

**EXHIBIT A ATTACHMENT A-3
RESUMES**

Scott Samuelson

Professor, [Mechanical and Aerospace Engineering](#)

Director, [National Fuel Cell Research Center](#)

Education:

B.S., University of California, Berkeley, Mechanical Engineering, 1964

M.E., University of California, Berkeley, Mechanical Engineering, 1965

Ph.D., University of California, Berkeley, Mechanical Engineering, 1970

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Research:

Dr. Samuelson is interested in energy conversion, fuel cells, combustion, fuel sprays, laser diagnostics, air quality, turbulent transport, alternative fuels, the modeling of reacting flows, practical energy systems, and the conflict between energy and the environment.

Dr. Samuelson's current research activity focuses on energy generation, distribution and utilization, and includes the production of electricity, motive power and propulsive power from both fuel cells, gas turbines and hybrids of both. His work also explores the environmental impact of these energy systems, the dynamic between energy generation and atmospheric quality, and the development of environmentally preferred, high-efficiency energy generation integrated into buildings and building complexes.

Dr. Samuelson directs the Advanced Power and Energy Program (APEP), which encompasses the National Fuel Cell Research Center (NFCRC), the UCI Combustion Lab (UCICL) and the Pacific Consortium on Energy and the Environment (PARCON).

His work at the UCICL is directed toward the development of advanced stationary gas turbine power systems. Research at the NFCRC is leading the evolution of power generation fuel cells, and the PARCON accelerates the development and deployment of advance energy systems around the world.

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Daniel M. Kammen

Research Focus: renewable energy science, technology and policy. Energy and climate change. Risk analysis.

a. Professional Preparation

Cornell University Physics (Cum Laude) B.A. 1984

Harvard University Physics M.A. 1986

Harvard University Physics Ph.D. 1988

b. Appointments

Faculty Positions: Class of 1935 Distinguished Chair in Energy (2004 -); Professor, Goldman School of Public

Policy, University of California, Berkeley (2001-present); Professor, Energy and Resources Group, University of

California, Berkeley (2001-present); Professor, Department of Nuclear Engineering, University of California,

Berkeley (2001-present); Associate Professor, Energy and Resources Group (1998-2001);

Assistant Professor of

Public and International Affairs, Woodrow Wilson School of Public and International Affairs, Princeton

University (1993-98).

Administration and Research: Co-Director, Berkeley Institute of the Environment (2005 -);

Founding Director,

Renewable and Appropriate Energy Laboratory, University of California, Berkeley (1998-present); Postdoctoral

Fellow, Department of Physics and Kennedy School of Government, Harvard University, (1991 – 1993);

Weizmann Postdoctoral Fellow, Division of Engineering, and Division of Biology, California Institute of

Technology (1998 – 1991). Permanent Fellow, African Academy of Sciences (2000 – present).

Fellow, American

Physical Society (1999 – present); Chair, Science, Technology and Environmental Policy Program, Princeton

University (1994 – 1998).

National Advisory Board, Union of Concerned Scientists (2004 – present); Board of Directors, The Utility Reform

Network (2002 – present), Associate Editor, *Annual Review of Environment and Resources* (2002-2006). Editor

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TIMOTHY E. LIPMAN, PHD

Co-Director

Transportation Sustainability Research Center

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PROFESSIONAL PREPARATION

Stanford University Anthropology B.A., 1990

University of California – Davis Transp. Technology and Policy M.S., 1998

University of California – Davis Ecology (Env't'l Policy Analysis AOE) Ph.D., 1999

University of California – Davis Inst. of Transportation Studies Postdoc, 2000

University of California – Berkeley Energy and Resources Group Postdoc, 2000-2003

APPOINTMENTS

- May 2008 – Present: **Co-Director**, Transp. Sustainability Research Center, UC Berkeley
- October 2009 – Present: **Director**, US DOE Pacific Clean Energy Application Center, UC Berkeley
- July 2006 – April 2008: **Research Director**, Transp. Sustainability Research Center, UC Berkeley
- February 2004 – present: **Assistant Research Engineer**, Inst. of Transportation Studies, UC Berk.
- 2009 – present: **Member**, Transportation Research Board Comm. on Alt. Transp. Fuels ADC80
- November 2003 – June 2004: **Assistant Research Scientist**, Energy and Resources Group, UC Berk.
- June 2003 – October 2003: **Staff Research Associate**, Energy and Resources Group, UC Berkeley
- January 2003 – May 2003: **Post-Doctoral Researcher**, Inst. of Transportation Studies, UC Davis
- September 2000 – August 2002: **Post-Doctoral Researcher**, Energy and Resources Group, UC Berk.
- January 2000 – August 2000: **Post-Doctoral Researcher**, Inst. of Transportation Studies, UC Davis

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Vincent G. McDonell

EDUCATION AND TRAINING

Ph.D. in Mechanical Engineering, June 1990; University of California, Irvine (Irvine, CA)

M.S. in Mechanical Engineering, June 1987; University of California, Irvine (Irvine, CA)

B.S. in Engineering, June 1985; University of California, Irvine (Irvine, CA)

RESEARCH AND PROFESSIONAL EXPERIENCE

7/08—present **Adjunct Professor, Mechanical and Aerospace Engineering**, U.C. Irvine

11/05—present **Co-Director**, Pacific Region CHP Application Center

8/04 – 6/08 **Adjunct Associate Professor, Mechanical and Aerospace Engineering**, U.C. Irvine

10/99-present **Associate Director**. UCI Advanced Power and Energy Program, U.C. Irvine

7/95-present **Associate Director**. UCI Combustion Laboratory, U.C. Irvine

7/90-6/95 **Sr. Research Engineer**. UCI Combustion Laboratory, U.C. Irvine

1/88-7/90 **Air Force Laboratory Research Fellow**, WPAFB/U.C. Irvine

6/87-9/87 **Visiting Researcher**, Imperial College of Science and Technology, London, England