

Professor Irvin Glassman: "Grand Old Man of Combustion"

(1923 - 2019)



	Students	Degree Yr (PhD unless noted)	Thesis Title	Career
1	Edward T. Pitkin	1954MSE	An Experimental Investigation of an Axially Symmetric Supersonic Jet Mixing with Free Air (Rpt 243)	PhD UCLA '64, Prof., Emeritus ME, UCONN
2	Stefan Schrier	1956 MSE	The Effect of a Condensed Exhaust Phase on Monopropellant Rocket Performance	PhD U. Maryland '67, Prof., ME, UCONN, Retired 1987
3	James E.A. John	1957 MSE	An Experimental Investigation of the Bounded Mixing of Two Compressible Axially Symmetric Jet Streams (Rpt 399)	PhD U. Maryland '63, President, Kettering University (deceased)
4	Donald R. Willis	1958	On the Flow of Gases under Nearly Free Molecular Conditions (Rpt 442)	Prof. Emeritus, UC Berkeley (deceased)
5	Ian A. Smith	1958 MSE	The Kinetics and Mechanism of Ethylene Oxide Decomposition at High Temperatures (Rpt 416)	no professional info
6	R.J. Swigart	1958 MSE	A Study of the Kinetics of the Hydrogen-Oxygen Reaction in a New Flow Reactor (Rpt 432)	Engineer, The Aerospace Corp. (deceased)
7	John E. Scott	1959	The Mixing and Combustion of a Supersonic Fuel Jet and a Subsonic, Coaxial Gas Jet	Prof., UVA (Emeritus)
8	Hubert Bortzmeyer	1961 MSE	Analysis of Longitudinal High Frequency Combustion Instability in a Gas Fueled Rocket Motor (Rpt 587)	Computer Sciences Corp.
9	Roy Pelmas	1961 MSE	An Experimental Investigation of Longitudinal Combustion Instability in a Rocket Motor Using Premixed Gaseous Propellants (Rpt 432)	Engineer, United Technology Research Center (deceased)
10	Richard A. Dobbins	1961	Light Scattering and Transmission Properties of Sprays	Prof., Brown University (deceased)
11	Jacques Bertrand	1962 MSE	Theoretical and Experimental Investigations of Longitudinal High- frequency Combustion Instability in a Gas-Fueled Rocket Motor	CNES, Toulouse), French Launch Facility Expert (Retired)
12	Thomas A. Brzustowski	1962	Vapor-Phase Diffusion Flames in the Combustion of Magnesium and Aluminum	Prof., University President, Quantum Computing, U. Waterloo
13	Norman Cohen	1962 MSE	Evaluation of Swirl Atomizer Spray Characteristics by a Light Scattering Technique	no professional info
14	Stephen Fineman	1962 MSE	Some Analytical Considerations of the Hybrid Rocket Combustion Problem	Thiokol Chemical Corporation
15	Igor J. Eberstein	1964	The Gas Phase Decomposition of Hydrazine Propellants	NASA Goddard (retired)
16	Joseph William Rich	1965	Dissociation and Energy Transfer in Diatomic Molecular Systems	Prof., The Ohio State U
17	Craig Thomas Bowman	1966	Experimental Investigation of High-Frequency Longitudinal Combustion Instability in Gaseous Propellant Rocket Motors	Prof., Stanford University
18	Robert F. Sawyer	1966	The Homogeneous Gas Phase Kinetics of Reactions in the Hydrazine- Nitrogen Tetroxide Propellant System.	Prof., U. Cal. Berkeley (Emeritus)
19	Arthur M. Mellor	1967	Heterogeneous Ignition of Metals: Model and Experiment	Prof., U. Vanderbilt (Emeritus)
20	N.S. Laurendeau	1968 MSE	The Ignition Characteristics of Metals in Oxygen Atmospheres	Prof., Purdue (deceased)
21	Harry F. Sullivan	1969	The Structure of the Alkaline-Earth Metal Diffusion Flame	Prof., U. Waterloo (Emeritus)

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22	Frederick C. Gouldin	1971	Temperature Measurement in Metal-Combustion: The Calcium- Oxygen System	Prof., Cornell (Emeritus)
23	Jean Patrick Ducreut	1970MSE	Combustion of Barium	Dir. Nuclear Fuel Strategy, Westinghouse Electric (retired),
24	Donald R. Hardesty	1970	Unsteady Combustion in Gaseous Propellant Rocket Motors	Sandia CRF (retired)
25	Robert Meier	1971MSE	Subsurface Velocity and Temperature Fields in Burning Liquid Fuels	no professional info
26	Frederick L. Dryer	1972	High Temperature Oxidation of Carbon Monoxide and Methane in a Turbulent Flow Reactor	Prof., Princeton (Emeritus)
27	Chia-Ching Feng	1973	Flame Propagation through Fuel-Air Mixture Layer	Prof., Trenton State, Industry
28	Arthur S. Helmstetter	1974MSE	An Experimental Study of Subsurface Convective Flows Preceding a Flame Front Spreading Over a Liquid Fuel	COO, Ecosil Technologies LLC
29	Meredith B Colket	1975	The High Temperature Pyrolysis and Oxidation of Acetaldehyde	United Technologies Research Center (retired)
30	Melvin L. Zwillenberg	1975	A Search for Chemical Laser Action in Low Pressure Metal Vapor Flames	Public Service Electric & Gas, NJ (retired)
31	David Gubernick	1976MSE	An Experimental Study of Flame Spreading Over a Liquid Fuel	no professional info
32	Richard S. Cohen	1977	The High Temperature Oxidation and Pyrolysis of Ethane	Prof., Temple
33	Daniel Aronowitz	1978	Kinetics of the Pyrolysis and Oxidation of Methanol	PhD Chemistry, (Deceased, 1978)
34	Kenneth Van Treuren	1978	Thesis Sooting Characteristics of Liquid Pool Diffusion Flames	Prof., Baylor University
35	Jeffrey S Newman	1979MSE	Laser Doppler Velocimeter Measurements of the Gas and Liquid Flow Fields Induced by Flame Propagation Over a Liquid Fuel Surface	FM Global (Deceased)
36	Philip A. Yaccarino	1980MSE	Parametric Study of Sooting Diffusion Flames	GM Research (retired), Vehicle Fuel Systems Specialists, LLC
37	C Thomas Avedisian	1980	Superheating and Boiling of Water in Hydrocarbons and of Hydrocarbon Mixtures	Prof., Cornell
38	James A. Euchner	1980MSE	A Study of the Oxidation of Toluene in a Flow Reactor	Partner, Outside Insight Consulting, LLC
39	Donald J. Hautman	1980	Pyrolysis and Oxidation Kinetic Mechanisms for Propane	United Technologies Research Center (retired)
40	Steven R. Ray	1981	Flame Spread Over Solid Fuels	Fellow, Carnegie Mellon, Silicon Valley, Consultant
41	Chaya R. Venkat	1981MSE/CHE	Thesis High Temperature Oxidation of Aromatic Hydrocarbons	Exxon Mobil (retired)
42	Stephen L. Murphy	1982MSE	Pure and Oxidative Pyrolysis of Hydrocarbons in Relation to the Sooting Diffusion Flame	no professional info
43	Edward Burke	1983MSE	The High Temperature Oxidation of 1,3-Butadiene	no professional info
44	Thomas A. Litzinger	1985	The High Temperature Oxidation of Alkylated Aromatic Hydrocarbons	Prof., Penn State

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45	Alessandro Gomez	1986	A Quantitative Investigation of Soot Formation in Laminar Diffusion Flames	Prof., Yale
46	Uri Vandsburger	1986	An Experimental Study of the Processes Involved in the Formation of Soot Particles in Diffusion Flames	Prof., Virginia TechT (Emeritus)
47	Harjit Singh Hura	1987MSE	A Study of the Full Oxygen Effect on Soot Formation in Counterflow Diffusion Flames	GE Aviation, Evandale
48	George W. Sidebotham	1988	An Inverse Co-flow Approach to Sooting Laminar Diffusion Flames	Prof., The Cooper Union
49	Allan B. Lovell	1989	Role of Phenoxy Formation in the Oxidation of Aromatic Hydrocarbons	Exxon Mobil, Paulsboro
50	Jeffery L. Emdee	1991	An Experimental and Modeling Study of the High Temperature Oxidation of the Xylenes	Aerospace Corporation El Segundo, CA
51	Gregory Linteris	1991	Trace Radical Species Detection in the Turbulent Chemical Kinetic Flow Reactor Using a 180 Degree Laser Induced Fluorescence Probe	National Institute of Standards and Technology
52	Robert G. Butler III	1992MSE	A Flow Reactor Study of the Oxidation of !,3-Cyclopentadiene	no professoinal info
53	Kevin Davis	1992	A New Gas-Phase Combustion Synthesis Process for the Formation of Nano-Scale Non-Oxide Ceramic Powders	Reaction Engineering International
54	Christopher Shaddix	1993	An Experimental Study of the High Temperature Oxidation of 1- Methylnaphthalene	Sandia National Laboratories CRF
55	Paul Papas	1994	An Additive Approach to Supersonic Combustion: Use of Silane in	United Technologies Research
			Hydrogen-Air Systems and Consideration of Pyrophoric Metals	Center
56	Gary T. Davis	1994MSE	Supercritical Pyrolysis of Methylcyclohexane	NASA Goddard
57	John A. Brehm	1995MSE	Self-Propagating High-Temperature Synthesis of Titanium Nitride in Supercritical Nitrogen	Research Scientist, Drexel
58	Melissa S. Pecullan	1997	Pyrolysis and Oxidation Kinetics of Anisole and Phenol	no professional info
59	Hampton C. Gabler	1998	An Experimental and Numerical Investigation of Asymmetrically- Fueled Whirl Flames	Prof., Virginia Tech
60	Stephen D. Klotz	1998	Interactive Oxidation Chemistry of Aromatic and C4 Hydrocarbon Fuel Components	Lockheed
61	John Francis Stewart	1999	Supercritical Pyrolysis of the Endothermic Fuels Methylcyclohexane, Decalin, and Tetralin	no professoinal info
62	Steven Paul Zeppieri	1999	High Temperature Experimental and Computational Studies of the Pyrolysis and Oxidation of Endothermic Fuels	United Technologies Research Center
63	Robert G. Butler	2001	Combustion Chemistry of 1,3-cyclopentadiene	no professoinal info

Post Docs, Professional Research Staff

64 - '67

67 - '70

71 - '81

74 - '76

75 - '78

76 - '79

79 - '83

79 - '96

80 - '81

81 - '87

Technical Staff

Position

James G. Hansel, Engineer Air Products Inc (retired) Robert Mackinven, Post Doc Shell, London (retired) Prof., Princeton (Emeritus)/U Fred Dryer, Post Doc, Research Staff of SC Southwest Research Institute. David W. Naegeli, Research Staff Senior Research Engineer (retired) Prof., Penn State (Emeritus) Robert J. Santoro, Post-Doc, Research Staff Carlos Fernandez-Pello, Post Doc Research Staff Prof., UC Berkeley I.A Kennedy, Post Doc Prof., UC Davis Kenneth Brezinsky, Post-Doc, Research Staff Prof., University of Illinois Peter Shug (Visiting Scientist) DLR, Germany (retired) Fumi Takahashi, Post Doc Prof., Case Western University Anthony Bozowski (deceased, 1968)

55 - '68 - '62 58 -'64 60 -'99 64 - '81 81-'01

Anthony Bozowski (deceased, 1968) Ian A. Smith, Engineer and Researcher Maurice J. Web (deceased, 2008) Joseph A Sivo Donald Peoples Yolanda Stein

Victaulic Co, NJ Engineer

Career

