

David J. Icové, Ph.D., P.E., CFEI

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Teaching

- Enclosure Fire Dynamics
- Computational Fire Modeling and Visualization

Education

- Ph.D., Engineering Science and Mechanics, University of Tennessee, 1979
- M.S., Electrical Engineering, University of Tennessee, 1975
- B.S., Fire Protection Engineering, University of Maryland, 1975
- B.S., Electrical Engineering, University of Tennessee, 1971

Professional Experience

- 1995 – Present: Adjunct Assistant Professor, University of Tennessee, Knoxville
- 2004 – Present: Adjunct Lecturer, Professional Master of Fire Protection Engineering Program, Dept. of Fire Protection Engineering, University of Maryland
- 2006 – Present: Reserve Deputy Sheriff (Fire Investigations Bureau), Knox County Sheriff's Department, Knoxville, TN
- 1993 – 2005: Federal Law Enforcement Agent, Criminal Investigations Division, U.S. TVA Police, Knoxville, TN
- 1984 – 1993: Program Manager, Arson and Bombing Investigative Services Subunit, Federal Bureau of Investigation, Quantico, VA
- 1979 – 1983: Supervisor, Arson Task Force, Knoxville Police Department
- 1978 – 1979: Investigator, Ohio State Fire Marshal's Office, Reynoldsburg, OH
- 1976 – 1978: Investigator, Tennessee State Fire Marshal's Office, Knoxville, TN
- 1971 – 1975: Engineer, U.S. Navy, Hyattsville, MD

Research Interests

Joining UT in 1995, Dr. Icové is one of the leading internationally recognized fire scientists and co-author of *Forensic Fire Scene Reconstruction*, Prentice Hall (2004). His primary research experience is in applying and developing innovative forensic engineering techniques to better understand the complex phenomenon of fire and explosions. He has served on 9 M.S. and Ph.D. committees, authored/edited 6 textbooks, 6 textbook chapters, and 24 articles.

His expertise in forensic fire scene reconstruction is based on a blend of on-scene experience, design/supervision of fire tests and experiments. He has testified as an expert witness in civil and criminal trials, as well as before three U.S. Congressional Committees seeking guidance on key arson investigation and legislative initiatives. Dr. Icové is a Professional Engineer (PE) registered in Tennessee and Virginia, and an internationally Certified Fire and Explosion Investigator (CFEI).

Patents

- J.D. Birdwell, T.W. Wang, R.D. Horn, P. Yadav, and D.J. Icové, "Method of Indexed Storage and Retrieval of Multidimensional Information." U. S. Patent 6,741,983, May 25, 2004

Professional Activities

Committee Memberships:

- NFPA 921 "Technical Committee on Fire and Explosion Investigations," Member 1992 to present
- National Institute of Justice (NIJ), Technical Working Group Publications
 - *Fire and Arson Scene Evidence: A Guide for Public Safety Personnel* (June 2000)
 - *Electronic Crime Scene Investigation: A Guide for First Responders* (July 2001)
- American Society for Testing and Materials (ASTM), Committee E05 on Fire Testing, Member 2000 to present
- Underwriters Laboratory, Inc. "Fire Advisory Council," Member 2005 to present.

Editorial Board Member:

- *Fire and Arson Investigator*, Member of Editorial Review Board, International Association of Arson Investigators
- *Fire Technology*, Peer Reviewer, Springer Netherlands

Selected Publications

- D.J. Icové and J.D. DeHaan, “*Hourglass Burn Patterns: A Scientific Explanation for their Formation*,” (International Symposium on Fire Investigation Science and Technology, Cincinnati, Ohio, June 26-28, 2006.)
- D.J. Icové, H.E. Welborn, A.J. Vonarx, E.C. Adams, J.R. Lally, T.G. Huff, “*Scientific Investigation and Modeling of Prehistoric Structural Fires at Chevelon Pueblo*,” (International Symposium on Fire Investigation Science and Technology, Cincinnati, Ohio, June 26-28, 2006.)
- D.J. Icové and J.D. DeHaan, Forensic Fire Scene Reconstruction, 1st Edition (Prentice Hall, ISBN 0-13-094205-7, Upper Saddle River, New Jersey, 2004.)
- D.J. Icové and J.D. DeHaan. “*NFPA 921’s Impact on Fire Scene Reconstructions*,” Fire Protection Engineering Magazine, (Society of Fire Protection Engineers, Bethesda, Maryland, Vol. 21, pp. 10-16. Winter 2004.)
- A.M. Christensen and D.J. Icové. “*The Application of NIST’s Fire Dynamics Simulator to the Investigation of Carbon Monoxide Exposure in the Deaths of Three Pittsburgh Fire Fighters*,” (Journal of Forensic Science, Vol. 49, No.1, January 2004.)
- D.J. Icové, C.M. Blocher, and J.D. DeHaan, Instructor’s Manual to Kirk’s Fire Investigation, 5th Edition. (Prentice Hall, ISBN 0-13-060458-5, Upper Saddle River, NJ, 2002.)
- D.J. Icové, V.B. Wherry and J.D. Schroeder, Combating Arson-for-Profit: Advanced Techniques for Investigators, 2nd Edition. (Battelle Press, ISBN 0-934550-2, Columbus, OH, 1998.)
- D.J. Icové, K.A. Seger and W.R. VonStorch, Computer Crime: A Crimefighter’s Handbook. (O’Reilly & Associates, Cambridge, MA, 1995.)