

Distinguished Paper Awards at the 31st Combustion Symposium

Starting with the 31st International Symposium on Combustion, The Combustion Institute will present a Distinguished Paper Award to the paper in each of the twelve colloquia which is judged to be most distinguished in quality, achievement and significance. The Program Co-Chairs of the Symposium and the President of the Institute select the papers to receive the awards based on recommendations from the Colloquium Co-Chairs.

The following papers have been selected to receive the Distinguished Paper Award for the 31st International Symposium on Combustion.

Reaction Kinetics

R.B. Brad, A.S. Tomlin, M.J. Fairweather and J.F. Griffiths, University of Leeds

The application of chemical reduction methods to a combustion system exhibiting complex dynamics.

Soot, PAH, and Other Large Molecules

L.A. Sgro, A. de Filippo, G. Lanzaolo and A. D'Alessio,

Università degli Studi di Napoli "Federico II"

Characterization of nanoparticles of organic carbon (NOC) produced in rich premixed flames by differential mobility analysis.

Diagnostics

Fredrik Vestin, Lund Institute of Technology; Mikael Afzelius, University of Geneva;

Per-Erik Bengtsson, Lund Institute of Technology

Development of rotational CARS for combustion diagnostics using a polarization approach.

Laminar Flames

Alfonso F. Ibarreta, Chih-Jen Sung, Case Western Reserve University;

Hai Wang, University of Southern California

Experimental characterization of premixed spherical ethylene/air flames under sooting conditions.

Turbulent Flames

Jeffrey A. Sutton and James F. Driscoll, University of Michigan

Imaging of local flame extinction due to the interaction of scalar dissipation layers and the stoichiometric contour in turbulent non-premixed flames.

Heterogeneous Combustion

Pascal Ifeacho, Tim Huelser, Hartmut Wiggers, Christof Schulz and Paul Roth,

Universität Duisburg-Essen

Synthesis of SnO_{2-x} nanoparticles tuned between $0 \leq x \leq 1$ in a premixed low pressure H₂/O₂/Ar flame.

Spray and Droplet Combustion

Joseph C. Oefelein, Vaidyanathan Sankaran and Tomasz G. Drozda, Sandia National

Laboratories

Large eddy simulation of swirling particle-laden flow in a model axisymmetric combustor.

Detonations, Explosions and Supersonic Combustion

Ming-hsun Wu, M.P. Burke, Pennsylvania State University;
S.F. Son, Los Alamos National Laboratory;
R.A. Yetter, Pennsylvania State University

Flame acceleration and the transition to detonation of stoichiometric ethylene/oxygen in microscale tubes.

Fire Research

Howard R. Baum, National Institute of Standards and Technology;
Arvind Atreya, University of Michigan

A model of transport of fuel gases in a charring solid and its application to opposed-flow flame spread.

Stationary Combustion Systems

Andrew Fry, Brydger Cauch, Geoffrey D. Silcox, JoAnn S. Lighty, University of Utah,
Constance L. Senior, Reaction Engineering International

Experimental evaluation of the effects of quench rate and quartz surface area on homogeneous mercury oxidation.

IC Engine and Gas Turbine Combustion

Claudia Fajardo, and Volker Sick, University of Michigan

Flow field assessment in a fired spray-guided spark-ignition direct-injection engine based on UV particle image velocimetry with sub crank angle resolution.

New Technology Concepts

Symeon Karagiannidis, John Mantzaras, Paul Scherrer Institute;
Gregory Jackson, University of Maryland;
Konstantinos Boulouchos, Swiss Federal Institute of Technology

Hetero-/homogeneous combustion and stability maps in methane-fueled catalytic microreactors.

Marcus Aldén, Stephen B. Pope
Program Co-Chairs, 31st International Symposium on Combustion

Brian S. Haynes
President, Combustion Institute