



Dr. Sachin Gupta

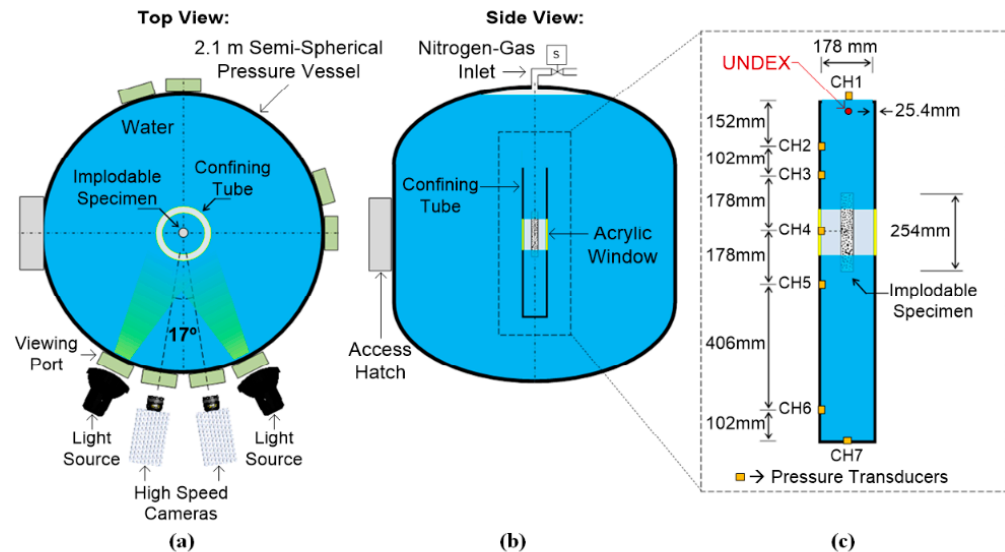


Figure 1. Experimental setup viewed from the (a) top, (b) side, and (c) detailed side section

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See:

- https://www.researchgate.net/profile/Sachin_Gupta47
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Biography:

Sachin Gupta currently works at the Department of Mechanical, Industrial and Systems Engineering, University of Rhode Island. Sachin does research in Structural Engineering, Materials Engineering and Mechanical Engineering. Their most recent publication is 'Dynamic Collapse of Underwater Metallic Structures – Recent Investigations: Contributions after the 2011 Murray Lecture'.

Education:

2011-2015 Ph.D. Mechanical Engineering, University of Rhode Island, USA
 2009-2011 M.S. Mechanical Engineering, University of Rhode Island, USA
 2005-2009, B.Tech. Mechanical Engineering, Indian Institute of Technology Kanpur, India

Selected Publications:

- Wang, E., Gardner, N., Gupta, S., & Shukla, A. (2012). Fluid-structure interaction and its effect on the performance of composite structures under air-blast loading. *International Journal of Multiphysics*, 6(3), 219–239.
- Gupta, S. , Shukla, A., and LeBlanc, J., 2013, “Shock Initiated Implosion of a Tube Within a Closed Tube: Experiments and Computational Simulations,” ASME Paper No. IMECE 2013-63765.
- Gupta, S. , Parameswaran, V. , Sutton, M. , and Shukla, A. , 2014, “Study of Dynamic Underwater Implosion Mechanics Using Digital Image Correlation,” *Proc. R. Soc. A*, 470, p. 20140576.

Gupta, S. , LeBlanc, J. M. , and Shukla, A. , 2014, “Mechanics of the Implosion of Cylindrical Shells in a Confining Tube,” *Int. J. Solids Struct.*, 51(23–24), pp. 3996–4014

Gupta, S. , 2015, “Underwater Implosion of Cylindrical Metallic Shells in Confining Environments,” Ph.D. dissertation, University of Rhode Island, Kingston, RI

Pinto M, Gupta S, Shukla A (2015) Hydrostatic implosion of GFRP composite tubes studied by digital image correlation. *J Press Vessel Technol* 137:051302

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Gupta, S. , LeBlanc, J. M. , and Shukla, A. , 2015, “Sympathetic Underwater Implosion in a Confining Environment,” *Extreme Mech. Lett.*, 3, pp. 123–129.

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Michael Pinto, Helio Matos, Sachin Gupta and Arun Shukla, “Experimental investigation on underwater buckling of thin-walled composite and metallic structures”, *Journal of Pressure Vessel Technology*, February 2016

Gupta, S. , Shukla, A. and LeBlanc, J. , 2016, “Shock Initiated Instabilities in Underwater Cylindrical Structures,” *J. Mech. Phys. Solids*, 95, pp. 188–212

Sachin Gupta, Helio Matos and Arun Shukla, “Pressure signature and evaluation of hammer pulses during underwater implosion in confining environments”, *Journal of the Acoustical Society of America*, August 2016

Helio Matos, Sachin Gupta and Arun Shukla, “Structural instability and water hammer signatures from shock-initiated implosions in confining environments”, *Mechanics of Materials*, January 2017