

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)
)
Tennessee Valley Authority) Docket No. 52-047-ESP
)
(Clinch River Nuclear Site))
_____)

**DECLARATION OF DR. M.V. RAMANA IN SUPPORT OF
INTERVENORS' NEW CONTENTION 4 (IMPERMISSIBLE DISCUSSION
OF ENERGY ALTERNATIVES AND NEED FOR PROPOSED SMR)**

Under penalty of perjury, M.V. Ramana declares as follows:

1. My name is M.V. Ramana. I am a Professor and the Simons Chair in Disarmament, Global and Human Security at the Liu Institute for Global Issues, University of British Columbia, Vancouver, Canada.
2. I am a qualified expert on matters relating to nuclear energy policy and economics. I have a Ph.D. in Theoretical Physics from Boston University and a M.Sc. in Physics from the Indian Institute of Technology, Kanpur, India. I have written many academic papers and articles on a wide range of topics relating to nuclear energy in various journals and magazines, including *Scientific American*, *Science and Global Security*, *Energy Policy*, *Nuclear Technology*, *Journal of Risk Research*, *Environmental Impact Assessment Review*, *Energy Research and Social Science*, and *International Journal of Global Energy Issues*. I have also been a member of many professional organizations relevant to my area of expertise, including the International Panel on Fissile Materials and the Science and Security Board of the Bulletin of the Atomic Scientists. A copy of my curriculum vitae is attached.
3. I am familiar with the licensing-related filings and correspondence that have been submitted by Tennessee Valley Authority (“TVA”) in support of its application to the U.S. Nuclear Regulatory Commission (“NRC”) for an Early Site Permit for a Small Modular Reactor (“SMR”) on the Clinch River Nuclear Site, particularly TVA’s Environmental Report. I am also familiar with the Draft Environmental Impact Statement prepared by the NRC for the proposed ESP. NUREG-2226, Draft Environmental Impact Statement for an Early Site Permit (ESP) at the Clinch River Nuclear Site (April 2018) (“Draft EIS”). And I am familiar with applicable NRC regulations, policies, and guidance documents.

4. I am familiar with the history of development of nuclear technology in the United States, including the development and operation of light water reactors and the development of SMR designs. I am also familiar with the characteristics and costs of a range of technologies available or currently being developed for electricity generation, including coal and gas based power plants; renewable energy sources such as solar and wind; and nuclear energy. I have researched and written papers on various technical and policy issues related to SMRs, including their technical characteristics, uranium fuel requirements and spent fuel generation, challenges with their licensing, conflicts between design priorities, and demand for them in developing countries.

4. I assisted Intervenors with the preparation of their new Contention 4, which asserts that the Draft EIS violates NEPA and NRC implementing regulations 10 C.F.R. §§ 51.75(b), 51.20(b), and 52.21, by impermissibly including an extensive discussion of the economic and technical benefits of the proposed SMR, including need for power and alternative energy sources. The factual assertions in the contention are true and correct to the best of my knowledge, and the opinions expressed therein are based on my best professional judgment.

M. V. Ramana

M.V. Ramana, Ph.D.

May 18, 2018

CURRICULUM VITAE

M. V. Ramana
email: m.v.ramana@ubc.ca
Phone: 604 822 8838

Liu Institute for Global Issues
School of Public Policy and Global Affairs
University of British Columbia

EMPLOYMENT

- Simons Chair in Disarmament, Global and Human Security,
Liu Institute for Global Issues, School of Public Policy and
Global Affairs, University of British Columbia January 2017 onwards
- Professional Specialist, Program in Science and Global
Security, Princeton University July 2012 – December 2016
Researching issues related to nuclear power, nuclear
proliferation and climate change
- Associate Research Scholar, Program in Science and Global
Security, Princeton University November 2009 – June 2012
Researching issues related to nuclear power, nuclear
proliferation and climate change
- Lecturer, Woodrow Wilson School of Public and International
Affairs March 2010 – May 2012, Fall
2013, Fall 2014, Spring 2016
Designed and taught courses related to energy, environment
and development, and nuclear power for Masters students and
Freshmen
- Visiting Research Scholar, Program in Science, Technology, and
Environmental Policy, Woodrow Wilson School of Public and
International Affairs, Princeton University May 2009 – November 2009
Researching issues related to nuclear power and climate change
- Senior Fellow, Centre for Interdisciplinary Studies in
Environment and Development, Bangalore April 2007 – April 2009
Fellow, Centre for Interdisciplinary Studies in Environment
and Development, Bangalore April 2004 – April 2007
Researched economic and environmental aspects of India's nuclear energy program
- Research Staff, Program on Science and Global Security,
Princeton University September 2001 – March 2004
Researched global nuclear disarmament and India's nuclear weapons and energy programs
- Lecturer, Woodrow Wilson School of Public and International
Affairs, Princeton University September 2001 – February
2002
Lectured and conducted precepts for a course on Methods in Science, Technology, and Environmental
Policy
- Lecturer, Yale Center for International and Area Studies, Yale
University August 2001 – December 2001
Designed and taught course on Science, Technology, and Development in India

Research Associate, Center for Energy and Environmental Studies, Princeton University September 1998 – August 2001
Conducted research on technical aspects of nuclear disarmament and India's nuclear weapons and energy programs; influence of scientists on nuclear policy

Lecturer, Woodrow Wilson School of Public and International Affairs, Princeton University February 1999 – July 1999
Gave lectures and conducted precepts for a course on Science, Technology, and Public Policy

Post-doctoral Fellow, Security Studies Program, Massachusetts Institute of Technology August 1996 – August 1998
Conducted research on technical aspects of nuclear weapons and disarmament, Indian ballistic missiles, and India's nuclear policy

Post-doctoral Fellow, Physics Department, University of Toronto September 1994 - July 1996
Conducted theoretical research on tests of particle physics models at accelerator experiments

Research Fellow, Physics Department, Boston University June 1989 – August 1994
Conducted research on phenomenological aspects of electroweak symmetry breaking

EDUCATION

Boston University, Ph.D., Physics, September 1994 Thesis Advisor: Kenneth D. Lane
Thesis Title: "Phenomenological Aspects of Electroweak Symmetry Breaking"

Indian Institute of Technology, Kanpur, M.Sc. Physics, May 1988

HONORS, AWARDS, PROFESSIONAL SERVICE

Member, Team of Editors, *Journal of Peace and Nuclear Disarmament*, since 2017

Member, Editorial Board, *Science and Global Security*, since 2017

Distinguished Lecturer, Sigma Xi Society, 2017-18

Leo Szilard Award, American Physical Society, 2014

Member, International Panel on Fissile Materials, since 2005

Member, Science and Security Board of the Bulletin of Atomic Scientists, 2008-2014

Member, Editorial Board, *Energy Research and Social Science*, since 2015

Robert Jay Lifton Fellowship, John Jay College of Criminal Justice, City University of New York, 2005

Guggenheim Fellowship, 2003

Member, Selection Committee, Global Security and Cooperation Program, Social Sciences Research Council, 2000-01

MacArthur Foundation Research and Writing Grant, 1999

SSRC-MacArthur Fellowship for International Research on Peace and Security, 1999

SSRC-MacArthur Post-doctoral Fellowship on Peace and Security in a Changing World, 1996

National Talent Search Scholarship, 1981 -1988

Reviewed papers for several journals including *Bulletin of the Atomic Scientists*, *Climate Policy*, *Energy Policy*, *Journal of Environment and Development*, *Environmental Politics*, *Journal of Risk Research*, *Energy Strategy Reviews*, *Economic and Political Weekly*, and *Energy for Sustainable Development*.

PUBLICATIONS

Refereed Publications

Journal Articles

- M. V. Ramana, “Technical and social problems of nuclear waste,” *WIREs Energy and Environment* (2018) doi.org/10.1002/wene.289.
- Kumar Sundaram and M. V. Ramana, “India and the policy of no first use of nuclear weapons,” *Journal for Peace and Nuclear Disarmament* (2018) doi.org/10.1080/25751654.2018.1438737.
- Matthias Englert, Friederike Frieß, and M. V. Ramana, “Accident Scenarios Involving Pebble Bed High Temperature Reactors,” *Science and Global Security*, **25**, no. 1 (2017), 42-55.
- M. V. Ramana, A. H. Nayyar, and Michael Schoeppner, “Nuclear High-level Waste Tank Explosions: Potential Causes and Impacts of a Hypothetical Accident at India’s Kalpakkam Reprocessing Plant,” *Science and Global Security*, **24**, no. 3 (2016), 174-203.
- M. V. Ramana and Priscilla Agyapong, “Thinking Big? Ghana, Small Reactors, and Nuclear Power,” *Energy Research and Social Science*, **21** (2016), 101-113.
- M. V. Ramana and Ali Ahmad, “Wishful Thinking and Real Problems: Small Modular Reactors, Planning Constraints, and Nuclear Power in Jordan,” *Energy Policy*, **93** (2016), 236–245.
- Amy King and M. V. Ramana, “The China Syndrome? Nuclear Power Growth and Safety After Fukushima,” *Asian Perspective*, **39** (2015), 607-636.
- M. V. Ramana and Ashwin K. Seshadri, “Negligence, Capture, and Dependence: Safety Regulation of the Design of India’s Prototype Fast Breeder Reactor,” *Journal of Risk Research*, **18**, no. 8 (2015), 1030-1050.
- Benjamin Sovacool and M. V. Ramana, “Back to the Future: Small Modular Reactors, Nuclear Fantasies, and Symbolic Convergence,” *Science, Technology, and Human Values*, **40**, no. 1 (2015), 96-125.
- M. V. Ramana and Zia Mian, “One Size Doesn't Fit All: Social Priorities and Technical Conflicts for Small Modular Reactors,” *Energy Research and Social Science* **2** (May 2014), 115-124.
- Ali Ahmad and M. V. Ramana, “Too Costly to Matter: Economics of Nuclear Power for Saudi Arabia,” *Energy* **69** (May 2014), 682-694.
- M. V. Ramana, Laura Berzak Hopkins, and Alexander Glaser, “Licensing Small Modular Reactors,” *Energy* **61**, (November 2013), 555-564.
- M. V. Ramana and Ashwin Kumar, “‘One in Infinity’: Learning from Accidents and Lessons for Nuclear Safety in India,” *Journal of Risk Research* (2013), 23-42.
- Alexander Glaser, Laura Berzak Hopkins, and M. V. Ramana, “Resource Requirements and Proliferation Risks Associated with Small Modular Reactors,” *Nuclear Technology* **184**, (October 2013), 121-129.
- M. V. Ramana, “Shifting Strategies and Precarious Progress: Nuclear Waste Management in Canada,” *Energy Policy* **61**, (October 2013), 196-206.
- M. V. Ramana and Eri Saikawa, “Choosing a Standard Reactor: International Competition and Domestic Politics in Chinese Nuclear Policy,” *Energy* **36** (2011), 6779-6789.
- J. Y. Suchitra and M. V. Ramana, “The Costs of Power: Plutonium and the Economics of India’s Prototype Fast Breeder Reactor,” *International Journal of Global Energy Issues* **35**, no. 1 (2011), 1-23.

- M. V. Ramana and Divya Badami Rao, "The Environmental Impact Assessment Process for Nuclear Facilities: An Examination of the Indian Experience," *Environmental Impact Assessment Review* **30**, no. 4 (2010), 268-271.
- M. V. Ramana and Ashwin Kumar, "Least Cost Principles and Electricity Planning for Karnataka," *Energy for Sustainable Development* **13**, no. 4 (2009), 225–234.
- M. V. Ramana and J. Y. Suchitra, "Slow and Stunted: Plutonium Accounting and the Growth of Fast Breeder Reactors in India," *Energy Policy* **37**, no. 12 (2009), 5028-5036.
- M. V. Ramana "India and Fast Breeder Reactors," *Science and Global Security* **17** (2009), 54-67.
- M. V. Ramana and Ashwin Kumar, "Compromising Safety: Design Choices and Severe Accident Possibilities in India's Prototype Fast Breeder Reactor," *Science and Global Security* **16** (2008), 87-114.
- Alexander Glaser and M. V. Ramana, "Weapon-Grade Plutonium Production Potential in the Indian Prototype Fast Breeder Reactor," *Science and Global Security* **15** (2007), 85-105.
- M. V. Ramana and J. Y. Suchitra, "Costing Plutonium: Economics of Reprocessing in India," *International Journal of Global Energy Issues* **27**, no. 4 (2007), 454-471.
- Zia Mian, A. H. Nayyar, R. Rajaraman, and M. V. Ramana, "Fissile Materials in South Asia and the Implications of the U.S.-India Nuclear Deal," with *Science and Global Security* **14** (2006), 117-143.
- M. V. Ramana, Antonette D'Sa, and Amulya Reddy, "Nuclear Energy Economics in India," *Energy for Sustainable Development* **IX**, no. 2 (June 2005), 35-48.
- M. V. Ramana, "An Estimate of India's Uranium Enrichment Capacity," *Science and Global Security* **12** (2004), 115-124.
- Zia Mian, R. Rajaraman, and M. V. Ramana, "Early Warning in South Asia: Constraints and Implications," *Science and Global Security* **11** (2003), 109–150.
- M. V. Ramana, Dennis Thomas, and Susy Varughese, "Estimating Nuclear Waste Production in India," *Current Science* **81**, no. 11 (December 10, 2001), 1458-1462.
- Zia Mian, M. V. Ramana, and R. Rajaraman, "Plutonium Dispersion and Health Hazards from Nuclear Weapons Accidents," *Current Science* **80**, no. 10 (May 25, 2001), 1275-1284.
- Z. Mian, A. H. Nayyar, and M. V. Ramana, "Bringing Prithvi Down to Earth: The Capabilities and Potential Effectiveness of India's Prithvi Missile," *Science and Global Security* **7**, no. 3 (1998), 333-360.
- M. V. Ramana, "Gauge Boson Scattering in a Hidden Symmetry Breaking Sector at $e+e-$ Colliders," *Modern Physics Letters A* **11** (1996), 247-255.
- M. V. Ramana "Glueballs in Strongly Interacting Theories at the Electroweak Scale," *Physics Letters* **B368** (1996), 215-220.
- B. Holdom and M. V. Ramana, "New Flavor Physics in b Decays," *Physics Letters* **B365** (1996), 309-311.
- B. Holdom and M. V. Ramana, "A New Physics Source of Hard Gluons in Top Quark Production," *Physics Letters* **B353** (1995), 295-300.
- R. S. Chivukula, M. Golden, D. Kominis, and M. V. Ramana, "The Phenomenology of a Hidden Symmetry Breaking Sector," *Physics Letters* **B293** (1992), 400-404.

R. S. Chivukula, M. Golden, and M. V. Ramana, “Colored Pseudo-Goldstone Bosons and Gauge Boson Pairs,” *Physical Review. Letters* **68** (1992), 2883-2886.

K. Lane and M. V. Ramana, “Walking Technicolor Signatures at Hadron Colliders,” *Physical Review* **D44** (1991), 2678-2700.

Conference Proceedings

Wei Peng, Fabian Wagner, Denise L Mauzerall, M.V. Ramana, Haibo Zhai, Mitchell Small, Xin Zhang, and Carole Dalin, “Competing Air Quality and Water Conservation Cobenefits from Power Sector Decarbonization,” in *American Geophysical Union Fall Meeting*, December 12-16, 2016, San Francisco, USA.

M. V. Ramana, Alexander Glaser, and Laura Berzak Hopkins, “Small Modular Reactors: Uranium Resource Requirements, Waste Generation and Proliferation Risk Assessment,” in *21st International Conference on Nuclear Engineering*, July 29 to August 2, 2013, Chengdu, China, 1-7.

M. V. Ramana, “Constraints on India’s Fast Breeder Program,” in *51st Annual Meeting of the Institute of Nuclear Materials Management*, July 13, 2010, Baltimore, USA, 1-9.

M. V. Ramana and J. Y. Suchitra, “Economic and Environmental Costs of Nuclear Power,” in *Ninth Biennial Conference of the International Society of Ecological Economics*, December 15-18, 2006, New Delhi, India, 1-21.

Non-Refereed Publications

Journal Articles

M. V. Ramana and Zia Mian, “The Courage to Challenge the Nuclear World Order,” *Economic and Political Weekly*, **52**, no. 48 (2 December 2017), 22-25.

M. V. Ramana, “Small Modular Reactors for Nuclear Power: Hope or Mirage?,” *Energy Studies Institute Bulletin*, **10**, no. 6 (December 2017), 10-11.

M. V. Ramana and Suvrat Raju, “Old Plans, Ongoing Handouts, New Spin: Deciphering the Nuclear Construction Announcement,” *Economic and Political Weekly*, **52**, no. 24 (17 June 2017).
<http://www.epw.in/journal/2017/24/web-exclusives/old-plans-ongoing-handouts-new-spin.html>.

M. V. Ramana, “An Enduring Problem: Radioactive Waste from Nuclear Energy,” *Proceedings of the IEEE*, **105**, no. 3, (March 2017), 415-418.

M. V. Ramana and Zia Mian, “Small Modular Reactors and the Challenges of Nuclear Power,” *Physics & Society*, **45**, no. 4 (January 2017), 5-9.

M. V. Ramana, “The Frontiers of Energy: A Gradual Decline?,” *Nature Energy*, **1**, no. 1 (2016), 7-8.

M. V. Ramana and Zia Mian, “Scrambling to build a Nuclear Middle East,” *Bulletin of the Atomic Scientists*, **72**, no. 1 (2016), 39-43.

M. V. Ramana, “The Checkered Operational History of High Temperature Gas Cooled Reactors,” *Bulletin of the Atomic Scientists*, **72**, no. 3 (2016), 171-179.

M. V. Ramana, “A Principled and Knowledgeable Critic: Praful Bidwai on Nuclear Weapons and Energy,” *Economic and Political Weekly*, **L**, no. 32 (August 2015), 23-26.

M. V. Ramana, “Atomic State: Big Science in Twentieth-Century India,” Book Review, *Technology and Culture* **55** (July 2014), 762-763

S Rajendran Pillai and M. V. Ramana, “Breeder reactors: A Possible Connection Between Metal Corrosion and a History of Sodium Leaks,” *Bulletin of the Atomic Scientists* **70**, no. 3 (May/June 2014), 49-55.

Zia Mian and M. V. Ramana, “Asian War Machines,” *Critical Asian Studies* **46**, no. 2 (June 2014), 345-360.

Ashwin Kumar and M. V. Ramana, “Nuclear Safety in India: Theoretical Perspectives and Empirical Evidence,” *OUCIP Journal of International Studies* **1**, no. 1 (July—December 2013), 49-72.

M. V. Ramana, “Why India’s electricity is Likely to Remain in Short Supply: The Economics of Nuclear Power,” *Bulletin of the Atomic Scientists* **69**, no. 6 (November/December 2013), 67–78.

Benjamin K. Sovacool, Patrick Parenteau, M. V. Ramana, Scott V. Valentine, Mark Z. Jacobson, Mark A. Delucchi, and Mark Diesendorf, “Comment on “Prevented Mortality and Greenhouse Gas Emissions from Historical and Projected Nuclear Power”,” *Environmental Science and Technology* **47**, (May 2013), 6715-6717.

Suvrat Raju and M. V. Ramana, “Cost of Electricity from the Jaitapur Nuclear Power Plant,” *Economic and Political Weekly* **XLVIII**, no. 26 & 27 (2013), 51-60.

M. V. Ramana, “Nuclear policy responses to Fukushima: Exit, Voice, and Loyalty,” *Bulletin of the Atomic Scientists* **69**, no. 2 (March/April 2013), 66-76.

M. V. Ramana, “Flunking Atomic Audits,” *Economic and Political Weekly* **XLVII**, no. 39 (2012), 10–13.

Ashwin Kumar and M. V. Ramana, “The Limits of Safety Analysis: Severe Nuclear Accident Possibilities at the PFBR,” *Economic and Political Weekly* **XLVI**, no. 43 (2011), 44-49.

M. V. Ramana, “Nuclear Power and the Public,” *Bulletin of the Atomic Scientists* **67**, no. 4 (July/August 2011), 43 -51.

Zia Mian and M. V. Ramana, “The Enduring Power of Mass Production, Mass Consumption, and Mass Destruction,” *Development* **54**, no. 2 (2011), 194-196.

Thomas Cochran, Harold Feiveson, Zia Mian, M. V. Ramana, Mycle Schneider, and Frank von Hippel, “It’s Time to Give Up on Breeder Reactors,” *Bulletin of the Atomic Scientists* **66**, no. 3, (May/June 2010), 50-56.

Suvrat Raju and M. V. Ramana, “The Other Side of Nuclear Liability,” *Economic and Political Weekly*, **XLV**, no. 16, (April 17, 2010), 48-54.

M. V. Ramana and Ashwin Kumar, “Safety First? Kaiga and Other Nuclear Stories,” *Economic and Political Weekly* **XLV**, no. 7 (2010), 47-54.

M. V. Ramana, “Nuclear Power: Economic, Safety, Health, and Environmental Issues of Near-Term Technologies,” *Annual Review of Environment and Resources* **34** (2009), 127-52.

Divya Badami Rao and M. V. Ramana, “Violating Letter and Spirit: Environmental Clearances for Koodankulam Reactors,” *Economic and Political Weekly* **XLIII**, no. 51 (December 20, 2008), 14-18.

Zia Mian and M. V. Ramana, “Going MAD: Ten Years of the Bomb in South Asia,” *Economic and Political Weekly* **XLIII**, no. 26 and 27 (June 28, 2008), 201-208.

U. A. Shimray and M. V. Ramana, “Uranium Mining in Meghalaya: Simmering Problem,” *Economic and Political Weekly* **XLII**, no. 52 (December 29, 2007), 13-17.

M. V. Ramana, “Heavy Subsidies in Heavy Water: Economics of Nuclear Power in India,” *Economic and Political Weekly* **XLII**, no. 34 (August 25, 2007), 3483-3490.

M. V. Ramana, “Economics of Nuclear Power: Subsidies and Competitiveness,” *Economic and Political Weekly* **XLII**, no. 2 (January 13, 2007), 169-171.

J. Y. Suchitra and M. V. Ramana, “High Costs, Questionable Benefits of Reprocessing,” *Economic and Political Weekly* **XLI**, no. 47 (November 25, 2006), 4848-4851.

M. V. Ramana, “Twenty Years after Chernobyl: Debates and Lessons,” *Economic and Political Weekly* **XLI**, no. 18 (May 6, 2006), 1743-1747.

J. Y. Suchitra and M. V. Ramana, “Nuclear Power: No Route to Energy Security,” *Energy Security Insights* **I**, no. 1 (March 2006), 13-16.

Zia Mian and M. V. Ramana, “Wrong Ends, Means, and Needs: Behind the U.S. Nuclear Deal with India,” *Arms Control Today* (January/February 2006), 11-17.

M. V. Ramana, “Tall Claim, Little Evidence,” *Economic and Political Weekly* **XL**, no. 50 (December 10, 2005), 5237-5239.

M. V. Ramana, “Nuclear Power: Expensive and Unsafe,” *Electrical India* **45**, no. 11 (November 2005), 1-11.

Zia Mian and M. V. Ramana, “Feeding the Nuclear Fire,” *Economic and Political Weekly* **XL**, no. 35 (August 27, 2005), 3808-3812.

- M. V. Ramana, Antonette D'Sa and Amulya Reddy, "Economics of Nuclear Power from Heavy Water Reactors," *Economic and Political Weekly* **XL**, no. 17 (April 23, 2005), 1763-1773.
- M. V. Ramana, "India's Uranium Enrichment Program," *International Network of Engineers and Scientists Against Proliferation Bulletin* **24** (December 2004), 71-74.
- M. V. Ramana, "Scientists, Nuclear Weapons, and the Peace Movement," *Economic and Political Weekly* **XXXIX**, no. 46-47 (November 20, 2004), 5013-5016.
- Zia Mian, A. H. Nayyar, and M. V. Ramana, "Making Weapons, Talking Peace: Resolving Dilemma of Nuclear Negotiations," *Economic and Political Weekly* **XXXIX**, no. 29 (July 17, 2004), 3221-3224.
- M. V. Ramana, R. Rajaraman and Zia Mian, "Nuclear Early Warning in South Asia: Problems and Issues," *Economic and Political Weekly* **XXXIX**, no. 3 (January 17, 2004), 279-284.
- M. V. Ramana, "Scientists, Nuclear Weapons and Peace in India," *International Network of Engineers and Scientists Against Proliferation Bulletin* **22** (December 2003), 25-27.
- M. V. Ramana, "A Stepping Stone to a Fully Nuclear Future," *Science and Global Security* **11** (2003), 81-83.
- M. V. Ramana, "Risks of a LOW Doctrine," *Economic and Political Weekly* **XXXVIII**, no. 9 (March 1, 2003), 860-864.
- R. Rajaraman, M. V. Ramana, and Zia Mian, "Possession and Deployment of Nuclear Weapons in South Asia: An Assessment of Some Risks," *Economic and Political Weekly* **XXXVII**, no. 25 (June 22, 2002), 2459-65.
- M. V. Ramana and A. H. Nayyar, "India, Pakistan and the Bomb" *Scientific American* (December 2001), 73-83.
- M. V. Ramana, "South Asian Mode of Weaponisation," *Economic and Political Weekly* **XXXV**, no. 11 (March 11, 2000), 896-897.
- M. V. Ramana, "Reinventing the Arms Race," *FORUM for Applied Research and Public Policy* **14**, no. 2 (Summer 1999), 1-6.
- Zia Mian and M. V. Ramana, "Disarmament Judo: Using the NPT to make the Nuclear-Weapon States Negotiate the Abolition of Nuclear Weapons," with Zia Mian, *Disarmament Diplomacy* **36** (April 1999), 1-4.
- Zia Mian and M. V. Ramana, "Beyond Lahore: From Transparency to Arms Control," *Economic and Political Weekly* **XXXIV**, no. 16-17 (17 April 1999), 938-942.
- M. V. Ramana, "India's Nuclear Program: From 1946 to 1998," *International Network of Engineers and Scientists Against Proliferation Bulletin* **16** (November 1998), 8-9.
- Zia Mian and M. V. Ramana, "Stepping Away from the Nuclear Abyss: Some Proposals," *International Network of Engineers and Scientists Against Proliferation Bulletin* **16** (November 1998), 12-14.
- M. V. Ramana, "Effects of a Nuclear Blast over Bombay," *Medicine and Global Survival* **5**, no. 2 (October 1998), 74-77.
- M. V. Ramana, "Do Nuclear Weapons provide Security?" *Seminar* **468** (August 1998), 50-54.
- M. V. Ramana, "The Hawks take Flight: India and the Fissile Material Cutoff," *International Network of Engineers and Scientists Against Proliferation Bulletin* **13** (July 1997), 10-12.

Reports and Chapters in Reports

Elena Krieger, Arjun Makhijani, Boris Lukanov, and M. V. Ramana, *A Clean Energy Pathway for New Jersey*, Prepared for New Jersey Conservation Foundation as part of ReThink Energy NJ by the Institute for Energy and Environmental Research and PSE Healthy Energy, September 2017

M. V. Ramana, “Bangladesh,” “Canada,” “China,” “India,” “Iran,” “Jordan,” “Pakistan,” and “Small Modular Reactors,” in Mycle Schneider and Antony Froggatt, *The World Nuclear Industry Status Report 2017*, Mycle Schneider Consulting, Paris (September 2017), 108-110, 114-117, 151-160, 196-206.

Bernadette K. Cogswell, Nataliawati Siahaan, Friga Siera R, M. V. Ramana, and Richard Tanter, *Nuclear Power and Small Modular Reactors in Indonesia: Potential and Challenges*, Indonesian Institute for Energy Economics and Nautilus Institute for Security and Sustainability, April 2017

Ray Acheson and M. V. Ramana, “India,” in Ray Acheson, ed., *Assuring Destruction Forever: 2017 Edition*, Reaching Critical Will, New York (2017), 10-11.

M. V. Ramana, “Bangladesh,” “China,” “Jordan,” “India,” “Pakistan,” and “United States,” in Mycle Schneider and Antony Froggatt, *The World Nuclear Industry Status Report 2016*, Mycle Schneider Consulting, Paris (July 2016), 43-44, 50-53, 125-148, 162-163.

M. V. Ramana and Frank von Hippel, eds., *Plutonium Separation in Nuclear Power Programs: Status, Problems, and Prospects of Civilian Reprocessing Around the World*, International Panel on Fissile Materials, Princeton (July 2015), 2-178.
Contribution: Report Design: 30%; Writing: 50%; Editing: 50%; Production: 80%

M. V. Ramana, “India” in M. V. Ramana and Frank von Hippel, eds., *Plutonium Separation in Nuclear Power Programs: Status, Problems, and Prospects of Civilian Reprocessing Around the World*, International Panel on Fissile Materials, Princeton (July 2015), 52-61.

Alexander Glaser, M. V. Ramana, Ali Ahmad, and Robert Socolow, “Small Modular Reactors: A Window on Nuclear Energy,” An Energy Technology Distillate from the Andlinger Center for Energy and the Environment at Princeton University (June 2015), 3-27.

M. V. Ramana, “Advanced Nuclear Reactors—The Story of the SMR,” in Mycle Schneider and Antony Froggatt, *The World Nuclear Industry Status Report 2015*, Mycle Schneider Consulting, Paris (July 2015), 68-77.

M. V. Ramana, “India,” in Ray Acheson, ed., *Assuring Destruction Forever: 2015 Edition*, Reaching Critical Will, New York (2015), 38-43.

M. V. Ramana, “India,” in Ray Acheson, ed., *Still Assuring Destruction Forever*, Reaching Critical Will, New York (2013), 10-11.

M. V. Ramana, “Modernizing India’s Nuclear Arsenal,” in Ray Acheson, ed., *Assuring Destruction Forever: Nuclear Weapon Modernization Around the World*, Reaching Critical Will, New York (2012), 34-43.

Harold Feiveson, Zia Mian, M. V. Ramana, and Frank von Hippel, eds., *Spent Fuel from Nuclear Power Reactors: Experiences and Lessons from Around the World*, International Panel on Fissile Materials, Princeton (2011), 2-182.

M. V. Ramana, “Canada” in Harold Feiveson, Zia Mian, M. V. Ramana, and Frank von Hippel, eds., *Spent Fuel from Nuclear Power Reactors: Experiences and Lessons from Around the World*, International Panel on Fissile Materials, Princeton (2011), 20-29.

Harold Feiveson, M. V. Ramana, and Frank von Hippel, “Multinational Repositories,” in Harold Feiveson, Zia Mian, M. V. Ramana, and Frank von Hippel, eds., *Spent Fuel from Nuclear Power Reactors: Experiences and Lessons from Around the World*, International Panel on Fissile Materials, Princeton (2011), 114-121.

M. V. Ramana, “No Escape from Accidents,” in Ray Acheson, ed., *Costs, Risks, and Myths of Nuclear Power: NGO World-Wide Study on the Implications of the Catastrophe at the Fukushima Dai-Ichi Nuclear Power Station*, Reaching Critical Will, New York (2011), 26-29.

Andrew Lichterman and M. V. Ramana, “The US-India Nuclear Deal: Violating Norms, Terminating Futures,” in Ray Acheson, ed., *Beyond Arms Control: Challenges and Choices for Nuclear Disarmament* (New York: Reaching Critical Will, 2011), 62-70.

M. V. Ramana, “India,” in *Global Fissile Material Report 2010: Balancing the Books: Production and Stocks*, International Panel on Fissile Materials, Princeton (2010), 117-125.

M. V. Ramana, “India,” in Frank von Hippel, ed., *The Uncertain Future of Nuclear Energy*, International Panel on Fissile Materials, Princeton (2010), 30-32.

M. V. Ramana, “Public Acceptance,” in Frank von Hippel, ed., *The Uncertain Future of Nuclear Energy*, International Panel on Fissile Materials, Princeton (2010), 79-82.

M. V. Ramana, “Indian Nuclear Industry: Status and Prospects,” *Nuclear Energy Futures Papers*, The Centre for International Governance Innovation, Waterloo, Canada (December 2009), 2-30.

Harold Feiveson, M. V. Ramana and José Goldemberg, “Managing the Civilian Nuclear Fuel Cycle,” *Global Fissile Material Report 2007*, International Panel on Fissile Materials, Princeton (2007), 82-91.

M. V. Ramana, “Feeding the Nuclear Fire: Resuming Nuclear Cooperation with India,” in Wade L. Huntley and Karthika Sasikumar, eds., *Nuclear Cooperation with India: New Challenges, New Opportunities* (Vancouver, Canada: Simons Center for Disarmament and Non-Proliferation Research, 2006), 23-27.

Zia Mian, A. H. Nayyar, R. Rajaraman, and M. V. Ramana, “Fissile Materials in South Asia: The Implications of the U.S.-India Nuclear Deal,” International Panel on Fissile Materials Research Report no. 1 (September 2006), 3-35.

M. V. Ramana, “India: A Nuclear Update,” Greenpeace Report (May 2003), 1-4.

Andrew Lichterman, Zia Mian, M. V. Ramana, and Jürgen Scheffran, “Beyond Missile Defense,” International Network of Engineers and Scientists Against Proliferation/Western States Legal Foundation Briefing Paper (March 2002), 1-10.

Zia Mian, M. V. Ramana, and R. Rajaraman, “Risks and Consequences of Nuclear Weapons Accidents in South Asia,” Princeton University/Center for Energy and Environmental Studies Report no. 326 (September 2000), 1-34.

M. V. Ramana, “Bombing Bombay? Effects of Nuclear Weapons and a Case Study of a Hypothetical Explosion,” International Physicians for the Prevention of Nuclear War, Cambridge, MA (1999), 5-54.

Conferences

M. V. Ramana, Matthias Englert, and Friederike Frieß, “Accident Risks for High Temperature Reactors,” in *1st International Conference on Nuclear Risks*, (April 16-17, 2015), Vienna

Monamie Bhadra, Caitlin Stronell, and M. V. Ramana, “The Impact of Fukushima and Chernobyl on India’s Anti-Nuclear Movements,” in *Traveling Norms and the Politics of Contention*, (October 25, 2013), Zurich University, 1-9.

Books

Authored

The Power of Promise: Examining Nuclear Energy in India (New Delhi: Penguin Books India, 2012); 313 pages + 55 page bibliography.

Edited

Prisoners of the Nuclear Dream, Edited Volume with C. Rammanohar Reddy (New Delhi: Orient Longman, 2003); 455 pages + 35 page bibliography.

Chapters

M. V. Ramana and Amy King, “A new normal? The changing future of nuclear energy in China,” in Peter van Ness and Mel Gurtov, eds., *Learning from Fukushima* (Canberra: Australian National University Press, 2017), 103-132.

M. V. Ramana, “Second life or Half-life? The Contested Future of Nuclear Power and its Potential Role in a Sustainable Energy Transition,” in Florian Kern, ed., *Palgrave Handbook of the International Political Economy of Energy Part IV: Energy Transitions* (London: Palgrave Macmillan, 2016), 363-396.

Ali Ahmad and M. V. Ramana, “Prospects for Nuclear Power in the GCC,” in Gawdat Bahgat, ed., *The Changing Energy Landscape in the Gulf: Strategic Implications* (Geneva: The Gulf Research Center, 2015), 55-72.

M. V. Ramana, “Absurd Confidence: Risk and Nuclear Power in India,” in Rajeev Gowda and Raphaelle Moor, eds., *India at Risk* (New Delhi: Oxford University Press, June 2014), 227-249.

M. V. Ramana, “Scientists and India’s Nuclear Bomb,” in Pervez Hoodbhoy, ed., *Confronting the Bomb: Pakistani and Indian Scientists Speak Out* (Karachi: Oxford University Press, 2012), 1-37

Zia Mian, R. Rajaraman, and M. V. Ramana, “The Infeasibility of Early Warning,” in Pervez Hoodbhoy, ed., *Confronting the Bomb: Pakistani and Indian Scientists Speak Out* (Karachi: Oxford University Press, 2012), 237-252.

Matthew McKinzie, Zia Mian A.H. Nayyar, and M. V. Ramana, “What Nuclear War Could Do to South Asia,” with in Pervez Hoodbhoy, ed., *Confronting the Bomb: Pakistani and Indian Scientists Speak Out* (Karachi: Oxford University Press, 2012), 267-276.

F. von Hippel, M. Bunn, A. Diakov, M. Ding, R. Goldston, T. Katsuta, M. V. Ramana, T. Suzuki and Y. Suyuan, “Chapter 14 - Nuclear Energy,” in *Global Energy Assessment - Toward a Sustainable Future* (Cambridge, UK and New York, NY, USA: Cambridge University Press, 2012), 1069-1130.

Shoibal Chakravarty and M. V. Ramana, “The Hiding Behind the Poor Debate: A Synthetic Overview,” in Navroz Dubash, ed., *Handbook on Climate Change and India: Development, Politics and Governance* (New Delhi: Oxford University Press & London: Earthscan, 2011), 218-229.

M. V. Ramana and J. Y. Suchitra, “Ignoring the Costs: Energy Planning and the Dismal Economics of Nuclear Power in India,” in Angela Guimaraes Pereira and Silvio Funtowicz, eds., *Science for Policy: Opportunities and Challenges* (New Delhi: Oxford University Press, 2009), 253-271.

M. V. Ramana, “India’s Nuclear Enclave and the Practice of Secrecy,” in Itty Abraham, ed., *Nuclear Power and Atomic Publics* (Bloomington, Indiana: Indiana University Press, 2009), 41-67.

M. V. Ramana and J. Y. Suchitra, “The Many Phases of Nuclear Insecurity,” in Anant Sudarshan and Ligia Noronha, eds., *India’s Energy Security* (New Delhi: Routledge, 2009), 207-222.

M. V. Ramana, “Nuclear Power in India: Failed Past, Dubious Future,” in Henry Sokolski, ed., *Gauging U.S.-Indian Strategic Cooperation, Nonproliferation Policy Education Center*, Washington, D.C., (Carlisle Barracks, PA : Strategic Studies Institute, U.S. Army War College, 2007), 71-98

M. V. Ramana and Zia Mian, “The Nuclear Confrontation in South Asia,” *SIPRI Yearbook 2003: Armaments, Disarmament and International Security* (Oxford: Oxford University Press, 2003), 195-212.

M. V. Ramana and Surendra Gadekar, “The Price we Pay: Environmental and Health Impacts of Nuclear Weapons Production and Testing,” in M. V. Ramana and C. Rammanohar Reddy, eds. *Prisoners of the Nuclear Dream* (New Delhi: Orient Longman, 2003), 411-441.

M. V. Ramana, “La Trahison des Clercs: Scientists and the India’s Nuclear Bomb,” in M. V. Ramana and C. Rammanohar Reddy, eds. *Prisoners of the Nuclear Dream* (New Delhi: Orient Longman, 2003), 206-244.

Matthew McKinzie, Zia Mian, A.H. Nayyar, and M. V. Ramana, “The Risks and Consequences of Nuclear War in South Asia,” with in Smitu Kothari and Zia Mian, eds. *Out of The Nuclear Shadow* (London: Zed Books & New Delhi: Rainbow Press & Lokayan, 2001), 185-196.

Zia Mian and M. V. Ramana, “A Nuclear Gordian Knot: South Asia and the Limits of Deep Cuts,” in Harold A. Feiveson, ed. *The Nuclear Turning Point: A Blueprint for Deep Cuts and De-alerting of Nuclear Weapons* (Washington, D.C.: Brookings Institution Press, 1999), 353-368.

Magazine, Newspaper, and Online Forum Articles

“HTRs will not help establish nuclear power in Jordan,” with Ali Ahmad, *The Jordan Times*, May 10, 2018

“The Long Lasting Nature of the Problems at Fukushima: 7 Years of the Disaster and Counting,” *Dianuke*, March 20, 2018

“A reminder from Hawaii,” with Lauren Borja, *Bulletin of the Atomic Scientists Online*, January 17, 2018

“Canada must change course on nuclear disarmament,” with Lauren Borja, *Vancouver Sun*, December 10, 2017

“Canada is missing its chance to shut the gate on nuclear weapons everywhere,” with Lauren Borja, *The Conversation*, October 2, 2017

“Small Nuclear Power Reactors: Future or Folly,” *The Conversation*, July 24, 2017

“No Indonesian market for SMRs,” *Bulletin of the Atomic Scientists Online*, June 28, 2017

“Nuclear Power: Expensive, hazardous and inequitable,” with Suvrat Raju, *Hindu*, June 5, 2017

“Ending nuclear lawlessness,” with Zia Mian, *Hindu*, April 13, 2017

“Westinghouse: Origins and Effects of the Downfall of a Nuclear Giant,” *World Nuclear Industry Status Report*, April 2, 2017

“paromanobik bidyut nipajjanak (Nuclear power is dangerous)” (in Bengali), *Janaswartha Barta*, January 21, 2017

“Jordan’s Energy Match: Solar 1, Nuclear 0,” with Ali Ahmad, *The Jordan Times*, December 11, 2016

“Future energy: Wasteful reactors,” *Deccan Chronicle*, November 20, 2016

“Meghalay-e Uranium khoni-khanan bipajjank (Hazards of mining uranium in Meghalaya),” *Janaswartha Barta* (in Bengali), November 5, 2016

“A fast reactor at any cost’: The perverse pursuit of breeder reactors in India,” *Bulletin of the Atomic Scientists Online*, November 3, 2016

“Holding Clean Energy Hostage,” with Cathy Kunkel, *Jacobin*, August 23, 2016

“Fast breeder reactors and the slow progress of India’s nuclear programme,” *Ideas for India*, August 16, 2016

“False Nuclear Hope,” with Zia Mian, *Himal*, August 14, 2016

“The Needless Quest for NSG Membership,” with Suvrat Raju, *Telegraph*, July 28, 2016

“Nuclear Security Summit: The Road Not Taken,” with Zia Mian, *Hindu*, April 19, 2016

“Five Years After the Fukushima Accidents: Thinking about Nuclear Power and Safety,” *Dianuke*, March 13, 2016

“‘Teething Troubles’ at Kudankulam: India Biting More Nuclear Than it Can Chew,” *The Wire*, March 8, 2016

“A Radioactive Money Pit: The Hidden Risks of Small-scale Nuclear Reactors,” with Sajan Saini, *Harper’s Magazine*, February 2016

“Three Cheers (not) for Jaitapur,” *Ideas for India*, January 25, 2016

“Moving nuclear reactors inland is a bad idea,” with Amy King, *Chinadialogue.net*, January 11, 2016

“Nuclear Salesmen in Paris: Wishful Thinking and Economic Realities,” *Economic and Political Weekly Online*, January 2, 2016

“A False Hope,” *Bulletin of the Atomic Scientists Online*, December 2015

“The strange love for nuclear energy,” with Suvrat Raju, *Hindu*, December 17, 2015

“Ahead of Paris, An Unfavorable Climate for Nuclear?,” *Nuclear Intelligence Weekly*, November 20, 2015

“Nuclear Power as Intended Nationally Determined Contribution Document,” *Mausam*, November 2015

“Nuclear Power Is No Fix for Climate,” World Energy Opinion, *Energyintel.com*, November 2015

“Miles to go: exporting uranium to India,” *On Line Opinion*, September 11, 2015, reprinted in *Nuclear Monitor*, September 2015

“An end to reprocessing,” *Nuclear Monitor*, August 27, 2015

“Lesson for India: Why reprocessing of spent fuel from nuclear reactors makes little sense,” *Economic Times*, August 23, 2015

“Looking Back, Looking Ahead: Plutonium Separation From Power Reactors,” with Frank von Hippel, *Nuclear Intelligence Weekly*, August 14, 2015

“Saudi Arabia must not focus on nuclear power,” with Ali Ahmad, *Gulf News*, June 25, 2015

“Betting on the Wrong Horse: Fast Reactors and Climate Change,” *Mausam*, April-June, 2015, reprinted in *Nuclear Monitor*, December 2015

“Paromanobik Shokti Ki Samadhan? (Is nuclear power the solution?),” *Janaswartha Barta* (in Bengali), May 23, 2015

“No Big Deal,” with Suvrat Raju, *Hindu Business Line*, May 1, 2015

“The Forgotten History of Small Nuclear Reactors,” *IEEE Spectrum*, May 2015

“Saudi Arabia’s expensive quest for nuclear power,” with Ali Ahmad, *Nuclear Monitor*, April 2015

“Is nuclear the answer to India’s energy crisis?” *SciDev.net*, April 20, 2015

“Profitability without accountability,” with Suvrat Raju, *Hindu*, February 16, 2015

“Go slow on fast reactors,” *TheHill.com*, February 3, 2015

“Nuclear deal no cause for celebration,” with Suvrat Raju, *Hindu*, January 31, 2015

“Does the Middle East Really Need Nuclear Power?,” with Ali Ahmad, *Al Monitor*, 25 September 2014 (reproduced in *Yemen Times*, 2 October 2014)

“The Doctrine of the Nuclear Sword,” with Zia Mian, *Himal*, September 2014

“Too Much to Ask: Why Small Modular Reactors may not be able to Solve the Problems Confronting Nuclear Power,” with Zia Mian, *Nuclear Monitor*, September 2014

“Atomic Power at a Steep Price,” with Suvrat Raju, *Daily News & Analysis*, March 27, 2014

“It’s better to be safe than sorry,” with Suvrat Raju, *Hindustan Times*, February 5, 2014

“Can Nuclear Power Be an Answer to India’s Electricity Needs?,” *akiomatsumura.com*, November 14, 2013

“The Impasse Over Liability Clause in Indo-U.S. Nuclear Deal,” with Suvrat Raju, *IndiaInk Blog, New York Times*, October 15, 2013

“The 2020 Olympics, Fukushima, and Trust,” Postscript, *Economic and Political Weekly*, Vol. XLVIII, No. 40, October 5, 2013

“Nuclear Extravagance in Washington,” with Suvrat Raju, *Hindu*, September 26, 2013

“The Limited Future of Nuclear Power in India,” *Physics and Society*, Vol. 42, No.3, July 2013

“China Must Avoid Costly Trap of Reprocessing Nuclear Fuel,” with Frank von Hippel, *Chinadialogue.net*, July 12, 2013

“Whistle Blowers and the Public Interest,” *Sanhati.com*, June 25, 2013

“Nuclear Energy: Infeasibility and Unimportance,” *Institute of Peace and Conflict Studies* (article on website), June 10, 2013

“Kudankulam: The Unsettled Queries,” *LiveMint*, June 5, 2013

“Nuclear Energy – Reassurances Don’t Guarantee Safety,” *Kafila.org*, April 4, 2013

“Castes and Moulds: Review of *Dispersed Radiance* by Abha Sur,” *Himal*, April 2013

“India’s Breeder Dreams and Realities,” *Nuclear Monitor*, April 2, 2013

“A Very Expensive Proposition,” with Suvrat Raju, *Hindustan Times*, February 12, 2013

“Some Challenges of Dealing with Nuclear Waste,” *Newslick* (online magazine), January 24, 2013

“The Problem of Radioactive Waste Disposal,” (translated into Kananda) *Vijay Karnataka*, November 24, 2012

“Nuclear Safety Before Vendor Interests,” with Suvrat Raju, *Hindu*, October 30, 2012

“India’s nuclear power failures warn against uranium exports,” *The Conversation*, October 15, 2012

“Where the Mind is Full of Fear: Opposition to the Koodankulam Nuclear Reactor,” with Suvrat Raju, *Hindu*, September 19, 2012.

“Flight From Disarmament,” *Bulletin of the Atomic Scientists Online*, May 10, 2012

“Nuclear Energy and Democracy,” with Suvrat Raju, *Al Jazeera English*, April 25, 2012.

“A New Twist in the Saga of India’s Liability Law,” with Suvrat Raju, *Nuclear Intelligence Weekly*, April 13, 2012

“In Denial of Fukushima,” *Tehelka*, March 17, 2012

Review of *Nucleus and Nation: Scientists, International Networks and Power in India* by Robert Anderson, *Pacific Affairs*, 8, no. 4 (2011).

“No Power to the People,” with Suvrat Raju, *Hindustan Times*, November 29, 2011

“This Power Play Fails to Charm,” *Sydney Morning Herald*, November 18, 2011

“Why Kudankulam is Untenable,” with Suvrat Raju, *Hindu*, November 12, 2011

“A Nuclear Chain Reaction,” with Suvrat Raju, *Times of India*, September 24, 2011

“Managing Spent Nuclear Fuel,” with Harold Feiveson, Zia Mian, and Frank von Hippel, *Bulletin of the Atomic Scientists Online*, June 27, 2011

“Strange Love,” with Suvrat Raju, *Open Magazine*, May 14, 2011

“Beyond Our Imagination: Fukushima and the Problem of Assessing Risk,” *Bulletin of the Atomic Scientists Online*, April 19, 2011

“Nuclear Reality, Damaged Democracy,” with Suvrat Raju, *Down to Earth*, April 16, 2011

“The Nature of Nuclear,” with A. H. Nayyar and Zia Mian, *Himal*, April 2011

“The Multiple Costs of India’s Nuclear Ambitions,” with Suvrat Raju, *InfoChange*, April 2011

“Fukushima Lessons,” with A. H. Nayyar and Zia Mian, *Dawn*, March 27, 2011

“React on Reactors,” with Suvrat Raju, *Hindustan Times*, March 17, 2011

“French Dressing: Nuclear Reactors for Jaitapur,” with Suvrat Raju, *Hindustan Times*, December 21, 2010

“No Sweetheart Deal This,” with Suvrat Raju, *Hindustan Times*, August 26, 2010

“Moral Hazard of Indemnifying Suppliers,” with Suvrat Raju, *Hindu*, August 21, 2010

“To Avoid a Disaster,” with Suvrat Raju, *Hindustan Times*, August 15, 2010

“India Nuke Rule Upsets Security in South Asia,” with Zia Mian, *Asahi Shimbun*, August 8, 2010

“For Whom the Nuclear Liability Bill,” with Suvrat Raju, *Nai Dunia (Hindi)*, April 17, 2010

“Nuclear power and public safety,” with Ashwin Kumar, *Third World Resurgence*, no. 235, 2010

“India’s Renaissance: Imperiled by Weak Safety Standards?” *Uranium Intelligence Weekly*, January 19, 2010

“The Future of Nuclear Power in India,” *India in Transition*, January 4, 2010

“Life in a Radiation Zone,” *Down to Earth*, January 1, 2010

“The Impact of the Indo-US Nuclear Deal on the NPT and the Global Climate Regime,” *Heinrich Böll Stiftung – Foreign Affairs & Security*, December 8, 2009

“A Nuclear and Sustainable Energy Reading List,” with Zia Mian, *Bulletin of Atomic Scientists*, November-December, 2009

“India’s Evolving Climate Change Strategy,” with Shoibal Chakravarty, *Climate Science and Policy*, November 13, 2009

“The Safety Inadequacies of India’s Fast Breeder Reactor,” with Ashwin Kumar, *Bulletin of Atomic Scientists Online*, July 21, 2009

“Nuclear Growth Projections,” *Dainik Janambhumi (Assamese)*, January 7, 2009

“Globalization of the Nuclear Industry,” with Andrew Lichterman, *Strategic Affairs*, December 15, 2008

“Rushing into the Wrong Future: The U.S.-India Nuclear Deal, Energy and Security,” with Andrew Lichterman, *Dissident Voice*, September 20, 2008

“Implications of the NSG Waiver Decision,” *Dainik Janambhumi (Assamese)*, September 13, 2008

“False Premise: Indo-U.S. Nuclear Deal,” in two installments, *Siliconer*, August and September, 2008

“Misleading Propaganda in Support of the Nuclear Deal,” *Dainik Janambhumi (Assamese)*, July 16, 2008

“The Indian Approach to Climate and Energy Policy,” with Divya Badami Rao, *Bulletin of the Atomic Scientists Online*, July 3, 2008

“What is Wrong with Testing Missiles?,” *Dainik Janambhumi (Assamese)*, June 14, 2008

“An Offer to Refuse,” *Dainik Janambhumi (Assamese)*, May 18, 2008

“Deeper into the Morass: Ten Years After Pokharan,” *Hindu*, May 11, 2008

“Remembering Chernobyl,” *Dainik Janambhumi (Assamese)*, April 28, 2008

“The Choices Involved in the Nuclear Deal,” *Phalanx*, April 2008

“The Physical Basis of Climate Change,” *Dainik Janambhumi (Assamese)*, March 13, 2008

“A Land Dispute Ready to Explode: Uranium Mining in Meghalaya,” *Hindustan Times*, February 2, 2008

“Nuclear Energy: A Costly Affair,” with J. Y. Suchitra, *Hosatu (Kannada)*, January 2008

“Nuclear safety lessons from Japan's summer earthquake,” with Ashwin Kumar, *Bulletin of the Atomic Scientists Online*, December 5, 2007

“The Costs of Nuclear Energy,” *Dainik Janambhumi (Assamese)*, November 7, 2007

“Fast Breeder of Expenditure?” with J. Y. Suchitra, *Hindustan Times*, October 23, 2007

“The Nuclear Deal and Fundamental Choices,” *Dainik Janambhumi (Assamese)*, September 10 & 11, 2007

“Koodankulam Goes Nuclear,” with Manju Menon, *Himal Southasian*, August 2007

“Address Local Concerns at Koodankulam,” with Manju Menon, *Tribune (Chandigarh)*, August 8, 2007

“Triumph of Fear,” with Zia Mian, *Bulletin of the Atomic Scientists*, July 2007

“More Missiles than Megawatts,” *IEEE Spectrum*, July 2007

“Home, Next to N-reactor,” with Praful Bidwai, *Tehelka*, June 23, 2007, translated and published in *Manida Urimai Kangani (Tamil)*, July 2007

“Uranium Mining: Health and Ecological Impact,” *Dainik Janambhumi (Assamese)*, June 16, 2007

“Fight Against Global Warming: N-energy won’t help,” with G. Ananthapadmanabhan, *Deccan Herald*, May 12, 2007

“Three Boos,” *Peace Now*, May 2007

“Feeding Potential for South Asia’s Nuclear Fire,” with Zia Mian and Frank von Hippel, *Asahi Shimbun*, March 5, 2007 (Japanese) and March 29, 2007 (English)

“Dealing with the Nuclear Deal,” *Peace Now*, November 2006

“Citizens Inputs on Power Tariffs,” *India Together*, November 24, 2006

“Editorial,” Special issue on Chernobyl and the Future of Nuclear Power, *Peace Now*, June 2006

“Chernobyl: The Politics of Counting Deaths,” *Peace Now*, June 2006

“Flaws in the Pro-nuclear Argument,” with J. Y. Suchitra, *InfoChange Agenda* 5, (2006)

“Let’s Not Chase the Atom,” *Down to Earth*, March 31, 2006

“Don’t Switch over to Nuclear Power,” *The Economic Times*, March 10, 2006

“Hiroshima and Nagasaki: Experiments in Nuclear Mass Murder,” *Peace Now*, August 2005

“India-US nuclear agreement: a Bad Deal,” *The Friday Times*, July 29, 2005

“Nuclear Power: No Solution to Global Warming,” *The Friday Times*, July 1, 2005

“Nuclear Power is not Cheap,” with Amulya Reddy, *The New Indian Express*, June 20, 2005

“NPT RevCon: Challenges of Disarmament,” *The Friday Times*, April 22, 2005

“Talking Peace, Making War,” with Zia Mian and A. H. Nayyar, *The News*, January 8, 2005

“A Fast Breeder of Danger,” *Indian Express*, September 7, 2004

“Steps for Nuclear Talks,” with Zia Mian, A. H. Nayyar and R. Rajaraman, *The News*, July 2, 2004

“When Early Warning is no Warning,” with Zia Mian and R. Rajaraman, *The Hindu*, July 2, 2004

“Reducing Nuclear Risk,” with R. Rajaraman, *The Hindu*, June 4, 2004

“Reinforcing Nuclear Secrecy,” *The Daily Times*, February 5, 2004

“Some Things to Agree on,” with Zia Mian, A. H. Nayyar and Sandeep Pandey, *The Daily Times*, January 2, 2004

“Nuclear Terrorism: the Greater Dangers,” *The Daily Times*, December 18, 2003

“Climate Change and Developing Countries,” *The Daily Times*, December 4, 2003

“Climate Change Failure: the Underlying Causes,” *The Daily Times*, November 21, 2003

“The Arms Race Continues,” *The Daily Times*, October 23, 2003

“Need for Nuclear Transparency,” *The Daily Times*, September 25, 2003

“Electricity Sector Restructuring,” *The Daily Times*, September 11, 2003

“Nuclear Disarmament after Iraq,” *The Daily Times*, July 31, 2003

“Reprocessing: the Cons,” *Outlook (web edition)* July 25, 2003

“Enduring Nuclear Legacies,” *The Daily Times*, July 17, 2003

“Steps to Peace,” *The Daily Times*, May 22, 2003

“Remembering the Chernobyl Catastrophe,” *The Daily Times*, April 24, 2003

“Compounding Mistakes: New Reactor at Chashma,” *The Daily Times*, April 10, 2003

“Assessing Emergency Plans,” *The Daily Times*, March 13, 2003

“Nuclear Resurgence in the US,” *The Daily Times*, February 27, 2003

“India’s Force in Being,” *The Daily Times*, February 6, 2003

“Phasing Out Nuclear Energy in Europe,” *The Daily Times*, January 30, 2003

“Military Planning and Nuclear Weapons,” *The Daily Times*, January 16, 2003

“India’s Nuclear Command Authority,” *The Daily Times*, January 9, 2003

“Reckless Challenges,” *The Daily Times*, December 5, 2002

“Following the US Lead,” *The Daily Times*, November 14, 2002

“False Alarms and Early Warning Systems,” *The Daily Times*, November 7, 2002

“North Korea’s Negotiating Strategy,” *The Daily Times*, October 31, 2002

“Deterrence: Hope and Reality,” *The Daily Times*, October 3, 2002

“Nuclear Deterrence: The Inside Look,” *The Daily Times*, September 26, 2002

“Shared Understandings and Deterrence,” *The Daily Times*, September 12, 2002

“Impacts of Underground Nuclear Tests,” *The Daily Times*, August 23, 2002

“The Arrow Deal: India, Israel and the US,” *The Daily Times*, August 8, 2002

“Indo-Pak Military Crises – Some Fallouts,” *The Daily Times*, July 25, 2002

“Censorship in the Nuclear Age,” *The Hindu*, July 19, 2002

“Radioactive Fallout from Nuclear Testing,” *The Daily Times*, July 18, 2002

“Bush-Putin Nuclear Treaty,” *The Daily Times*, July 4, 2002

“Censoring Nuclear Truths,” *The Daily Times*, June 27, 2002

“The Illogic of Civil Defense,” *The Daily Times*, June 13, 2002

“Tactical Nuclear Weapons: Another Firebreak,” *The Daily Times*, June 6, 2002

“Profiting from Arms Sales and Death,” *The Daily Times*, May 30, 2002

“Nuclear Instability and Militancy,” *The Daily Times*, May 23, 2002

“Missiles and the Fast Delivery of Nuclear Destruction,” *The Daily Times*, May 16, 2002

“Looking Back at Pokharan II,” *Outlook (web edition)*, May 13, 2002

“Dubious Achievements of the BJP Government,” *The Daily Times*, May 9, 2002

“Nuclear Non-Proliferation Treaty: Stalemate again,” *The Daily Times*, April 25, 2002

“The US Contempt for International Treaties,” *The Daily Times*, April 18, 2002

“Reviewing the Nuclear Non-Proliferation Treaty,” *The Daily Times*, April 11, 2002

“Reality Behind the Smoke Screen: US Nuclear Posture Review,” *The Friday Times*, April 5-11, 2002

“In the Event of a Nuclear War,” *Mantram: For the Ambitious South Asian Professional*, March 2002

“India-Pakistan Standoff: Recalling October 1962,” *The Friday Times*, February 22-28, 2002

“A Nuclear Wedge,” *Frontline*, December 8, 2001

“India, Pakistan and the Bomb,” with A. H. Nayyar, *Scientific American*, December 2001

“Yet Another Nuclear Danger,” with Zia Mian and R. Rajaraman, *Frontline*, August 17, 2001

“Fast Breeders: Tall Promises, Poor Performance,” *The Hindu*, July 16, 2001

“What they can Agree on,” *The Hindu*, July 10, 2001

“The New Texas Ranger and his Guns,” with Andrew Lichterman, *Frontline*, June 8, 2001

“Fast-breeder Reactors - A Dying Breed,” *The Hindu*, May 28, 2001

“The Bomb of the Blue God,” *South Asian Magazine for Action and Reflection*, Winter/Spring 2001

“Slow, Silent Killer,” *Frontline*, February 3, 2001

“New Nukes, Old Speak,” *The Friday Times*, October 27, 2000

“The Concorde and the Nuclear Reactor,” *Himal*, September 2000

“Ending the n-race,” *The Hindu*, May 25, 2000

“Old Weapons, New Contestants,” *IEEE Spectrum*, March 2000

“Scientists and the Indian Bomb,” *Anubhav*, February 2000

“The Question of Nuclear Yield,” *Frontline*, January 21, 2000

“Dangerous Encounters: Nuclear Reactor Accidents,” *The Hindu*, November 21, 1999

“Organizing in India Against the Bomb,” *Vital Signs*, Vol. 12, Issue 2, November 1999

“Sweeping Charges: The Cox Report and Nuclear Espionage,” *Frontline*, October 22, 1999

“Draft Nuclear Doctrine,” *Dainik Bhaskar (Hindi)*, September 1999

“A Recipe for Disaster,” *The Hindu*, September 9, 1999

“Disturbing Questions: On the Heavy Water Leak at the Madras Atomic Power Station,” *Frontline*, June 4, 1999

“Underground Tests: Ravaging Nature,” *The Hindu Survey of the Environment '99* (June 1999)

“Heads They Win, Tails We All Lose,” *Dainik Bhaskar (Hindi)*, June 1999

“Nuclear Tests: the Long Term Fallout,” *The News on Sunday (Pakistan)* May 2, 1999

“For a Just Peace: The Anti-Nuclear Movement in India,” *Social Science Research Council Newsletter* **12** (May 1999)

“Health and Environmental Effects of Underground Nuclear Tests,” *Dainik Bhaskar (Hindi)*, March 1999

“Radiation Perils to Workers: Experiences from the United States,” *Dainik Bhaskar (Hindi)*, February 1999

“Reject the Hydrogen Bomb!,” *Dainik Bhaskar (Hindi)*, January 1999

“Did India Test an H-bomb?,” with Frank von Hippel, *Federation of American Scientists Public Interest Report* **52** No. 1, January/February 1999

“Does India Need the H-bomb?,” with Frank von Hippel, *The Hindu*, December 23, 1998

“Nuclear Weapons and Security,” *Dainik Bhaskar (Hindi)*, December 1998

“The Indian Nuclear Bomb – Long in the Making,” *Precis* **9** No. 3 Fall 1998

“If? Bombing Bombay,” *Himal* August 1998

“India's Changing Nuclear Policy,” *Peace Magazine* XIV, January/February 1998

“A Fissile Material Cutoff Treaty,” *Peace Magazine* XII, May/June 1996

PROFESSIONAL MEETINGS

- “Challenges of Small Modular Reactors,” Presentation at Panel on “Emerging Technologies for Small-scale Grids”, Singapore International Energy Week, Singapore, October 27, 2017
- “Nuclear Energy and Nuclear Disarmament: Can the two co-exist?,” Presentation at the Gathering in the Shadows of a Nuclear Winter Conference, South Asian Network for Secularism and Democracy and Institute for the Humanities, Simon Fraser University, Vancouver, September 9, 2017
- “Global and Regional Economics of Nuclear and Renewable Energy,” Presentation at Workshop on The Future of Nuclear Energy in the Middle East, International Panel on Fissile Materials and American University of Beirut, Beirut, March 15, 2017
- “Nuclear Energy in Saudi Arabia: Necessary? Economically Competitive?,” Presentation at NPEC Public Policy Fellowship Retreat, Nonproliferation Policy Education Center, Washington, D.C., March 4, 2017
- “Linkages Between Nuclear Energy and Nuclear Weapons,” Presentation (over Skype) at Workshop on The Nuclear-Climate Nexus and Sustainable Peace, International Peace Bureau World Congress, Berlin, October 1, 2016
- “Emerging Reactor and Fuel Cycle Technologies, Including Associated Safety, Security, and Safeguards Risks,” Presentation at Workshop on Managing Risks Associated with Global Nuclear Energy Expansion: Emerging Challenges and Cooperative Solutions, George Washington University, Washington, D. C., May 5, 2016
- “Reprocessing and Breeder Reactors: The Case of India,” Presentation at Meeting of the International Panel on Fissile Materials, American Association for the Advancement of Science, Washington, D. C., March 14-15, 2016
- “Ethical Concerns Regarding Nuclear Energy: Weapons, Accidents, Wastes, Costs, and Democracy,” Workshop on Ethics and Governance of Energy Technologies, Eindhoven University of Technology, Netherlands, January 15, 2016
- Co-convenor, Working Group on “Civilian Nuclear Energy, Energy Resources, and International Cooperation,” 61st Pugwash Conference on Science & World Affairs, Nagasaki, Japan, November 1-5, 2015
- “Small Modular Reactors in the United States,” Workshop on Nuclear Power And Small Modular Reactors In Indonesia: Potential And Challenges, Indonesian Institute of Energy Economics, Jakarta, June 25, 2015
- “The Challenges of Nuclear Safety,” International Workshop on Emerging Energy Scenarios in the Middle East, Munib and Angela Masri Institute of Energy and Natural Resources, American University, Beirut, May 22, 2015
- “Accident Risks for High Temperature Reactors,” 1st International Conference on Nuclear Risks, Vienna, April 16-17, 2015
- “Taking Sides on the ‘Double Movement’,” Polanyi Conference on Science and Social Responsibility, University of Toronto, November 15, 2014
- “Nuclear Power in Today’s Energy and Environmental Discourse,” Workshop on New Studies in Ecology and Environment, New Delhi, India, August 23, 2014
- “Liability” and “Waste Management,” two talks at Workshop on Nuclear Power in East Asia: The Costs and Benefits, Australian National University, Canberra, Australia, August 12-14, 2014

- “The State of the SMR Market,” Third Trilateral Meeting, Carnegie Mellon University, Pittsburgh, May 8-9, 2014
- “Arguing from the Periphery,” American Physical Society Annual Meeting, Savannah, GA, April 6, 2014
- “Resource Requirements and Proliferation Risks Associated with Small Modular Reactors,” Panel on Opportunities and Challenges for Nuclear Small Modular Reactors, American Association for the Advancement of Science Annual Meeting, Chicago, February 15, 2014
- “Global Context for Nuclear Power,” Conference on Nuclear Technology, Nuclear Energy and a ME WMD-free Zone, Doha, Qatar, October 27, 2013
- “The Impact of Fukushima and Chernobyl on India’s Anti-Nuclear Movements,” Conference on Traveling Norms and the Politics of Contention, Zurich, Switzerland, October 25, 2013
- “Small Modular Reactors: Uranium Resource Requirements, Waste Generation and Proliferation Risk Assessment,” Presentation at the 21st International Conference on Nuclear Engineering, Chengdu, China, July 29-August 2, 2013
- “Fukushima Nuclear Accident: Shortcomings of Safety Regulation and Lessons Learned,” Panel Discussion at the Carnegie International Nuclear Policy Conference, Washington, D.C., April 8, 2013
- “Whither Nuclear Power?” Panel Discussion at the Carnegie International Nuclear Policy Conference, Washington, D.C., April 8, 2013
- “One in infinity’: Assessing Nuclear Risks in India,” Presentation at the Panel on “India at Risk: Capacity, Institutions and Expertise”, Society for Risk Analysis 2012 Annual Meeting, San Francisco, December 12, 2012
- “How about Domestic Emission Inequities? The Case of India,” Presentation at the International Conference on Inequality and Sustainability, Stockholm Environmental Institute & Center for International Environment and Resource Policy, Boston, November 9, 2012
- “Proliferation Risks Associated with Small Modular Reactors,” Presentation at the “Summer Symposium on Science and World Affairs”, Organized by the Union of Concerned Scientists, Princeton, July 9, 2012
- “India and Nuclear Transparency,” Presentation at the Workshop on “Transparency”, Organized by the International Panel on Fissile Materials, Princeton, March 31, 2012
- “Nuclear Safety and Security in India,” Presentation at the Panel Discussion on Nuclear Policy of Key Countries, Seoul National University, Seoul, South Korea, March 22, 2012
- “Indian Fallout: Public Protest and Organizational Strategies in the Aftermath of the Fukushima Accidents,” Presentation at Panel Discussion on Nuclear Energy After Fukushima: Japan and Beyond, Association of Asian Studies Conference, Toronto, March 18, 2012
- “Nuclear Power in India: Implications of Fukushima,” Presentation at the Panel on Nuclear Power: One Year after Fukushima, American Physical Society Meeting, Boston, March 1, 2012
- “India’s Nuclear Plans: Can they be Realized?,” Presentation at the Workshop on “Reprocessing”, Organized by the International Panel on Fissile Materials, Tokyo, January 20, 2012
- “Prospects for India’s Breeder Program,” Presentation at the Workshop on “Nuclear Fuel Cycle Issues in Asia”, Organized by the International Panel on Fissile Materials, Tokyo, March 19, 2010

- “Inherently Ambiguous? The Limits of Nuclear Accident Scenarios and Safety Analyses,” Meeting on “Knowledge Society Debates”, Organized by the STEPS Centre, University of Sussex, National Institute of Advanced Studies, Bangalore, January 8, 2009
- “Some Challenges for Nuclear Power in Developing Countries,” Presentation at Conference on “New Generation Nuclear: From policy to implementation,” Organized by Chatham House, London, November 17-18, 2008
- “Nuclear Power in India: Perspectives and Challenges,” Presentation at Conference on “The nuclear energy revival: regional perspectives and governance challenges,” Organized by Centre for International Governance Innovation & Canadian Centre for Treaty Compliance, Waterloo, November 6-7, 2008
- “More than Desirable: Some Necessary, but not Sufficient, Conditions for Nuclear Expansion,” Presentation at the Conference on The Future of Nuclear Energy, Organized by the Bulletin of the Atomic Scientists, Argonne National Laboratory, and the University of Chicago, Chicago, September 25-26, 2008
- “Nuclear Power and Energy Security in India,” Presentation at Meeting on “The Proposal for Nuclear Trade with India,” Organized by Heinrich Böll Foundation and Arms Control Association, Berlin, May 13, 2008
- “Some Implications of the US-India Nuclear Deal,” Presentation at the NGO Panel on “The US-India Nuclear Deal and the NPT,” Nuclear Non Proliferation Treaty Preparatory Committee Meeting, United Nations, Geneva, May 2, 2008
- “Fissile Material Implications of the US-India Nuclear Deal,” Presentation at the Annual Meeting of the German Physical Society, Berlin, February 29, 2008
- “Nuclear Safety,” Presentation at the Centre for Interdisciplinary Studies on Environment and Development Advisory Committee Meeting, Bangalore, January 11, 2008
- “Climate Change and Nuclear Power in Developing Countries,” Presentation at “Nuclear Energy: Myth and Reality,” Side event at 13th Conference of Parties to the United Nations Framework Convention on Climate Change, Organized by Heinrich Böll Foundation, Nusa Dua, Bali, December 13, 2007
- “Infeasible and Undesirable: A Nuclear Comeback and Climate Security,” Presentation at 2nd TERI-KAF Conference on “Energy, Climate, and Security: The Inter-Linkages,” Organized by The Energy and Resources Institute and Konrad Adaneur Foundation, Goa, October 13 - 14, 2007
- “Nuclear Reactors: Unsafe at any Price,” Presentation at the International Conference on “Indo-US Nuclear Deal,” Organized by the Heinrich Böll Foundation, CNDP, and PEACE, New Delhi, August 31-September 1, 2007
- “The U.S. India Nuclear Deal: Debates and Implications,” Presentation at the Meeting on “Forging a New Consensus for the NPT,” Article VI Forum, Vienna International Center, Vienna, March 29, 2007
- “Nuclear Energy: Projections and Economics,” Presentation at Workshop on Power Sector Reforms and Regulation in India, Prayas, Pune, March 22-23, 2007
- “Economic and Environmental Costs of Nuclear Power,” Presentation at the Ninth Biennial Conference of the International Society of Ecological Economics, New Delhi, December 16-18, 2006
- “Nuclear Economics in a Developing Country: The Case of India,” Presentation at the Conference on The Future of Nuclear Energy, Organized by the Bulletin of the Atomic Scientists, Argonne National Laboratory, and the University of Chicago, Chicago, November 1-2, 2006

- “Nuclear Energy and Climate Change,” Presentation at the Workshop for Journalists on Energy and Climate Change, Organized by PANOS South Asia, New Delhi, July 5, 2006
- “Feeding the Nuclear Fire,” Presentation at the Conference on International Nuclear Cooperation with India, Simons Centre for Disarmament, University of British Columbia, Vancouver, November 22, 2005
- “India’s Nuclear Enclave and the Practice of Secrecy,” Presentation at the Second Workshop on “Culture, Society and Nuclear weapons in South Asia,” Social Science Research Council, Washington, D.C., August 28-29, 2005
- “An Estimate of India’s Uranium Enrichment Capacity,” Presentation at the 17th International Summer Symposium on Science and World Affairs, Princeton, July 23-31, 2005
- Discussant, First Workshop on “Culture, Society and Nuclear weapons in South Asia,” Social Science Research Council, Amsterdam, May 9-11, 2005
- “Nuclear Power: the Department of Atomic Energy’s Plans and Constraints,” Presentation at the Consultation Meeting on Strategies to Realize a Non-nuclear India organized by Citizens for Alternatives to Nuclear Energy and Centre for Interdisciplinary Studies in Environment and Development, Bangalore, January 29, 2005
- Coordinator, Environmental Sustainability Group, Workshop on “Neglected Dimensions of Electricity Sector Policies: Equity, Sustainability, and Institutions and Governance,” Prayas, Pune, January 11-12, 2005
- “India and Nuclear Secrecy,” Presentation at the Conference on “Transparency as a Pre-requisite of Arms Control,” Peace Research Institute, Bensheim, November 19-20, 2004
- “Nuclear Energy and Security,” Presentation at the Workshop on “The Challenge of Hiroshima: Alternatives to Nuclear Weapons, Missiles, Missile Defenses, and Space Weaponization in a Northeast Asian Context,” International Network of Engineers and Scientists Against Nuclear Weapons, Hiroshima, October 8-11, 2004
- “Energy and Environmental Sustainability,” Presentation at the National Seminar on Integrating Environmental Sustainability with Economic Development, Maharani’s Arts College for Women, Bangalore, August 26, 2004
- “The Cost of Electricity from Indian Pressurised Heavy Water Reactors,” Presentation at the Centre for Interdisciplinary Studies on Environment and Development Advisory Committee Meeting, Bangalore, January 12, 2004
- “Effects of Nuclear Explosions,” Lecture at the Workshop on “Defence, Technology and Cooperative Security in South Asia”, Regional Centre for Strategic Studies, Shanghai, December 3-13, 2003
- “Problems with Nuclear Early Warning Systems in South Asia,” Lecture at the Workshop on “Defence, Technology and Cooperative Security in South Asia”, Regional Centre for Strategic Studies, Shanghai, December 3-13, 2003
- “Nuclear Weapons Effects,” Presentation at the Institute for Energy and Environmental Research Technical Training Workshop, Takoma Park, Maryland, June 19, 2003
- “Nuclear South Asia,” Talk at Panel on “War and Public Health,” Presentation at the American Public Health Association 130th Annual Meeting & Exposition, Philadelphia, November 11, 2002
- “Under the Nuclear Shadow,” Discussion at Middlesex County College, October 31, 2002

- “Dangers of Nuclear War and Paths to Nuclear Weapons Abolition,” Presentation at the American Friends Service Committee Conference on “Paths to a Just and Secure Future,” Boston, October 11, 2002
- “Nuclear South Asia,” Overview Lecture at the 1st International Professional Meeting of Independent Technical Security Analysts, Chicago, July 23-24, 2002
- Invited “Shadow Expert” at the SANITY (Students Against Nuclear Insanity and for Tomorrow’s Youth) Youth Caucus at the Nuclear Non Proliferation Treaty Preparatory Committee Meeting, United Nations, New York, April 17, 2002
- “The Arms Race in South Asia,” Presentation at the NGO Panel on “The Shape of Things to Come,” Nuclear Non Proliferation Treaty Preparatory Committee Meeting, United Nations, New York, April 12, 2002
- “Alternatives to Missile Defense,” Briefing for Delegates, NGOs and Press at the Nuclear Non Proliferation Treaty Preparatory Committee Meeting, United Nations, New York, April 11, 2002
- “Effects of Nuclear Explosions and Nuclear War in South Asia,” Lecture at the Workshop on “Defence, Technology and Cooperative Security in South Asia”, Regional Centre for Strategic Studies, Kalutara, Sri Lanka, January 5-14, 2002
- “Plutonium Dispersal and Health Hazards from Nuclear Weapon Accidents,” Lecture at the Workshop on “Defence, Technology and Cooperative Security in South Asia”, Regional Centre for Strategic Studies, Kalutara, Sri Lanka, January 5-14, 2002
- “Beyond Missile Defense: Arguments,” Presentation at the 13th International Summer Symposium on Science and World Affairs, Berlin, July 21-30, 2001
- “The Missile Race in Critical Regions: Is there a way out?,” Presentation at the Workshop on “Moving Beyond Missile Defense”, International Network of Engineers and Scientists Against Nuclear Weapons, Santa Barbara, March 19-21, 2001
- “Is there a Missile Threat? The Dynamics of Missile Proliferation and the State of Missile Control,” Presentation at the Workshop on “Moving Beyond Missile Defense”, International Network of Engineers and Scientists Against Nuclear Weapons, Santa Barbara, March 19-21, 2001
- “Ballistic Missile Disarmament,” Presentation at the Panel on “Outer Space: Disarmament Issues,” Organized by the NGO Committee on Disarmament, Disarmament Week, United Nations, October 19, 2000
- “Why Nuclear Disarmament,” Presentation at the Alliance for Nuclear Accountability Meeting, Amarillo, September 23, 2000
- “Plutonium Dispersion and Health Hazards from Nuclear Weapons Accidents,” Presentation at the 12th International Summer Symposium on Science and World Affairs, Moscow, Russia, August 23-31, 2000
- “Scientists and Radiation Protection: A History,” Presentation at the NGO Panel on “Health, Environment, Science and Society: Professional Responsibility in the Nuclear Age,” Nuclear Non-Proliferation Treaty Review Conference, United Nations, New York, May 15, 2000
- “Environmental Aspects of the Nuclear Fuel Cycle,” Presentation at the NGO Panel on “The Toxic Legacy of the Nuclear Age,” Nuclear Non-Proliferation Treaty Review Conference, United Nations, New York, May 4, 2000
- “Scientists and Ideology,” Presentation at the NGO Panel on “Personal Responsibility in the Nuclear Age,” Nuclear Non-Proliferation Treaty Review Conference, United Nations, New York, May 1, 2000

- “NPT Forecast: Cloudy or Sunny,” Presentation at the NGO Presentation in preparation for the Nuclear Non-Proliferation Treaty Review Conference, United Nations, New York, April 18, 2000
- “The Future of Post-Nuclear South Asia,” Presentation at the Conference on “Rethinking the Past, Shaping the Future: Partition, History and Identity,” South Asian Students Association of Smith College, Northampton, MA, March 25, 2000
- Overview presentation at the workshop (jointly organized with Srirupa Roy, New York University) on “Nuclear Understandings: Science, Society, and the Bomb in South Asia,” Dhaka, February 17, 2000
- Overview presentation at plenary discussion on “Nuclear Policy and Understandings in India” at the 13th Annual SSRC-MacArthur Foundation Fellows' The Conference, New Delhi, August 19-23, 1999
- “Health Effects of Reactor Accidents,” Presentation at the 11th International Summer Symposium on Science and World Affairs, Shanghai, China, July 28 - August 5, 1999
- “Regional Proliferation,” NGO Presentation at the Nuclear Non Proliferation Treaty Preparatory Committee Meeting, United Nations, New York, May 10-21, 1999
- “Nuclear Capabilities of India,” Presentation at the session on “Physics and Disarmament” at the 63rd Annual Meeting of the German Physical Society, Heidelberg, March 18, 1999
- Keynote Speaker, Symposium on De-alerting of Nuclear Weapons, Organized by The United Nations Department of Disarmament Affairs, New York, October 26, 1998
- “Radioactivity Releases from Underground Nuclear Tests,” Presentation at the 10th International Summer Symposium on Science and World Affairs, Cambridge, Massachusetts, USA, July 13-21, 1998
- “India's Nuclear Tests: Some Technical Aspects,” Presentation at the 10th International Summer Symposium on Science and World Affairs, Cambridge, Massachusetts, USA, July 13-21, 1998
- “Effects of a Nuclear Explosion,” Presentation at the Institute for Energy and Environmental Research Technical Training Workshop, Takoma Park, Maryland, July 7-12, 1998
- Discussant, Panel Discussion on “India, Pakistan and Global Nuclear Disarmament,” Sponsored by Congresswoman Barbara Lee and Congressman John Conyers and the Institute for Policy Studies, Rayburn House Office Building, Washington, D.C., June 25, 1998
- “India's Nuclear Tests,” Presentation at the 12th Annual SSRC-MacArthur Foundation Fellows' Conference, San Salvador, May 17-23, 1998
- Invited Specialist to discuss “Agreements on controlling the components: a fissile material cut-off” at the International Consultation on “Global Security and Nuclear Disarmament” organized by the United Services Institution, Delhi and the Oxford Research Group, U.K., Neemrana, March 3-6, 1998.
- “Serving a Nuclear Summons: How to make the Nuclear Weapon States Negotiate Disarmament,” Presentation at the Pugwash Workshop on “Eliminating Nuclear Weapons,” New Delhi, March 1-3, 1998
- Participant, Meeting on “The Future of Russian-US Strategic Arms Reductions: START III and Beyond,” Jointly sponsored by The Center for Arms Control, Energy, and Environmental Studies, The Moscow Institute of Physics and Technology, and The MIT Security Studies Program, Cambridge, USA, February 2-6, 1998
- “Modelling Prithvi and Agni,” Presentation at the 9th International Summer Symposium on Science and World Affairs, Cornell University, Ithaca, USA, July 24 -August 3, 1997

- Participant, Conference on “The Future of Nuclear Weapons : A US-India Dialogue,” Center for Advanced Study of India, University of Pennsylvania, May 5-8, 1997
- “Nuclear Energy in India: Problems and Prospects,” Presentation at the NGO sessions of the NPT Preparatory Conference, United Nations, New York, USA, April 15, 1997
- “The Effects of Nuclear Explosions - a Case Study of Mumbai,” Presentation at the Regional Meeting of the International Physicians for the Prevention of Nuclear War, New Delhi, India, February 21-23, 1997
- “History of the Comprehensive Test Ban Treaty,” Overview Presentation at Panel Discussion on South Asia and the CTBT, Massachusetts Institute of Technology, USA, September 24, 1997
- “India's Participation in a Fissile Material Production Cutoff Convention,” Presentation at the 8th International Summer Symposium on Science and World Affairs, Beijing, China, July 23-31, 1996
- “India's Participation in a Fissile Material Production Cutoff Convention” Presentation at the 10th Annual SSRC-MacArthur Foundation Fellows' Conference, Oxford University, United Kingdom, May 18-23, 1996
- “New Flavor Physics in b Decays,” Presentation at the 2nd Workshop on High Energy Physics Phenomenology, SN Bose Institute, Calcutta, January 1996
- “A New Physics Source of Hard Gluons in Top Quark Production,” Presentation at the 17th Annual MRST Meeting on High Energy Physics, Rochester, NY, USA, May 8-9, 1995
- Participant, Theoretical Advanced Study Institute in Elementary Particle Physics, Boulder, Colorado, USA, June 2-28, 1991

INVITED SEMINARS AND LECTURES

- “Life Under the Shadow: Twenty years of Nuclear Weapons in India and Pakistan,” Seminar, Centre For India And South Asia Research, University Of British Columbia, March 29, 2018
- “Global Environmental Crises,” Lecture in Course on Introduction to International and Intercultural Studies, Douglas College, March 26, 2018
- “The Fukushima Accident, Policy Choices and the Contested Future of Nuclear Energy,” Lecture in Course on Urban Systems and Society, School of Community and Regional Planning, University Of British Columbia, March 12, 2018
- “Can Nuclear Energy be a Solution to Climate Change? Possible? Desirable? Feasible?,” Colloquium, Indiana University of Pennsylvania, February 22, 2018
- “Nuclear energy, radioactive waste, and sustainability,” Lecture in Course on Sustainability, Indiana University of Pennsylvania, February 22, 2018
- “The Nuclear Arms Race in South Asia: The Case of India,” Lecture in Course on Weapons of Mass Destruction and International Security, Princeton University, Princeton, February 21, 2018
- “Nuclear Weapons in India: History and Risk,” Seminar, Ethnic Studies Department & International Institute, University Of California, San Diego, November 30, 2017
- “Nuclear Power in the Middle East,” Seminar, University of San Diego, November 30, 2017
- “Nuclear Energy and SMRs: Products and Problems,” Lecture in Course on Nuclear Energy and Policy, Michigan State University, November 15, 2017
- “Nuclear Bombs and Nuclear Power: World Peace & Energy Security -- Unravelling the Promises,” Asian College of Journalism, Chennai, India, November 6, 2017
- “Nuclear Energy and SMRs in Indonesia,” Energy Studies Institute, National University of Singapore, October 25, 2017
- “The Global Future of Nuclear Energy,” School of Public Policy and Global Affairs, University of British Columbia, Vancouver, October 18, 2017
- “The Nuclear Arsenals of India and Pakistan: Programmes, Plans and Dangers,” Lecture in Course on Nuclear Weapons and Disarmament, University of Melbourne, May 8, 2017
- “The Nuclear Arms Race in South Asia: The Case of India,” Lecture in Course on Weapons of Mass Destruction and International Security, Princeton University, Princeton, April 10, 2017
- “Why do States Build Nuclear Weapons? The Case of India,” Carleton College, MN, November 4, 2016
- “Nuclear Power: Overview, Economics, and India,” Carleton College, MN, November 4, 2016
- “Small Modular Reactors: An Inadequate Response to the Challenges Faced by Nuclear Power,” Nanyang Technological University, Singapore, October 18, 2016
- “U.S. Launch of the World Nuclear Industry Status Report 2016,” with Mycle Schneider, Natural Resources Defense Council, Washington, D.C., September 19, 2016
- “After Fukushima: Nuclear Power Programs Around the World,” Google Hangout with Sigma Xi, October 11, 2016

- “Nuclear Weapons in South Asia: Programmes, Plans, and Dangers,” Dr. Asghar Ali Engineer Memorial Advisory Committee and Coalition for Nuclear Disarmament and Peace, Mumbai, August 27, 2016
- “The Future of Nuclear Energy in India: Expectations and Constraints,” School of Media and Cultural Studies, Tata Institute of Social Sciences, Mumbai, August 26, 2016
- “Understanding Nuclear Energy and Nuclear Diplomacy,” Asian College of Journalism, Chennai, August 22, 2016
- “Whither Nuclear Power in the Middle East: The Cases of Saudi Arabia and Jordan,” Nonproliferation Policy Education Center, Washington, D.C., May 5, 2016
- “Connections Between Nuclear Energy and Nuclear Weapons,” Liu Institute for Global Issues, University of British Columbia, Vancouver, January 8, 2016
- “Exit, Voice, and Loyalty: Policy Choices and the Future of Nuclear Energy since Fukushima,” Liu Institute for Global Issues, University of British Columbia, Vancouver, January 7, 2016
- “Nuclear Power and India’s Energy Needs: Lessons from History,” Energy Policy Institute at the University of Chicago- India Centre, New Delhi, December 23, 2015
- “Status of nuclear power in India and the potential impact of India- Japan nuclear cooperation,” Citizens’ Nuclear Information Center, Tokyo, November 6, 2015
- “Nuclear Energy in China and India: Can Ambitions Meet Reality?” Kyoto University, Kyoto, November 4, 2015
- “Assessing Risk Assessment: Nuclear Regulation and Reactor Safety,” Princeton Institute for International and Regional Studies, Princeton University, Princeton, October 15, 2015
- “Nuclear Fission Energy: Status and Policies,” ExxonMobil – Princeton University Workshop, Princeton, October 13, 2015
- “Nuclear India: Politics, Rhetoric and Reality,” The Alliance for a Secular and Democratic South Asia & Science for the People, Massachusetts Institute of Technology, Cambridge, October 5, 2015
- “Challenges in Licensing Small Modular Reactors,” Bapeten (Nuclear Energy Regulatory Agency of Indonesia), Jakarta, June 26, 2015
- “Reprocessing and Breeder Reactors in India,” International Panel on Fissile Materials Panel on the Global Challenge of Reprocessing and Plutonium Disposal, NPT Review Conference, United Nations, New York, May 7, 2015
- “Nuclear Energy: Global Overview & the Case of India,” Program on International Relations and Strategic Affairs, Princeton University & Center for Policy Research, Princeton, April 9, 2015
- “Atomic Development and Democratic Dissent: Opposition to the Koodankulam Nuclear Plant in India,” Lecture, Program for South Asian Studies, Princeton University, Princeton, March 4, 2015
- “Nuclear Energy After Fukushima,” Colloquium, Department of Physics, Ohio State University, February 23, 2015
- “Nuclear Energy in India: Current Status and Future Outlook,” Korea Advanced Institute of Science and Technology, Daejeon, December 22, 2014
- “Nuclear Energy in India: Historical Record and Future Prospects,” Institute of South Asian Studies, National University of Singapore, August 19, 2014

- “Nuclear Power in India: History and Prospects,” Melbourne University, August 15, 2014
- “Motivations and Challenges for Small Modular Reactors,” Nuclear Engineering Department, Universidade Federal do Rio de Janeiro, March 18, 2014
- “The Power of Promise: Examining the Feasibility of a Rapid Expansion of Nuclear Energy in India,” South Asia Institute and the Kennedy School Project on Managing the Atom, Harvard University, Cambridge, December 6, 2013
- “Fukushima: Implications for the Understanding of Severe Accidents and the Future of Nuclear Energy,” Colloquium, Department of Physics, Case Western University, Cleveland, November 21, 2013
- “Nuclear Energy: Issues in India and Around the World,” Presentation at Prayas Energy Group, Pune, November 1, 2013
- “Challenges in Licensing Small Modular Reactors,” Trilateral Meeting, University of Maryland, College Park, September 19-20, 2013
- “Nuclear Energy and Climate Change,” Presentation at the Heinrich Böll Foundation, Beijing, August 6, 2013
- “Nuclear Power: Why, What, Why Not,” Lecture, Vermont Law School, South Royalton, July 12, 2013
- “Nuclear Arms Race in South Asia: The Case of India,” Lecture at the Heinrich Böll Foundation, Berlin, April 29, 2013
- “The Future of Nuclear Energy in India: History, Technology, and Economics,” Program in South Asia Studies, Princeton University, Princeton, March 28, 2013
- “Nuclear Energy in India: History, Technology, and the Future,” King’s College London, March 20, 2013
- “The Potential for Severe Accidents Associated with Nuclear Power,” Round Table on Liability Legislation in India, New Delhi, March 17, 2013 (over Skype)
- “Nuclear Energy in India: Learning from the Past, Thinking about the Future,” Indian Institute of Technology, Madras, February 22, 2013
- “The Power of Promise,” Jawaharlal Nehru University, New Delhi, February 20, 2013
- “Risk Perception in the Indian Nuclear Establishment,” The Energy and Resources Institute (TERI), New Delhi, February 20, 2013
- “Nuclear Power: Motivations and Problems,” National Institute of Immunology, New Delhi, February 19, 2013
- “Nuclear Energy in India: Perspectives on its Past, Present and Future,” Madras Institute of Development Studies, Madras, February 18, 2013
- “Is Nuclear Energy the Answer to India's energy needs?” Loyola College, Madras, February 18, 2013
- “Nuclear Accidents and Learning: The Indian Experience,” National Institute of Advanced Studies, Bangalore, February 15, 2013
- “Nuclear Energy in India: Past and Future,” Indian Institute of Management, Bangalore, February 14, 2013

- “Nuclear Energy in India: Perspectives on its Past, Present and Future,” Hyderabad Central University, Hyderabad, February 13, 2013
- “Nuclear Energy in India,” Panel Discussion at Lamakaan: An Open Cultural Space, Hyderabad, February 12, 2013
- “Worried in Koodankulam: Nuclear Safety and Public Protests in India,” Lecture at the San Jose Peace and Justice Center, San Jose, December 22, 2012
- “Organizing for Nuclear Disarmament and Peace in India,” Hiroshima/Nagasaki Commemoration, Coalition for Peace Action, Princeton, August 6, 2012
- “Small Modular Reactors: Features, Motivations,” Exploring the End of Nuclear Power and Examining its Proliferation and Health Problems, Institute for Energy and Environmental Research, Washington, D.C., July 25, 2012
- “Connections Between Nuclear Power and Nuclear Weapons: Production,” Exploring the End of Nuclear Power and Examining its Proliferation and Health Problems, Institute for Energy and Environmental Research, Washington, D.C., July 25, 2012
- “Nuclear Power: Why, What, Why Not,” Lecture, Vermont Law School, South Royalton, July 13, 2012
- “Small Modular Reactors: Overview,” Seminar at the Brookhaven National Laboratory, Upton, New York, May 9, 2012
- “Nuclear Power After Fukushima,” Colloquium, Department of Mathematical Sciences, Montclair State University, Montclair, New Jersey, November 30, 2011
- “The Future of Nuclear Power” Fall 2011 Maclean House Lecture Series, Sponsored by the Office of the Alumni Association, Princeton University, Princeton, October 6, 13, & 20, 2011
- “The Economics of Nuclear Power,” Seminar at the Indian Institute of Science, Bangalore, August 29, 2011
- “Nuclear Power: Risk and Ethics,” Lecture at Ashoka Trust in Ecology and Environment, Bangalore, August 29, 2011
- “United Kingdom,” Presentation at panel discussion on “The Challenges of Spent Fuel Management: Experience and Lessons from Around the World” at the AAAS Center for Science, Technology and Security Policy, Washington D.C., June 3, 2011
- “Nuclear Power: Global Trends, Future Projections,” Presentation at panel discussion on “The Jobs, Costs, and Security Landscape of a US Nuclear Expansion,” Organized by Center for Earth, Energy, and Democracy, Institute for Agriculture and Trade Policy, Minneapolis, March 25, 2011
- “Implications of Fukushima for Nuclear Safety: A Preliminary Assessment,” Presentation at panel discussion on “After the Earthquake: Japan’s Nuclear Plant Crisis” at the Woodrow Wilson School for Public and International Affairs, Princeton University, March 24, 2011
- “Nuclear Energy and Climate Change,” Plenary Lecture at the Conference on “Towards a Nuclear Weapon Free World” and the 10th Anniversary National Convention of the Coalition for Nuclear Disarmament and Peace, New Delhi, December 11, 2010
- “Nuclear Power: Current Trends, Future Projections, Developing Countries,” Bulletin of the Atomic Scientists, Doomsday Clock Symposium, Washington, D. C., November 4, 2010

- “Looking up at the Apocalypse: Disarmament, Climate Change, and Justice,” Panel Presentation at “For a Nuclear Free, Peaceful, Just, Sustainable World Conference”, Riverside Church, New York City, May 1, 2010
- “India: Climate Debates, Energy Trends,” Princeton Environmental Institute, Princeton University, February 5, 2010
- “Dealing with Climate Change: Equity, Justice, and Social Change,” Climate Change Panel, Bulletin of the Atomic Scientists, Doomsday Clock Symposium, New York City, January 13, 2010
- “A Nuclear Powered Solution to Climate Change: Feasible? Desirable?,” Environment Affairs Forum, Princeton University, November 24, 2009
- “India’s Energy Future: How Much Can Nuclear Power Contribute?,” Science, Technology, and Environmental Policy Seminar, Princeton University, September 28, 2009
- “Nuclear Energy in India: History and Future,” Rotary Club, Bangalore, March 14, 2009
- “Kya Dam Hai? The Economics of Nuclear Power,” Gujarat Vidyapeeth, December 8, 2008
- “Between Three Hard Places: India's Energy and Climate Change Policies,” Seminar, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, October 14, 2008
- “Nuclear Power as a Solution to Climate Change?,” Seminar, John F. Welch Technology Centre, General Electric Company, Bangalore, September 15, 2008
- “Economic Costs of Nuclear Power in India,” Seminar, Indian Institute of Management, Bangalore, March 21, 2008
- “Can Nuclear Power Help with Climate Change? Lessons from the Experience in India and Elsewhere,” Lecture for Postgraduate Certificate Course on Technology and Sustainable Development, Indian Institute of Technology, Madras, January 14, 2008
- “The Nuclear Deal and the Evolving Indo-US Relationship,” Lecture for course on “Globalization”, Swaraj Vidyapeeth, Bangalore, December 29, 2007
- “Indo-US Nuclear Deal,” Talk to CONCERNs, Student Group, Indian Institute of Science, Bangalore, November 17, 2007
- “The US-India Nuclear ‘Deal’: Underlying Issues and Debates,” Seminar, Institute for Social and Economic Change, Bangalore, November 15, 2007
- “Some Aspects of the US India Nuclear Deal,” Seminar, Indian Statistical Institute, Bangalore, November 7, 2007
- “Nuclear Energy: Economic and Environmental Aspects,” Lecture for course on “Approaching the Environment in India – New Theories and Methods in the Study of the Nature-Society Interface,” Institute for Social and Economic Change, Bangalore, August 9, 2007
- “Implications of the US India Nuclear Deal,” Presentation to the Citizens for Alternatives to Nuclear Energy, Bangalore, April 19, 2007
- “Breeder Reactors: Overview and Economics,” Seminar, National Institute for Advanced Studies, Bangalore, November 29, 2006
- “An Overview of Nuclear Power in India,” Presentation to the Greenpeace International Advisory Committee, Greenpeace, Bangalore, June 4, 2006

- “India: Prisoner of the Nuclear Dream,” Special Energy and Environmental Policy Lecture, Center for Energy and Environmental Policy, University of Delaware, May 18, 2006
- “The US-India Nuclear Deal,” Seminar, Science, Technology and Global Security Working Group, Program in Science, Technology and Society, Massachusetts Institute of Technology, May 12, 2006
- “Nuclear Power in India: Failed Past, Dubious Future,” Seminar, Nonproliferation Policy Education Center, Washington, D.C., May 10, 2006
- “The US-India Nuclear Deal,” Seminar, Center for International Security and Cooperation, Stanford University, May 1, 2006
- “The US-India Nuclear Deal,” Joint Seminar with Zia Mian, South Asia Studies Committee, Princeton University, April 25, 2006
- “Nuclear Weapons in India: Glimpses from History” and “Atomic Energy in India”, Two lectures at the National Law School of India University, Bangalore, April 1, 2006
- “South Asia: Under the Nuclear Shadow,” Seminar, Liu Institute for Global Studies, University of British Columbia, Vancouver, Canada, November 23, 2005
- “Promises and Failures: The Story of Atomic Energy in India,” Colloquium, Raman Research Institute, Bangalore, October 6, 2005
- “Nuclear Power: Plans, Prospects, and Constraints,” Presentation to Greenpeace, Bangalore, August 24, 2005
- “Nuclear Power in India: Current Status, Future Prospects,” Seminar, Centre for International Security and Cooperation, Stanford University, July 20, 2005
- “Ionizing Radiation and Health,” Lecture, Bangalore Planetarium, May 27, 2005
- “Technology Choices and their Implications: the Case of Nuclear Energy in India,” Lecture, Course on Technology and Policy in India, Indian Institute of Management, Bangalore, March 16, 2005
- “Economics of Nuclear Power in India,” Seminar, Institute for Social and Economic Change, Bangalore, February 17, 2005
- “Nuclear Energy and Nuclear Weapons: Issues for an Informed Public Debate,” Public Lecture, Organized by Society for Promoting Participative Ecosystem, Prayas, Centre for Environment Education, and others, Pune, January 12, 2005
- “Technology and Development: Nuclear Energy in India,” Two lectures, Course on Technology and Sustainable Development, Indian Institute of Technology, Chennai, January 4, 2005
- “Future of Nuclear Power in India,” Lunch Seminar, Program on Science and Global Security, Princeton University, October 1, 2004
- “Nuclear Power in India: An Overview,” Seminar, Department of Chemical Engineering, Indian Institute of Science, Bangalore, August 19, 2004
- “Secrecy and India’s Nuclear Establishment,” Lecture, Alternate Law Forum, Bangalore, May 21, 2004
- “A Progressive Bomb?,” Seminar, China Study Group, New York, January 31, 2004
- “An Estimate of India’s Uranium Enrichment Capacity,” Lunch Seminar, Program on Science and Global Security, Princeton University, August 6, 2003

- “Nuclear Power in India,” Seminar, Center for Energy and Environmental Policy, University of Delaware, May 15, 2003
- “Steps Towards Operationalizing the Indian Nuclear Arsenal,” Lunch Seminar, Program on Science and Global Security, Princeton University, January 22, 2003
- “Normal Accidents and Nuclear War,” Lecture, Course on “Engineers in Society,” New Jersey Institute of Technology, October 24, 2002
- “Deployment of Nuclear Weapons and Early Warning in South Asia,” Technical Seminar, Security Studies Program, Massachusetts Institute of Technology, October 10, 2002
- “Beyond Missile Defense,” Division of Natural Sciences and Mathematics Colloquium, Colgate University, April 19, 2002
- “Health Impacts from Uranium Mining in India,” Presentation to ASHA, Princeton University, February 16, 2002
- “The Environmental and Health Impacts of the Nuclear Fuel Cycle,” Seminar, Institute for Social and Economic Change, Bangalore, January 3, 2002
- “Uranium Mining and Health in India,” Presentation to ASHA, Columbia University, November 4, 2001
- “Economics of Nuclear Power from Fast Breeder Reactors in India,” Seminar, Indira Gandhi Institute for Development Research, August 20, 2001
- “Nuclear Power Economics in India: Fast Breeders vs. Heavy Water Reactors,” Seminar, Center for Energy and Environmental Studies, Princeton University, July 10, 2001
- “Scientists and India’s Nuclear Bomb,” Seminar, Center for International Security and Cooperation, Stanford University, March 13, 2001
- “Scientists and India’s Nuclear Bomb,” Lecture, Yale Center for International and Area Studies, Yale University, October 26, 2000
- “Nuclear Weapons in South Asia: A Scientist’s Perspective,” Presentation to the Stanford India Association, Stanford University, June 29, 2000
- “Prisoners of the Nuclear Dream: India, Pakistan, and the Making of Nuclear Nations,” Seminar, Program on Science, Technology and Society, Massachusetts Institute of Technology, February 19, 1999
- “Nuclear Energy and Weapons in South Asia,” Seminar, Gettysburg College, January 29, 1998
- “The Effects of Nuclear Explosions - a Case Study of Mumbai,” Seminar, School of International Studies, Jawaharlal Nehru University, New Delhi, February 24, 1997
- “Walking Technicolor Signatures at Hadron Colliders,” Seminar, Center for Theoretical Studies, Indian Institute of Science, Bangalore, July 1992
- “Electroweak Symmetry Breaking, Walking Technicolor, and the SSC,” Seminar, Department of Physics, University of Wuppertal, Germany, February 1992