

**The Changing Geopolitics of Natural Gas: The Rise of Unconventional Gas
and Its Implications for Global Natural Gas Markets, Geopolitical Relations
and U.S. Energy Security**
A Special Modeling Workshop

March 17, 2011
9:00 am – 2:30 pm
Kelly International Conference Facility
James A. Baker III Hall, Rice University

Workshop hosted by the Baker Institute Energy Forum

- 8:30 am **Coffee and Registration**
- 9:00 am **Introduction to the Study**
Amy Myers Jaffe
Wallace S. Wilson Fellow in Energy Studies, Baker Institute
- 9:15 am **Political Developments and Unconventional Gas in China**
Steven W. Lewis, Ph.D.
C.V. Starr Transnational China Fellow, Baker Institute
- 9:45 am **FSU: Natural Gas Developments in Turkmenistan and Russia**
Martha Brill Olcott, Ph.D.
*Senior Associate, Russia and Eurasia Program, Carnegie Endowment for
International Peace*
- 10:15 am **Coffee Break**
- 10:30 am **Iraqi Politics and Implications for Oil and Gas**
Meghan O'Sullivan, Ph.D.
*Jeane Kirkpatrick Professor of the Practice of International Affairs, Harvard
Kennedy School*
- 11:00 am **Iran Country Outlook**
Suzanne Maloney, Ph.D.
*Senior Fellow, Foreign Policy, Saban Center for Middle East Policy, The
Brookings Institution*

- 11:30 am **Resource Nationalism and Natural Gas:
Venezuela and Bolivia Country Outlooks**
David R. Mares, Ph.D.
Baker Institute Scholar for Latin American Energy Studies, Baker Institute
- Noon **Economic Modeling Framework**
Kenneth B. Medlock III, Ph.D.
*James A. Baker, III, and Susan G. Baker Fellow in Energy and Resource
Economics, Baker Institute*
- 1:15pm Songying Fang, Ph.D.
Assistant Professor, Department of Political Science, Rice University
- 1:30 pm **Lunch**
Doré Commons

Speaker Biographies

Songying Fang, Ph.D.

Assistant Professor, Department of Political Science, Rice University

Songying Fang, Ph.D., is an Assistant Professor of Political Science at Rice University. Prior to joining the faculty at Rice, she was an Assistant Professor of Political Science at the University of Minnesota from 2005-2009. Her research areas are international institutions, international security, and international political economy using game-theoretic analysis. Her work has appeared in *American Journal of Political Science*, *Quarterly Journal Political Science*, and *The Review of International Organizations*. She received her Ph.D. from the University of Rochester in 2006.

Amy Myers Jaffe

Wallace S. Wilson Fellow in Energy Studies, Baker Institute

Amy Myers Jaffe is the Wallace S. Wilson Fellow in Energy Studies and director of the Energy Forum at the Baker Institute, as well as associate director of the Rice Energy Program. Jaffe's research focuses on oil geopolitics, strategic energy policy including energy science policy, and energy economics. Jaffe was formerly senior editor and Middle East analyst for *Petroleum Intelligence Weekly*. She is widely published and served as co-editor of "Energy in the Caspian Region: Present and Future" (Palgrave, 2002) and "Natural Gas and Geopolitics: From 1970 to 2040" (Cambridge University Press, 2006), and as co-author of "Oil, Dollars, Debt, and Crises: The Global Curse of Black Gold" with Mahmoud A. El-Gamal (Cambridge University Press, 2010). Jaffe also contributed to *Foreign Policy's* "21 Solutions to Save the World" (May/June 2007). She served as a member of the reconstruction and economy working group of the Baker/Hamilton Iraq Study Group, as project director for the Baker Institute/Council on Foreign Relations Task Force on Strategic Energy Policy, and as a principal adviser to USAID's project on "Options for Developing a Long Term Sustainable Iraqi Oil Industry." She currently serves as a strategic adviser to the American Automobile Association (AAA) of the United States and is a member of the Council on Foreign Relations. Jaffe was among the Key Women in Energy-Americas honorees in the Pathfinders/Trailblazers category (2004), the honoree for Esquire's annual 100 Best and Brightest in the contribution to society category (2005), *Elle* magazine's Women for the Environment (2006), and was named to *Who's Who in America* (2008). Jaffe is a Princeton University graduate with a degree in Arabic studies.

Steven W. Lewis, Ph.D.

C.V. Starr Transnational China Fellow, Baker Institute

Steven W. Lewis, Ph.D., is the C.V. Starr Transnational China Fellow and faculty adviser for the Jesse Jones Leadership Center Summer in D.C. Policy Research Internship Program. He is also a professor in the practice and an associate director of the Chao Center for Asian Studies, as well as an affiliated faculty member of the Department of Sociology at Rice University. His research explores the growth of a transnational Chinese middle class, the influence of advertisements in new public spaces in Chinese cities, the development of privatization experiments in China's localities, and the reform of China's energy policies, national oil companies and international energy relations. Through the Transnational China Project, Lewis has organized research conferences with the Shanghai Academy of Social Sciences and has worked with the Energy Forum as the organizing researcher of the Northeast Asia Energy Cooperation Workshops, the Coastal Cities Summit surveys and U.S.-China-Middle East energy relations conferences. Lewis has also been adviser to the Science Collaboration Across Borders initiative and served as the chief liaison between the Baker Institute and the Shanghai Institutes for International Studies. He has conducted studies, research and given briefings for The National Bureau of Asian Research; Japan's Ministry of Economy, Trade and Industry; the Sichuan Petroleum Administration; the Korean Economic Institute; and the World Petrochemical Congress. Lewis is an associate fellow of Asia Society International, an editorial board member of *Asia Policy* and an academic adviser to the U.S.-China Working Group of the U.S. House of Representatives. He received his doctorate in political science from Washington University in St. Louis.

Suzanne Maloney, Ph.D.

Senior Fellow, Foreign Policy, Saban Center for Middle East Policy, The Brookings Institution

Suzanne Maloney, Ph.D., is a Senior Fellow at the Saban Center for Middle East Policy at the Brookings Institution, where her research focuses on energy, economic reform and U.S. policy toward the Middle East. Most recently, she was a member of the State Department's Policy Planning Staff, covering Iran, Iraq, the Gulf States and broader Middle East issues. Prior to joining the government, she was the Middle East Advisor at ExxonMobil Corporation, where she worked on regional business development, political risk analysis, and corporate outreach and communications. Dr. Maloney directed the 2004 Council on Foreign Relations Task Force on US Policy toward Iran, chaired by Zbigniew Brzezinski and Robert Gates, and is the author of a forthcoming book on Iran for the U.S. Institute of Peace. She was the recipient of an International Affairs Fellowship at the Council on Foreign Relations and has previously served at Brookings as an Olin Fellow and a Brookings Research Fellow. She holds a Ph.D. from the Fletcher School of Law and Diplomacy at Tufts University.

David R. Mares, Ph.D.

Baker Institute Scholar for Latin American Energy Studies, Baker Institute

David R. Mares, Ph.D., is the Baker Institute Scholar for Energy Studies and a professor of political science and adjunct professor at the Graduate School of International Relations and Pacific Studies at the University of California, San Diego. Mares previously was profesor-investigador at El Colegio de México (1980-82), Fulbright Professor at the Universidad de Chile (1990) and visiting professor at the Diplomatic Academy in Ecuador (1995). He has been a visiting scholar at the Weatherhead Center for International Affairs, Harvard University; a fellow at the Japan External Trade Research Organization (JETRO); a fellow at the Center for Advanced Study in the Behavioral Sciences (CASBS), Stanford University; and held a Pew Faculty Fellowship in International Affairs. His research and teaching interests include Latin American energy politics, the political economy of drug policy, defense policy, civil-military relations and the use of photographic imagery in politics. Mares has published many books and articles in numerous journals in the Americas and Europe. He is editor of the series "Latin America: Social Sciences and the Law" (Routledge Press) and was a member of the international advisory board of the Instituto Latinoamericano de Relaciones Civiles-Militares (Peru), as well as of the editorial board of Latin American Research Review. He has prepared reports for a number of international research institutions, and he is an associate fellow of the Inter-American Dialogue (Washington, D.C.), a fellow of the academic forum of the Summit of the Americas (Montreal, Canada), and a member of the Tri-national Academic Group on Governance in North America (Monterrey, Mexico). He earned his Ph.D. from Harvard University in 1982.

Kenneth B. Medlock III, Ph.D.

James A. Baker, III, and Susan G. Baker Fellow in Energy and Resource Economics, Baker Institute

Kenneth B. Medlock III, Ph.D., is a fellow in energy studies at the Baker Institute and adjunct assistant professor in the Rice University Department of Economics. Medlock received a Ph.D. in economics from Rice in 2000 and was the Baker Institute's M. D. Anderson Fellow from 2000 to 2001. Afterward, he held the position of corporate consultant at El Paso Energy Corporation. Medlock leads the Baker Institute Energy Forum's natural gas program. He is a principal in the development of the Rice World Natural Gas Trade Model, aimed at assessing the future of international natural gas trade. He also teaches introductory and advanced courses in energy economics. Medlock's research covers a wide range of topics in energy economics and has been published in numerous academic journals, book chapters and industry periodicals, as well as in various Energy Forum studies. He is a member of the International Association of Energy Economics (IAEE), and in 2001 he won (joint with Rice Professor of Economics Ronald Soligo) the IAEE Award for Best Paper of the Year in the Energy Journal. Medlock has served as an adviser to the Department of Energy in its energy modeling efforts and is a regular participant in Stanford University's Energy Modeling Forum. Medlock was the lead modeler of the Modeling Subgroup of the 2003 National Petroleum Council (NPC) study of North American natural gas markets, was a contributing author to the California Energy Commission's and Western Interstate Energy Board's "Western Natural Gas Assessment" in 2005, and contributed to the 2007 NPC study, "Facing the Hard Truths." He earned his Ph.D. in economics from Rice University in 2000.

Meghan O'Sullivan, Ph.D.

Jeane Kirkpatrick Professor of the Practice of International Affairs, Harvard Kennedy School

Meghan O'Sullivan, Ph.D., is the Jeane Kirkpatrick Professor of the Practice of International Affairs at the John F. Kennedy School at Harvard University. Her areas of research include nation-building, counterinsurgency, the geopolitics of energy, decision making in foreign policy, and the Greater Middle East, especially Iraq and Afghanistan. From July 2004 to September 2007, she was Special Assistant to President George W. Bush and also held the position of Deputy National Security Advisor for Iraq and Afghanistan for the last two years of this tenure. She spent two of the last seven years in Iraq, most recently in fall 2008 at the request of Ambassador Ryan Crocker and General Raymond Odierno to help conclude the security agreement and strategic framework agreement between the United States and Iraq. Prior to being named Deputy National Security Advisor for Iraq and Afghanistan, Dr. O'Sullivan was with the NSC staff as Senior Director for Strategic Planning and Southwest Asia. Before joining the NSC, Dr. O'Sullivan was political advisor to the Administrator of the Coalition Provisional Authority and the Deputy Director for Governance in Baghdad, Iraq from April 2003 to June 2004. She has also worked at the Office of Policy Planning at the Department of State and was a Fellow at the Brookings Institution. Dr. O'Sullivan is a member of the Council of Foreign Relations, the Trilateral Commission, the Aspen Strategy Group and is an editorial board member of *The Washington Quarterly*. She received a B.A. from Georgetown University; she received a masters of science in Economics and doctorate in Politics from Oxford University.

Martha Brill Olcott, Ph.D.

Senior Associate, Russia and Eurasia Program, Carnegie Endowment for International Peace

Martha Brill Olcott, Ph.D., is a senior associate with the Russia and Eurasia Program at the Carnegie Endowment in Washington, D.C. Olcott specializes in the problems of transitions in Central Asia and the Caucasus as well as the security challenges in the Caspian region more generally. She has followed interethnic relations in Russia and the states of the former Soviet Union for more than 25 years and has traveled extensively in these countries and in South Asia. Her book, "Central Asia's Second Chance," examines the economic and political development of this ethnically diverse and strategically vital region in the context of the changing security threats post 9/11. In addition to her work in Washington, Olcott codirects the Carnegie Moscow Center Project on Religion, Society, and Security in the former Soviet Union. She is professor *emerita* at Colgate University, having taught political science there from 1974 to 2002. Olcott served for five years as a director of the Central Asian American Enterprise Fund. Prior to her work at the Carnegie Endowment, Olcott served as a special consultant to former Secretary of State Lawrence Eagleburger. Soon after 9/11, she was selected by *Washingtonian* magazine for its list of "71 People the President Should Listen To" about the war on terrorism. She received her Ph.D. from the University of Chicago.