

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 Loa Collage, 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.

Adjunct Distinguished Scientist of Energetics Research Institute (EnRI) - Nanyang Technological University, Singapore - 2010–.

International Tsunami Society Award for Outstanding Life-Long Contributions to Tsunami Research, 2012.

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, Wikipedia.

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

“Numerical Modeling of Crater Formation by Meteorite Impact and Nuclear Explosion,” Charles L. Mader, **Predictive Modeling of Dynamic Process**, Stefan Hiemaier, Editor, Festschrift for Dr. Klaus Thoma, Chapter 23, 447-457 (Springer, New York, 2009).

“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 10 and 13 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 Moon Asteroid Impacts - Tsunamis on the Moon,” Charles L. Mader, *Science of Tsunami Hazards* **36**, No. 2 (2017).

“Modeling Shock Desensitization of Composition B Explosive,” Charles L. Mader, *Journal of Energetic Materials* **32**, 80-86 (2014).

“The 3/2012 Japan Tsunami in Hawaii,” Charles L. Mader, Proceedings of the Pacific Congress on Marine Science and Technology, PACON 2012, December 8-13, 2012.

“Tsunami Hazards to Hawaii from Landslides and Craters formed by Asteroid Impacts,” Charles L. Mader, Proceedings of MTS/IEEE OCEANS’11 Conference, Kona, Hawaii, September 19-22 (2011).

“Tsunami Hazards to Hawaii from M9+ Event Similar to the 2004 Indian Ocean Tsunami,” Charles L. Mader, Proceedings of the Pacific Congress on Marine Science and Technology, PACON 2010, June 1-5, 2010.

“Modeling Oblique Initiation of Insensitive Explosives,” Charles L. Mader, Michael Gittings, Fourteenth International Symposium on Detonation, (2010).

“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 La Palma Landslide Tsunami,” Charles L. Mader, *Science of Tsunami Hazards* **19**, 150 (2001).

“Modeling the 1958 Lituya Bay Mega-Tsunami,” Charles L. Mader, *Science of Tsunami Hazards* **17**, 57 (1999).

“Asteroid Tsunami Inundation of Japan,” Charles L. Mader, *Science of Tsunami Hazards* **16**, 11 (1998).

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“Modeling the Asteroid Impact and Tsunami,” David A. Crawford and Charles L. Mader, *Science of Tsunami Hazards* **16**, 21 (1998).

- “Modeling the 1994 Skagway Tsunami,” Charles L. Mader, *Science of Tsunami Hazards* **15**, 41 (1997).
- “Wave Erosion on the Southeastern Coast of Australia: Tsunami Propagation Modeling,” Anthony T. Jones and Charles L. Mader, *Australian Journal of Earth Sciences* **43**, 479-483 (1996).
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- “Modeling the 1992 Nicaragua Tsunami,” Charles L. Mader, *Science of Tsunami Hazards* **11**, 107 (1993).
- “Modeling Tsunami Flooding of Hilo, Hawaii,” Charles L. Mader, George D. Curtis and George Nabeshima, *Recent Advances in Marine Science and Technology*, 92 79-86 PACON International (1993).
- “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).
- “Modeling Hilo, Hawaii Tsunami Inundation,” Charles L. Mader and George Curtis, *Science of Tsunami Hazards* **9**, 85 (1991).
- “A Tsunami Flooding Parameter Study,” Charles L. Mader, Proceedings of International Symposium on Geophysical Hazards in Developing Countries and their Environmental Impacts, (1991).
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- “Numerical and Hydraulic Modeling of Flooding,” Charles L. Mader, 2nd UNJR Tsunami Workshop Proceedings, (1990).

“The 1987-88 Alaskan Bight Tsunamis: Deep Ocean Data and Model Comparisons,” F. I. Gonzalez, C. L. Mader, M. C. Eble and E. N. Bernard, *International Journal of Natural Hazards* **4**, 119-140 (1991).

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“Numerical Modeling of the Effect of Particle Size of Explosives on Shock Initiation Properties,” 4th International Congress of Pyrotechnics Proceedings, La Grande-Motte, France pages 45-54 (1989).

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