RICHARD P. SUTTMEIER

CURRENT POSITION:

Professor of Political Science University of Oregon Eugene, OR 97403-1226 (541) 346 2856 email: PETESUTT@oregon.uoregon.edu

EDUCATION:

Ph.D. Indiana University, 1969 (Political Science) A.B. Dartmouth College, 1963 (Philosophy)

CURRENT RESEARCH INTERESTS:

The role of science and technology in US China relations; The role of technical standards in China's post-WTO technology policy; Science and democratization; The management of environmental and technological risks in China; High technology development in China; International perspectives on the ethics of new technologies.

TEACHING FIELDS:

Science, Technology, and International Affairs; Chinese Environmental Issues; Asian Political Economy; Science, Technology and Public Policy; Chinese and Japanese Politics; Comparative Politics

ADMINISTRATIVE, TEACHING AND COMMITTEE SERVICE - ACADEMIC:

Chair, Department of Political Science, University of Oregon, Fall, 2001- Spring, 2002 Visiting Professor, Hong Kong University of Science and Technology, Fall, 1999 Director, Asian Studies Program, University of Oregon, 1994-97 Visiting Adjunct Professor, Fletcher School of Law and Diplomacy, Spring, 1993. Director, Center for Asian and Pacific Studies, University of Oregon, 1990-1992. Henry P. Bristol Professor of International Affairs, Hamilton College, 1982-1990. Associate Professor, Hamilton College, 1976-82. Assistant Professor, Hamilton College, 1970-76. Chair, Department of Government, Hamilton College, 1978-1984 Teaching Fellow, Chung Chi College, The Chinese University of Hong Kong, 1963-` 1965

PROFESSIONAL SERVICE EXPERIENCE - NON-ACADEMIC:

Director, Beijing Office, National Academy of Sciences/Committee on Scholarly Communication with the People's Republic of China (1987-1988).

Senior Analyst, Office of Technology Assessment of U.S. Congress (1985-86) (Recruited to work on a major study of technology transfer to China for Congress).

Member, U.S. Planning Group for First Sino-American Science Policy Conference (held

January, 1983).

- Member, U.S. Science Policy Delegation to the People's Republic of China, sponsored by the Committee for Scholarly Communication with the People's Republic of China, January, 1982.
- Member, The Pure and Applied Chemistry Delegation to the People's Republic of China, sponsored by the U.S. National Academy of Sciences and the Science and Technology Association of the PRC May, 1978.
- Service to Committee for Scholarly Communication with the People's Republic of China, National Academy of Sciences (aid in briefing delegations of scientists going to China; advice on general program planning).
- Member of Executive Committee, Section on International and Comparative Administration, American Society for Public Administration, 1974-76; Program Chair for panels dealing with comparative and international administration for 1974 American Society for Public Administration Convention.
- Specialist, International Affairs, Office of International Affairs, National Aeronautics and Space Administration, 1969-70.

CONSULTING EXPERIENCE:

- Witness, US-China Economic and Security Commission, US Congress, Hearing on China's High Technology Development, Palo Alto, April, 2005.
- Consultant, World Bank, Knowledge Management Project, Summer, 2000
- Consultant, Chinese Ministry of Science and Technology on International Cooperation in Science and Technology, 1998-2000.
- Consultant, World Bank, Final Evaluation of UNDP/World Bank "Key Studies Development Project," China, June, 1997.
- Member, international team to review a decade of science and technology reforms in China organized by the International Development Research Center of Canada on behalf of the Chinese State Science and Technology Commission, November, 1995.
- Consultant, Science Applications International Corp., 1995.
- Consultant, World Bank, Mid-Term Evaluation of UNDP/World Bank "Key Studies Development Project," China, January, 1994.
- Invited participant/resource person for the Conference on "China's Science and Technology Development Towards the 21st Century." Beijing, October, 24-30, 1992. Sponsored by UNDP and the State Science and Technology Commission of China.
- Witness, Hearings on U.S. Satellite Exports to China. Committee on Science and Technology, House of Representatives. September 23, 1988.
- Consultant, Office of the Science and Technology Adviser, The World Bank, 1981-82.
- Consultant, Department of State. Review and Assessment of the Implementation of the U.S.-P.R.C. Agreement on Cooperation in Science and Technology, 1980-81.
- Consultant, U.S. Congress, Office of Technology Assessment, Project on the Assessment of International Technology Transfer, 1979; Project on Technology Transfer to China, 1985.
- Witness, Hearings on U.S.-China Scientific Exchanges, Sub-Committee on Science,

Research and Technology, Committee on Science and Technology, House of Representatives, May 10, 1979.

WORK IN PROGRESS:

- "China-US Science and Technology Cooperation: Past Achievements and Future Progress." Paper presented to the US-China Forum on Science and Technology Policy, Beijing, October, 2006. Under revision for publication by conference organizers.
- "Success in "Pasteur's Quadrant?" The Chinese Academy of Sciences and its Role in the National Innovation System" (with Shi Bing) Originally presented at the Tsinghua-Stanford workshop on Greater China's Innovative Capacities: Progress and Challenges, Beijing, May 20-21, 2006. Revised for publication by conference organizers.
- "China's 15-Year Science Plan: Mapping Research and Innovation Strategies for the 21st Century." Solicited paper from *Physics Today*. Expected publications, Fall, 2006. (With Cong Cao and Denis Fred Simon).
- "State, Self-Organization, and Identity in the Building of Sino-US Cooperation in Science & Technology." Paper prepared for delivery at the conference on "" People on the Move': The Transnational Flow of Chinese Human Capital," Center on Chinese Transnational Relations, Hong Kong University of Science and Technology, October 20-22, 2005. Revised for publication in a special issue of *Pacific Affairs*.
- "China's Innovation Challenge and The Remaking of the Chinese Academy of Sciences" (with Cong Cao and Denis Fred Simon). Submitted for publication in *Innovations: Technology, Governance, Globalization*, Vol. 1 Number 3.
- "Standards and the State: Chinese Technology Policy in an Age of Globalization." (with Yao Xiangkui). Submitted for publication by the East Asian Institute, University of Singapore.
- "A World United or Divided?: Standardization's Impact on Global Trade." Submitted for publication in *The Standards Edge: Unifier or Divider*.
- "China Software Industry And the Challenge of Competitiveness." Report being prepared for the China Task Force, Council on Competitiveness (with Yao Xiangkui).
- Is It Safe to be Modern? Technology, Risk, and Governance in 21ST Century China (book manuscipt, tentative title).
- "The 'Techno-Nationalism Issue in China's Research and Innovation Strategies: Towards International Predation or Global-Local Syncretism" (draft).
- "Globalization, Structural Change, and the Role of Government in China's Search for a National Innovation Strategy." Forthcoming in volume on innovation in developing countries, edited by Gu Shulin, to be published by the United Nations University.

PUBLICATIONS AND PAPERS:

Books:

- Science, Technology and China's Drive for Modernization. Hoover Institution Press. 1980.
- Research and Revolution: Science Policy and Societal Change in China. Lexington Books. 1974.

Major Reports:

- Standards of Power? Technology, Institutions, and Politics in the Development of China's National Standards Strategy. NBR Special Report. National Bureau of Asian Research, June, 2006 (with Yao Xiangkui and Alex Tan).
- China's Post-WTO Technology Policy: Standards, Software, and the Changing Nature of Techno-Nationalism. NBR Special Report. National Bureau of Asian Research, May, 2004 (with Yao Xiangkui).
- A Decade of Reform: Science and Technology Policy in China. Ottawa. International Development Research Center, 1997 (contributing author).
- *Technology Transfer to China*. U.S. Congress. Office of Technology Assessment. 1987. (contributing author).

Refereed Articles:

- "Knowledge Innovation' and the Chinese Academy of Sciences." *Science* 312 (April 7, 2006), pp. 58-9. (With Cao Cong and Denis Simon)
- "China's New Scientific Elite: Distinguished Young Scientists, the Research Environment, and Hopes for Chinese Science" (With Cao Cong). *The China Quarterly*. 168 (December, 2001). pp.960-984.
- "China Faces the New Industrial Revolution: Research and Innovation Strategies for the 21st Century" (With Cao Cong). *Asian Perspective* Vol. 23, # 3 (1999).
- "Leadership and Elitism in Chinese Science and Engineering: The Making of China's Brain Bank?" (With Cao Cong). *Asian Survey*. Vol. 39, #3 (May-June, 1999). 525-559.
- "Risk in China: Comparative and Historical Perspectives on its Social Construction and Management." *Technological Forecasting and Social Change*. 46, #2 (June, 1994), pp. 103-124.
- "Reform, Modernization, and the Changing Constitution of Science in China." *Asian Survey* XXIX No. 10. October, 1989.
- "Chinese Efforts to Stimulate High-Technology: Implications for Korea." *The Korean Journal of International Studies*. XIX No. 4. 1988.
- "Hidden Agenda's, 'Conceptual Clarity, and Disciplinary Awareness in the Study of Science and Technology in the Developing Countries." *Science and Technology Studies*. Vol. 5, No. 3/4 (Winter, 1988).
- "Nuclear Trade with China." *The Columbia Journal of World Business*. XXI No. 1 (Spring, 1986). (with Alan Crane).
- "Corruption in Science: The Chinese Case." *Science, Technology and Human Values.* Winter, 1985.
- "Politics, Modernization and Science in China." *Problems of Communism*. (January-February, 1981).
- "Japanese Reactions to U.S. Nuclear Policy: The Domestic Origins of an International

Negotiating Position." Orbis. 22, #3 (Fall, 1978).

- "The Gikan Question in Japanese Government: Bureaucratic Curiosity or Institutional Failure?" *Asian Survey*. XVII 10 (October, 1978).
- "Recent Developments in the Politics of Chinese Science." *Asian Survey* XVI 4 (April 1977).
- "Science Policy Shifts, Organizational Change and China's Development." *The China Quarterly*. 62 (June, 1975).
- "Chinese Scientific Societies and Chinese Scientific Development." *The Developing Economies*. XI 2 (Fall, 1973).
- "The Mao Ethic and Environmental Quality." (with Leo A. Orleans). *Science*. 170 (December 11, 1970).
- "Party Views of Science: The Record of the First Decade." *The China Quarterly*. 44 (October-December, 1970).

Book Chapters:

- "Science and Technology: A New World in the Making?" In Ashley Tellis and Michael Wills (eds.). Strategic Asia 2004-05: Confronting Terrorism *in the Pursuit of Power*. Seattle. The National Bureau of Asian Research. 2004.
- "Reform, China's Technical Community, and the Changing Policy Cultures of Science." (With Cao Cong). In Merle Goldman and Edward Gu (eds.). *Chinese Intellectuals between Market and State*. London. Routledge-Curzon. 2004.
- "Reconstituting the Arts and Sciences." (With Richard Kraus). In Edwin A. Winckler (ed.). *China's Transition from Communism*. Boulder. Lynne Riener, 1999.
- "Scientific Cooperation and Conflict Management in US-China Relations, 1978-Present." In Allison L. de Cerreno and Alexander Keynan (eds.). Scientific Cooperation, State Conflict: The Role of Scientists in Mitigating International Discord. Annals of the New York Academy of Sciences. Vol. 866. 1998.
- "Emerging Innovation Networks and Strategies for Industrial Technology in China: Some Observations." In William Golden and Thomas Ratchford. (eds.). Science, Engineering, and Technology in Government and Industry Around the World: Translating Knowledge into Power and Wealth. Published as a Special Issue of Technology in Society. Vol. 19, # 3/4 (August/November, 1997). pp. 305-324.
- "China's Strategy for High Technology: Reform, R&D, and the Global Search for Asset Complementarity." In Denis F. Simon and Hong Pyo Lee (eds.). *Globalization and Regionalization of China's Economy. Implications for the Pacific Rim and Korea.* Seoul. The Sejong Institute. 1995. pp. 195-230.
- "The Technological Emergence of the Pacific Rim: Threat or Opportunity to the US." In Denis Fred Simon (ed.). *The Emerging Technological Trajectory of the Pacific Rim.* Armonk, NY. M.E. Sharpe, 1995.
- "The Roles of Science and Technology Policies in the Economic Growth of East Asia/Pacific Rim Nations." 1996 AAAS Science and Technology Yearbook. Washington. AAAS. 1997.
- "Greater China and the Development of Chinese Science and Technology." In Zhiling Lin and Thomas W. Robinson (eds.). *The Chinese and Their Future*. Washington.

The American Enterprise Institute. 1993. pp. 195-212.

- "Minimizing Maximum Regrets: US Interests in Science and Technology Relations with China." In William Tow (ed.). *Building Sino-American Relations*. New York. Parargon House, 1991.
- "China's High Technology: Programs, Problems and Prospects." In U.S. Congress, Joint Economic Committee. *China's Economic Dilemmas in the 1990's: The Problems of Reform, Modernization and Interdependence*. 1991.
- "The Role of Science and Technology in South Korean Development." In Ilpyong J. Kim (ed.). *Korean Challenges and American Policy*. New York. Paragon House, 1991.
- "Science and Technology and Reform in the Giants." In Richard E. Feinberg, John Echeverri-Gent, and Friedemann Muller (eds.). *Economic Reform in Three Giants: US Foreign Policy and the USSR, China and India*. Overseas Development Council. US - Third World Policy Perspectives, No. 14. New Brunswick, NJ. Transaction Books. 1990.
- "Science, Technology and China's Political Future." In Merle Goldman and Denis Simon (eds.). *Science and Technology in the Post-Mao Era*. Cambridge, MA. Council on East Asian Studies, Harvard Contemporary China Series, Harvard University Press. 1989.
- "China: The Search for Strategies." In Aaron Segal (ed.). *Learning By Doing: Science* and Technology in the Developing World. Westview Press. 1987.
- "Academic Exchanges: Values and Expectations in Science and Engineering." In Joyce K. Kallgren and Denis Fred Simon (eds.). *Educational Exchanges: Essays on the Sino-American Experience*. University of California, Berkeley, Institute of East Asian Studies. 1987.
- "Riding the Tiger: The Political Lives of Chinese Scientists." In Victor Falkenheim (ed.). *Citizens and Groups in Chinese Politics*. University of Michigan Press, Michigan China Monograph Series. 1987.
- "Three Approaches to Science Policy (China, Japan and the United States)." In Lisbeth A Levey (ed.) *Technology Transfer in China: Selected Papers*. American Association for the Advancement of Science. 1987.
- "New Directions in Chinese Science and Technology." In John S. Major (ed.). *China Briefing, 1985.* The China Council of the Asia Society. Westview Press. 1986.
- "Science and Technology Under Reform." In US Congress, Joint Economic Committee. *China's Economy Looks Toward the Year 2000.* Washington. Government Printing Office. 1986.
- "China's Nuclear Power Option." In US Congress, Joint Economic Committee. *China's Economy Looks Toward the Year 2000.* Washington. Government Printing Office. 1986.
- "Moon-Ghetto' Problems in China's Alternative Scientific Futures." In Norton Ginsburg and Bernard A. Lalor (eds.), *China: The 80's Era*. Westview Press, 1984.
- "The Role of Science and Technology in U.S.-China Trade Relations." In Daniel H. Bays (ed.), *U.S.-China Trade Relations, 1983.* Center for East Asian Studies, The University of Kansas, 1983.
- "Research, Innovation and the Chinese Political Economy." In U.S. Congress, Joint Economic Committee. *China Under the Four Modernizations*. 1982.

- "The Nuclear Power Option: Technological Promise and Social Limitations." In Ronald Morse (ed.) *The Politics of Japan's Energy Strategy*. Institute of East Asian Studies, University of California, Berkeley, 1982.
- "Science Policy and Organization." In Leo A. Orleans (ed.) *Science in Contemporary China*. Stanford University Press, 1980.
- "The Institutional Structure for Industrial Research and Development in China." In Richard Baum (ed.), *China's Four Modernizations: The New Technological Revolution.* Westview Press, 1980.
- "U.S.-Japanese Nuclear Relations--Implications for the Pacific Region." In Stuart Harris and Keichi Oshima (eds.), *Australia and Japan: Nuclear Energy Issues in the Pacific.* Canberra and Tokyo. Australia-Japan Economic Relations Research Project, 1980.
- "Scientific Institutions." and (with Genevieve Dean) "The Institutionalization of Science." In Science and Technology in the People's Republic of China. Paris. The Organization for Economic Cooperation and Development, 1977.
- "The Academic of Medical Sciences." In Joseph R. Quinn (ed.), *Medicine and Public Health in the People's Republic of China*. National Institutes of Health, 1972.
- "Space and International Development" (with Richard Barnes). *War on Hunger*. IV 4 (April, 1970).

Conference Papers (since 1992):

- "China as Rising Techno-Power? Forces of Change and Continuity in China's Technological Development." Prepared for the conference on "China's Emerging Technological Trajectory In the 21st-Century," September 4-6, 2003, Rensselaerville, New York
- "Science and Democracy in China and the West: In Search of Modernitiy's Elusive Relationship." Prepared for delivery at the annual meeting of Society for the Social Studies of Science, Milwaukee, November, 2002 (with Cao Cong) (submitted for publication).
- "Scientific Misconduct in China: Cases, Causes, and Cures." Prepared for delivery at the annual meeting of Society for the Social Studies of Science, Milwaukee, November, 2002 (with Cao Cong).
- "Curious Connections: Democratic Possibilities in Science-State Relations in China and the West." Paper presented to the Symposium on Science and Ideology, Center for Chinese Studies, University of California, Berkeley, October 19th, 2001 (with Cao Cong).
- "International Collaboration in Science and Technology: An Overview of Issues" (with Geoffrey Oldham), presented to the Chinese Ministry of Science and Technology, January, 2000.
- "Hazard Management and the Study of Cross Cultural Decision Making: Conceptualizing 'The Chinese High Reliability Organization." Paper presented to the SPUDM Workshop on Cross-Cultural Approaches to Decision Making, Meeting of the European Association for Decision Making, Leeds, August, 1997.
- "Safer Skies with Nuclear Power: China's Emerging Regimes for the Management of Hazardous Technologies." Paper delivered to the International Studies

Association West Regional Conference, Eugene, Oregon, October, 1996. "Science and Technology in Greater China: Taiwan-Mainland Contacts and Their

- Implications for the US." For presentation at the Yale Mainland-Taiwan Society International Conference on Mainland-Taiwan Relations Towards the 21st Century, Yale University, April 3, 1993
- "High Technology Development in China: Some Critical Issues." Paper presented to the Conference on "China's Science and Technology Development Towards the 21st Century." Beijing, October, 24-30, 1992.

Published Articles (Non-Refereed):

- "China's Technology Trap And the Reconstruction of the Chinese National Innovation System." In *China's High Technology Development*. Hearings before the US-China Economic and Security Review Commission. April 21, 2005. Washington, US Government Printing Office. 2005. Pp.73-81.
- "A New Technonationalism? China and the Development of Technical Standards." *Communications of the ACM* Vol. 48, #4 (April, 2005), 35-37.
- "China's Techno-Warriors: Another View." (review article). *The China Quarterly*. 179 (September, 2004). pp. 804-810.
- "Assessing China's Technology Potential." *Georgetown Journal of International Affairs*. Summer/Fall, 2004. pp. 97-105.
- "China Goes Nuclear." *The China Business Review* (September-October, 1996). pp. 16-21 (with Peter C. Evans).
- "Does 'Globalization' Matter? Science, Technology and the Changing Context of US-China Relations." *In Depth.* Spring, 1995.
- "Risk Analysis and Environmental History: Some Thoughts on Complementarities."*Chinese Environmental History Newsletter*. Vol. 1, # 2 (November, 1994).
- "The Changing International Context for Sino-American Relations in Science and Technology." *In Depth.* Fall, 1993. pp. 91-111.
- "Science and Technology Policy: Developing a Competitive Edge." *Current History*. September, 1991.
- "Chinese S&T Reforms: Towards a Post-Socialist Knowledge System?" *China Exchange News.* 16, No. 4 (December, 1988).
- "Listening to China." Issues in Science and Technology. Fall, 1988.
- "Laying the Corporate Foundations for China's High Tech Future." *The China Business Review*. July-August, 1988.
- "A Season in Beijing." China Exchange News. Vol. 16, No. 1 (March, 1988).
- "New Conflicts in the Research Environment." *Bulletin of the Atomic Scientists*. October, 1984.
- "Space and International Development" (with Richard Barnes). *War on Hunger*. IV 4 (April, 1970).

Book Reviews:

Review of David Zweig. Internationalizing China. In Issues and Studies. Vol. 40, No. 1

(March, 2004).

- Review of Ole Doring (ed.). Chinese Scientists and Responsibility: Ethical Issues of Human Genetics In Chinese and International Contexts. Forthcoming in The China Quarterly. Pp.183-4.
- Review of Borge Bakken. *The Exemplary Society: Human Improvement, Social Control,* and the Dangers of Modernity in China. Forthcoming in *The Annals of the American Academy of Political and Social Science.*
- Review of Judith Shapiro. *Mao's War Against Nature*. In *The China Quarterly*. 169 (March, 2002).
- Review of Q. Y. Yu. *The Implementation of China's Science and Technology Policy*. In *East Asian Science, Technology and Medicine*, 18 (2001). Pp. 134-136.
- Review of Charles Feinstein and Christopher Howe (eds.). Chinese Technology Transfer in the 1990's: Current Experience, Historical Problems, and International Perspectives. In China Review International. Vol. 6, No. 1 (Spring, 1999). Pp. 120-126.
- Review of Gu Shulin. "China's Industrial Tehcnology: Market Reform and Organizational Change." In *The China Quarterly*. V. 160 (December, 1999). Pp. 1065-6.
- "Higher Education in Twentieth Century China: Promise, Turmoil, Transformation?" (Review of Ruth Hayhoe, *China's Universities, 1895-1995: A Century of Cultural Conflict*). *Minerva* XXXVI, 3 (Autumn, 1988). Pp. 293-298.
- "The Political Life of Science in Post-Mao China." (Review of H. Lyman Miller, *Science and Dissent in Post-Mao China*). *Minerva*. XXXV, 1 (Spring, 1997). pp.90-94.
- Review of Shiming Hua. Scientism and Humanism. Two Cultures in Post-Mao China (1978-1989). In Journal of Asian Studies. Vol. 55 #2 (ay, 1996). Pp.438-439.
- "China at the Limits." Review of *China's Environmental Crisis* by Vaclav Smil. *Science*. July 30, 1993. pp. 627-628.

"Socialist Science Policy" (review article). *Problems of Communism*. (July-August, 1977).

Other Government Reports:

Science and Technology Resources in China. Report to the National Science Foundation. August, 1991.

- *Energy Technology Transfer to China*. US Congress. Office of Technology Assessment. Technical Memorandum. 1985 (contributing author).
- Science and Technology in China's Socialist Economic Development. Report submitted to the World Bank. January, 1982.
- U.S.-P.R.C. Scientific Cooperation: An Assessment of the First Two Years. Report submitted to the Department of State. June, 1981.

Chinese Modernization and Technology Acquisition: An Examination of Organizational and Decision Making Factors. Prepared for the U.S. Congress, Office of Technology Assessment, June, 1979.

AWARDS AND FELLOWSHIPS:

National Science Foundation Award (September, 2004) for support of research on the

role of science and technology in US China relations.

- National Science Foundation Award (December, 2002). Co-P.I. for International Conference on "China's Emerging Technological Trajectory in the 21st Century." (September, 2003, Rensselaer Polytechnic Institute).
- National Science Foundation Awards (October, 1997, September, 1998) for support of research on "The Chinese Scientific Community."

National Science Foundation Award (January, 1993) for support of research on "Evolving Chinese Approaches to the Management of Technological Risks."

Associate in Research, East Asia Program, Cornell University, 1988-1991.

Distinguished Scholar Award, Committee for Scholarly Communication with the People's Republic of China for research and lecturing in China, August, 1982. National Fellow, The Hoover Institution, 1980-81.

Fulbright-Hays Research Fellowship for study of Japan's nuclear energy policies, 1976-77.

Visiting Research Fellow, Technology and Development Institute (TDI), East-West Center, 1972-73.

National Endowment for the Humanities Fellowship, Summer, 1972.

American Society for Public Administration Postdoctoral Fellowship, NASA Office of Inernational Affairs, 1969-70.

MEMBERSHIPS IN PROFESSIONAL ORGANIZATIONS:

American Political Science Association Association for Asian Studies American Association for the Advancement of Science Society for the Social Studies of Science