanism for low to high temperature oxidation of methylcyclohexane as a component of transportation fuel surrogates”, under review in *Combustion and Flame*.

Krithika Narayanaswamy, Perrine Pepiot, and Heinz Pitsch,  
 “A chemical mechanism for low to high temperature oxidation of *n*-dodecane as a component of transportation fuel surrogates”, *Combustion and Flame*, 2014.

Krithika Narayanaswamy, Guillaume Blanquart, and Heinz Pitsch,  
 “A consistent chemical mechanism for oxidation of substituted aromatic species”  
*Combustion and Flame*, 157 (10) (2010) 1879–1898.

## CONFERENCE

Krithika Narayanaswamy, Perrine Pepiot, and Heinz Pitsch,  
 “Jet Fuels and Fischer-Tropsch fuels - Surrogate definition and chemical kinetic modeling”  
 8<sup>th</sup> U.S. National Combustion Meeting, University of Utah, Salt Lake City, May 22<sup>nd</sup>, 2013

Krithika Narayanaswamy, Perrine Pepiot, and Heinz Pitsch,  
 “Chemical mechanism for *n*-dodecane and methylcyclohexane as components of transportation fuel surrogates”,  
*Thermal and Fluid Sciences Affiliates and Sponsors Conference*, Stanford University, 2012

Krithika Narayanaswamy, Perrine Pepiot, and Heinz Pitsch,  
 “Progress in surrogate formulations for jet fuels”  
*Thermal and Fluid Sciences Affiliates and Sponsors Conference*, Stanford University, 2011

Krithika Narayanaswamy, Perrine Pepiot, and Heinz Pitsch,  
 “Towards Surrogate formulation for jet fuels”  
*Thermal and Fluid Sciences Affiliates and Sponsors Conference*, Stanford University, 2010

Krithika Narayanaswamy, Guillaume Blanquart, and Heinz Pitsch,  
 “A consistent chemical mechanism for oxidation of substituted aromatic species”  
 6<sup>th</sup> U.S. National Combustion Meeting, University of Michigan, Ann Arbor, 2009

Krithika Narayanaswamy, Guillaume Blanquart, and Heinz Pitsch,  
 “A consistent chemical mechanism for oxidation of substituted aromatic species”  
*Thermal and Fluid Sciences Affiliates and Sponsors Conference*, Stanford University, 2009

## INVITED TALKS

Krithika Narayanaswamy, Perrine Pepiot, and Heinz Pitsch,  
 “A chemical kinetic model for jet fuel surrogates”  
*Cornell Fluid Dynamics Seminar*, Cornell University, April 29<sup>th</sup>, 2014.

Krithika Narayanaswamy, Perrine Pepiot, and Heinz Pitsch,  
 “Development towards a chemical kinetic model for transportation fuel surrogates”  
*Chemical Engineering Seminar*, Indian Institute of Technology Madras, September 6<sup>th</sup>, 2012.

Krithika Narayanaswamy, Perrine Pepiot, and Heinz Pitsch,  
 “Development towards a chemical kinetic model for transportation fuel surrogates”  
*High Temperature Gas Dynamics Seminar*, Stanford University, May 9<sup>th</sup>, 2012.

POSTERS

Krithika Narayanaswamy, Perrine Pepiot, and Heinz Pitsch,  
"Jet Fuels and Fischer-Tropsch fuels - Surrogate definition and chemical kinetic modeling"  
*Thermal and Fluid Sciences Affiliates and Sponsors Conference*, Stanford University, 2013.

Krithika Narayanaswamy, Perrine Pepiot, and Heinz Pitsch,  
"Development of kinetic model for jet fuels and Fischer-Tropsch fuels"  
34<sup>th</sup> *Proceedings of Combustion Institute*, Warsaw University of Technology, Poland, August 4<sup>th</sup>, 2012.

Krithika Narayanaswamy, Perrine Pepiot, and Heinz Pitsch,  
"Kinetic models for surrogate fuels"  
7<sup>th</sup> *U.S. National Combustion Meeting*, Georgia Institute of Technology, Atlanta, March 22<sup>nd</sup>, 2011.