

VITA

CHARLES L. MADER

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EDUCATIONAL BACKGROUND

B.S. and M.S. from Oklahoma State University, Stillwater, OK

Ph.D. from Pacific Western University, Encino, CA

PROFESSIONAL SOCIETIES:

American Chemical Society

American Physical Society

Combustion Institute

Sigma Xi

Tsunami Society

Marine Technology Society

PROFESSIONAL RECOGNITIONS:

Fellow of American Institute of Chemists

Fellow of the Los Alamos National Laboratory

Los Alamos Scientific Laboratory Distinguished Performance Award, 1980

“Certified Professional Chemist” recognition from the National Certification Commission in Chemistry and Chemical Engineering

International Union of Geodesy and Geophysics, Tsunami Commission Award for Contributions to Tsunami Research, 1985

Consulting Professor, Beijing Institute of Technology, Beijing, China

Senior Fellow, Joint Institute for Marine and Atmospheric Research, University of Hawaii, Honolulu, Hawaii

Visiting Research Professor, Center for Explosive Technology Research, New Mexico Institute of Mining and Technology, Socorro, New Mexico

Adjunct Professor of Physics, University of New Mexico, Albuquerque, New Mexico

Adjunct Professor of Oceanography, University of Hawaii, Honolulu, HI.

Affiliate Professor of Marine Science, Hawaii Pacific University, Kaneohe, HI.

Editor, *Science of Tsunami Hazards* published by the International Tsunami Society 1982-2006.

ARL Technical Assessment Board of National Academy of Sciences - 2000-2003.

Listed in American Men of Science, Who's Who in Technology Today, Who's Who in the West, Who's Who in America, Who's Who in Science and Engineering, Men of Achievement and Who's Who in the World.

PUBLICATIONS

BOOKS

Numerical Modeling of Explosives and Propellants - Third Edition, Charles L. Mader (CRC Press, Boca Raton, 2007).

Numerical Modeling of Water Waves - Second Edition, Charles L. Mader (CRC Press, Boca Raton, 2004).

Numerical Modeling of Explosives and Propellants - Second Edition, Charles L. Mader (CRC Press, Boca Raton, 1997).

Numerical Modeling of Water Waves, Charles L. Mader (University of California Press, Berkeley, 1988).

Numerical Modeling of Detonations, Charles L. Mader (University of California Press, Berkeley, 1979), Russian Edition (MIR Press, Moscow, 1985).

LASL PHERMEX Data, Volumes I, II, III, Charles L. Mader (University of California Press, Berkeley, 1980).

Los Alamos Explosive Performance Data, Charles L. Mader, Sharon Crane, and James N. Johnson (University of California Press, Berkeley, 1982).

BOOK CHAPTERS

“Tsunamis,” Charles L. Mader, a chapter in **Encyclopedia of Global Environmental Change**, edited by T. Munn (John Wiley and Sons, London - 2001),

“Detonation Performance,” Charles L. Mader, a chapter in **Organic Energetic Compounds**, edited by Paul L. Marinkas (Nova Science Publishers, Inc., Commack, New York, 1996),

“Introduction to Energetic Materials” and “Numerical Modeling of Impact Involving Energetic Materials,” Charles L. Mader, Chapters 11 and 14 in **High Velocity Impact Dynamics**, edited by John Zukas (Wiley) 1990.

“Numerical Calculations of Explosive Phenomena,” Charles L. Mader, a chapter in **Computers and Their Role in the Physical Sciences**, edited by A. Taub and S. Fernbach (Gordon & Breach Science Publishers, New York, 1970), p. 385.

PUBLICATIONS

“Numerical Modeling of Munroe Jets,” Charles L. Mader and Michael L. Gittings, *Proceedings of the 15th Topical Conference on Shock Compression of Shocked Matter*, American Institute of Physics (2007) .

“Numerical Modeling for the Krakatoa Hydrovolcanic Explosion and Tsunami,” Charles L. Mader and Michael L. Gittings, *Science of Tsunami Hazards* **24**, 174 (2006).

- “Two- and Three-Dimensional Asteroid Impact Simulations,” Galen R. Gisler, Robert P. Weaver, Charles L. Mader and Michael L. Gittings, *Computing in Science and Engineering* **26**, No. 3, 46-55 (2004).
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- “Modeling the 1958 Lituya Bay Mega-Tsunami,” Charles L. Mader and Michael L. Gittings, *Science of Tsunami Hazards* **20**, 241 (2002).
- “Proton Radiographic and Numerical Modeling of Colliding Diverging Detonations,” Charles L. Mader, John D. Zumbro and Eric N. Ferm, Twelfth International Symposium on Detonations, (2002).
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- “Asteroid Tsunami Inundation of Japan,” Charles L. Mader, *Science of Tsunami Hazards* **16**, 11 (1998).
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- “Modeling the 105 Ka Lanai Tsunami,” Carl Johnson and Charles L. Mader, *Science of Tsunami Hazards* **12**, 3 (1994).
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- “Modeling the 1992 Nicaragua Tsunami,” Charles L. Mader, *Science of Tsunami Hazards* **11**, 107 (1993).
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- “Numerical Modeling of Tsunami Waves,” Charles L. Mader *Scientific Computing and Automation* **June**, 19-23 (1993).
- “Numerical Modeling of the Effect of Temperature and Particle Size on Shock Initiation Properties of HMX and TATB ,” Charles L. Mader and James D. Kershner, *Journal of Energetic Materials* **10**, 69-95 (1992).
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- “The Heterogeneous Explosive Reaction Zone,” Charles L. Mader and James D. Kershner, Ninth Symposium (International) on Detonation (1989).
- “Numerical Modeling of the Effect of Particle Size of Explosives on Shock Initiation Properties,” 4th International Congress of Pyrotechniques Proceedings, La Grande-Motte, France pages 45-54 (1989).
- “Tsunami Modeling Using Personal Computers,” C. Mader and G. Mitchem, Proceedings of Pacific Congress on Marine Science and Technology, PACON 88, OST6/28, May 16-20 (1988).

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