

KOZO SAITO
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Office Address

Department of Mechanical Engineering, University of Kentucky, Lexington, KY 40506-0503
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Education

B.S. (1975), and Dr. Engrg. (1980) Mechanical Engineering,
Seikei University, Tokyo, Japan (Doctoral thesis advisor: R.I. Emori)

Professional Positions Held

University of Kentucky
Tennessee Valley Authority (titled) Professor in Mechanical Engineering (2001 – present);
Professor (1993 – 2000); Associate Professor (1986 - 1993)
Princeton University
Prof. Research Staff (1984 - 1986); Research Associate (1981 – 1984)
University of California, San Diego
Postgraduate Assistant Engineer (1980 - 1981) (Advisors: F.A. Williams and A.S. Gordon)

Special Assignments

National Institute of Standards and Technology (formally NBS) (1984-85)
Inter-governmental Personnel Act Assignment
Factory Mutual Research Corp. (The summer of 1987 and of 1988)
Summer Scientist
University of Tokyo
Visiting Professor (1993 spring semester and May, 1995)
Seikei University in Japan
Visiting Research Fellow (Spring of 1993, 95, 97)
USDA Forest Service, Missoula Montana (summer of 1994)
Visiting Researcher to develop a maximum spotting distance for running crown fires

Synergistic Activities

Director (2007 – Present), Institute of Research for Technology Development (IR4TD),
University of Kentucky
Committee on Demilitarization of Assembled Chemical Weapons (1997 - 2000), National
Research Council
Chair (1995 – present), International Scale Modeling Committee
Publication Committee for the International Symposia (25th, 26th and 27th) on Combustion,
The Combustion Institute
Program sub-committee for the International Symposia on Combustion (since 1984)
Session Organizer for the Annual International Lean Manufacturing Conferences (1996 - 1998)
Founding Director, University of Kentucky's Painting Technology Consortium where over
twenty companies have participated
Co-Founder and Co-Chair (2000 – present), University of Kentucky's Annual Painting
Technology Workshop
Liaison and Advisor, Collaboration between University of Kentucky – Toyota on Lean
Manufacturing Program (1993 – present)

Graduate Student and Postdoctoral Advisees and Visiting Scholars from Seventeen Different Countries

25 doctoral students (19 completed); 24 MS students (23 completed);
39 postdoctoral and visiting scholars (38 completed)

Relevant Patents (out of 9)

1. A.J. Salazar, K. Saito, R.P. Alloo, and N. Tanaka, "Wet scrubber and paint spray booth including the wet scrubber," Patent No.: **US 6,024,796**, February 15, 2000.
2. A.J. Salazar, K. Saito, R.P. Alloo, and N. Tanaka, "Wet scrubber and paint spray booth including the wet scrubber," Patent No.: **US 6,093,250**, July 25, 2000.
3. K. Saito, M.I. Hassan Ali, M.A. Omar, M. Sakakibara, T. Suzuki, and Y. Tanigawa, "Systems and methods for inspecting coatings," Patent No.: **US 7,129,492**, October 31, 2006.
5. K. Saito, M.I. Hassan Ali, M.A. Omar, M. Sakakibara, T. Suzuki, and Y. Tanigawa, "Systems and methods for inspecting coatings," Patent No.: **US 7,220,966**, May 22, 2007.

Relevant Publications (out of 145)

6. M. Omar, M.I. Hassan, K. Saito, and R. Alloo, "IR self-referencing thermography for detection of in-depth defects," *Infrared Physics and Technology*, vol. **46**: 283-289 (2005).
7. M. Omar, M.I. Hassan, and K. Saito, "Optimizing thermography depth probing with a dynamic thermal point spread function," *Infrared Physics and Technology*, vol. **46**: 506-514 (2005).
8. T. Konishi, A. Ito, Y. Kudo, A. Narumi, K. Saito, J. Baker, and P. Struk, "Simultaneous measurement of temperature and chemical species concentrations with holographic interferometer and infrared absorption," *Applied Optics*, vol. **45**: 5725-5732 (2006).
9. V. Srinivathan, A.J. Salazar, and K. Saito, "Numerical investigation on the disintegration of round turbulent liquid jets using LES/VOF techniques," *Atomization and Sprays*, vol. **18**: 1-47 (2008).
10. K. Saito Edited., *Progress in Scale Modeling*: Summary of the First International Symposium on Scale Modeling (ISSM in 1988) and Selected Papers from subsequent Symposia (ISSM II in 1997 through ISSM V in 2006, Springer Science + Business Media B.V., 2008.

Research Collaborators

Forman Williams (UCSD); Jun Ishimoto (Tohoku University, Japan); Akihiko Ito (Hirosaki University, Japan); Tamio Ida (Kinki University, Japan); Kazu Kuwana (Yamagata University, Japan); Yuji Nakamura (Hokkaido University, Japan)

Former Doctral Students (Outside Univ. of Kentucky)

Shyam Venkatesh (NASA Ames, CA); John Baker (Univ. of Alabama, Tuscaloosa); Heng Ban (Utah State University); Chen Qian (GM); Leeyan Wang (Vistelon); Jae Um (GE); Asumond Vego (Lexmark); Ghassan Tashtoush (Jordan U of Sci. and Tech); Yuji Nakamura (Hokkaido University, former visiting doctroal student); Liming Yuan (NIOSH); Mohamed Omar (Clemson University); Numan Abu-Dheir (King Fahd University of Petroleum and Minerals, Saudi Arabia); Wahed Wasel (Taif University, Saudi Arabia)