



SPEAKER BIOGRAPHIES

ARC Energy Investment Forum

The Battle for the Hearts and Wheels of the Market

Monday April 3, 2017

Heritage Park, Gasoline Alley Museum, Calgary, AB

Explore the future of automotive technology and implications for investing

KEYNOTE SPEAKERS



Dr. Steve Koonin
New York, USA
Former US DOE Under Secretary and Current Director of New York University's Center for Urban Science and Progress



Larry Burns
Detroit, USA
Advisor to Google (now Waymo) on Self Driving Cars and Former Vice President of Research & Development for GM



Peter Tertzakian
Calgary, Canada
Executive Director,
ARC Energy Research Institute



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Keynote Speakers:



Dr. Steve Koonin (*New York, USA*)

Former US DOE Under Secretary and Current Director of New York University's (NYU) Center for Urban Science and Progress (CUSP)

Steven E. Koonin was appointed as the founding Director of NYU's CUSP in April 2012. That consortium of academic, corporate, and government partners will pursue research and education activities to develop and demonstrate informatics technologies for urban problems in the "living laboratory" of New York City. He previously served as the U.S. Department of Energy's second Senate-confirmed Under Secretary for Science from May 19, 2009 through November 18, 2011.

As Under Secretary for Science, Dr. Koonin functioned as the Department's chief scientific officer, coordinating and overseeing research across the DOE. He led the preparation of the Department's 2011 Strategic Plan and was the principal author of its Quadrennial Technology Review. Dr. Koonin particularly championed research programs in High Performance Simulation, Exascale Computing, Inertial Fusion Energy, and Greenhouse Gas Monitoring, Reporting, and Verification. He also provided technical counsel on diverse nuclear security matters.

As the Chief Scientist at BP from 2004 to early 2009, Dr. Koonin developed the long-range technology strategy for alternative and renewable energy sources. He managed the firm's university-based research programs and played a central role in establishing the Energy Biosciences Institute at the University of California Berkeley, the Lawrence Berkeley National Laboratory, and the University of Illinois at Urbana-Champaign.

Dr. Koonin is a member and past chair of the JASON Study Group, advising the U.S. Government on technical matters of national security. He has served on numerous advisory committees for the Department of Energy, the National Science Foundation, and the Department of Defense, including the Defense Science Board and the Chief of Naval Operation's Executive Panel.



Larry Burns (*Detroit, USA*)

Advisor to Google (now Waymo) on Self Driving Cars and Former Vice President of Research and Development for GM

Larry Burns advises organizations on the future of mobility, logistics, energy, manufacturing, and innovation. His current clients include Alphabet (Waymo), Peloton Technology, Kitson & Partners, Driversiti, IHS Markit and a major U.S. shipping company. From 2010 to 2016, Larry was also a Consultant to Google (Self-Driving Cars), Professor of Engineering Practice at the University of Michigan, Director of the Program for Sustainable Mobility at Columbia University, Senior Advisor to the Chairman of Hess Corporation, Consultant to Allstate and on the Advisory Boards of Greentech Capital Advisors and VantagePoint Capital Partners.

Larry served as General Motors Corporate Vice President of Research & Development and Planning from 1998-2009. He was a member of GM's top decision board and was responsible for advanced technology development, product portfolio planning, capacity planning and strategic planning.

Larry is a major voice for the "reinvention of the automobile" and the diversification of transportation energy. He has championed driverless and connected vehicles, vehicle electrification, fuel cells, advanced batteries, bio-fuels, and innovative concept vehicles.

Larry is a member of the U.S. National Academy of Engineering and the ITS America Hall of Fame, is co-author of *Reinventing the Automobile: Personal Urban Mobility for the 21st Century* (MIT Press, January, 2010) and is a frequent keynote speaker at conferences and leadership meetings. Larry has a Ph.D. in Civil Engineering, University of California, Berkeley, a M.S. in Engineering / Public Policy, University of Michigan, Ann Arbor, and a B.S. in Mechanical Engineering, from the General Motors Institute (now Kettering University).

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Alan Nagel (*Calgary, Canada*)

SAE Certified Vehicle Electrification Specialist (CVEP), Vtrux Canada (VIA Motors) and Sun Country Highway

Through a unique arrangement with the Southern Alberta Institute of Technology (SAIT Polytechnic), Alan spent 28 years employed within General Motors of Canada's Product Service Training department and has assisted in the development and delivery of a wide array of conventional hybrid, plug-in hybrid, and battery electric vehicle training.

In 2013, Alan garnered a unique automotive engineering credential having been recognized by the Society of Automotive Engineers in becoming one of their first "SAE Certified" Vehicle Electrification Professionals (SAE-CVEP) a new SAE certification and accreditation for those directly involved in electric vehicle engineering, product design, manufacturing, training and service readiness.

Since 2015, Alan has been employed by Sun Country Highway Ltd. As part of Sun Country, Alan currently serves as National Service Manager for Vtrux Canada, the Canadian distribution arm for extended range electric pick-up trucks and vans produced by VIA Motors USA. Alan has most recently helped launch "Sun Country Academy" which looks to advise and assist training institutions and polytechnics throughout Canada in the creation of electric vehicle safety/servicing standards and the development of an all-new curriculum necessary to create the EV technicians of the future.



Andrew Miller (*London, United Kingdom*)

Analyst, Benchmark Mineral Intelligence

Andrew's primary role is to collect price data on opaque mineral markets such as lithium, graphite and cobalt, and process and analyse this data into regular market reports, forecasting and indices published by Benchmark. At Benchmark, Andrew regularly travels to active mines and processing plants in many different countries with a specialist focus on China. He is also invited to give market-focused presentations around the world including Canada, China, Australia and U.S.

In his role at Benchmark, Andrew has advised some of the world's leading institutional investors and mining companies. Andrew's previous role was as an Analyst with Industrial Minerals / Metal Bulletin covering the graphite and fluorspar markets for three years. Prior to this position, Andrew started his career analysing financial markets for UK-based Invesco Perpetual and is first-class honours educated in Economics from the University of East Anglia, UK.



Dr. Linda Nazar (*Waterloo, Canada*)

University of Waterloo Professor and Canada Research Chair Solid State Energy Materials

In 1987 Dr. Nazar joined the Chemistry Department at the University of Waterloo, where she initiated her independent academic career. She was promoted to full professor in 2000 and established the Laboratory for Electrochemical Energy Materials.

Dr. Nazar has achieved international recognition as a leader in the areas of solid state chemistry, electrochemistry, energy storage and materials science. She has co-authored over 220 publications, 11 patents, and over 300 contributed international conference papers. Dr. Nazar has also presented her work in over 200 invited distinguished lectures, colloquia and seminars around the globe. She is listed in the 2014 and 2016 Highly Cited Research List (Web of Science), and the 2014 Web of Science's Most Influential Scientific Minds.

Dr. Nazar is the recipient of several academic and professional honours and awards, including the ECS Battery Division Research Award (2009), the IBA award (2011), the IUPAC Distinguished Women in Chemistry award (2011), the August-Wilhelm-von-Hofmann Lecture award (2013), and was a 2010 Moore Distinguished Scholar at Caltech. She was elected to the Royal Society of Canada in 2012, and was made an Officer of the Order of Canada in 2015.



Bill Woebkenberg (*Detroit, USA*)

Transport Fuels Technical and Regulatory Specialist, Aramco Research Center

During his 30+ year career, Bill Woebkenberg has served as a technical specialist in powertrain, NVH and vehicle integration as well as vehicle development at Ford Motor Company. Additionally, he was exhaust aftertreatment and acoustics program manager at Arvin-Meritor for various Ford Motor Company vehicle programs, including the 2005 Mustang. More recently, Bill developed and promoted the Mercedes-Benz technical and regulatory outlook on U.S. market fuels, providing written and oral testimony on these topics to the EPA and legislative subcommittees of the U.S. government, and various state legislatures. He has presented various market fuel related topics at the SAE Government & Industry Conference, National Ethanol Conference, and the U.S. Department of Energy Biomass Conference, as well as many other vehicle and energy related technical conferences.

Bill now performs a similar function in the energy industry, representing the Strategic Transport Analysis Team at Aramco Research Center – Detroit, in ASTM gasoline and diesel subcommittees as well as API Fuels subcommittees.



Mark Nantais (*Toronto, Canada*)

President, Canadian Vehicles Manufacturers' Association

Mr. Nantais was appointed President of the CVMA in January 1994 overseeing the operation of the organization and its 16 standing committees on a national basis. As President, having 33 years of experience in the automotive industry, he has the responsibility for the development of policy and the overall strategic direction of the Association representing Canada's leading manufacturers of motor vehicles.

During his tenure he has taken lead responsibility for the membership's activities in the areas of engineering, environmental performance, alternative fuels and energy efficiency, in addition to industrial relations, occupational health and safety, and technical standards harmonization (nationally and internationally).

As the automotive industry representative, he has served on several of the federal and provincial governments' consultative groups including Climate Change and Canada's delegation to the negotiation of the Canadian-U.S. Trans-boundary Agreement on ground level ozone transport. More recently he has served on the Ontario Minister of Environment's Climate Action Advisory Group. On the international trade front he has provided the auto industry's perspectives on multilateral trade negotiations at the World Trade Organization, international standards harmonization fora, and on behalf of the CVMA, provided input to Canada's negotiators on bilateral trade agreements with South Korea and more recently the CETA, TPP and Japan bilateral negotiations.



Lawrence Romanosky (*Calgary, Canada*)

General Sales Manager, Porsche Canada Calgary

Lawrence is a life-long car enthusiast with a strong background in Classic Cars. Professionally, Lawrence completed a Bachelor of Commerce from the University of Calgary in 1990, and owned several small business for a decade before entering the Automotive industry in 2000, holding positions in Sales and Finance. Lawrence started with Porsche in 2012 as the New Car Sales Manager, and is currently the General Sales Manager of Porsche Centre Calgary.

He has pursued all manner of automotive related interests including competitive driving, car restoration, and is a regular attendee at the Pebble Beach Concours d'Elegance and other premier collector car events such as the Monterey Historic Car Races, Goodwood Festival of Speed, Rennsport Reunion and the RM and Gooding Collector Car Auctions. He has a significant Automotive library, and a collection of several thousand car magazines going back to 1947. Currently, he is learning as much as he can about pre-war automobiles.

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Doug Suttles (*Calgary, Canada*)

President and Chief Executive Officer of Encana Corporation

Doug Suttles joined Encana as President & CEO in June 2013. With over 30 years of experience in the oil and gas industry in various engineering and leadership roles, he is responsible for the overall success of Encana and for creating, planning, implementing and integrating the strategic direction of the organization.

Before joining Encana, Doug held a number of senior leadership posts at BP, including Chief Operating Officer, BP Exploration & Production, and President, BP Alaska.

Doug has served on the University of Texas Engineering Advisory Board since 2007 and was honored with the school's Mechanical Engineering Distinguished Alumni Award in 2008. Doug graduated from the University of Texas at Austin in 1983 with a bachelor's degree in mechanical engineering.



Mark Blackwell (*Calgary, Canada*)

Entrepreneur In Residence at the GE Industrial Internet Accelerator

Mark Blackwell currently is the Entrepreneur In Residence at the General Electric (GE) Industrial Internet Accelerator in Calgary. Most recently Mark was the Chief Operating Officer of GNS3 Technologies, an enterprise networking start-up, which was acquired in October for over \$30MM by Solarwinds. While at GNS3 the company grew to over 8000,000 monthly active users, 11MM downloads and was utilized by such organizations as the US Department of Defence, AT&T, Walmart, Google, Facebook and more. Mark also has experience as a venture investor while helping to run the Cenovus Energy Corporate Venture fund and investment banking with CIBC.

Mark also worked in the technology investment banking division at CIBC World Markets in Calgary. During his time at university, Mark received the Order of the University of Calgary and the Alumni Association's Future Alumni Award. He was also named a Top 20 Compelling Calgarian by the Calgary Herald and a Canada Top 20 Under 20.



David Mount (*San Francisco, USA*)

Partner at Kleiner Perkins Caulfield & Byers

David Mount joined Kleiner Perkins Caulfield & Byers in 2008 and is a partner in KPCB's Green Growth Fund (GGF), which supports young companies leading new markets in sustainable ways. David is focused on software and services investments applicable to the energy and industrials markets. He is on the boards of UpWind Solutions and Choose Energy, a board observer at OSIssoft, and led the firm's investment in ServiceMax. He has also worked closely with the teams at Silver Spring Networks (SSNI), Opower (OPWR), and Hara (acquired by Verisae).

For over a decade, David has been investing in billion dollar technology and energy portfolios that span the petrochemical, oil and gas and consumer sectors. Before joining KPCB, David developed his principal investing expertise at Sankaty Advisors, a \$20B structured finance unit of Bain Capital. There David helped manage Sankaty's petro-focused portfolio, which included exploration, production, refining, field services and specialty chemicals. He also evaluated opportunities in renewable energy and alternative fuels and chemicals, predating the first wave of investing in these technologies. David's involvement in the firm's consumer portfolio included investments in multinationals within the food, health and sustainable business sectors.

David holds a B.A. degree from Yale University and an M.S. degree in environment and resources from Stanford University. He completed his M.B.A. at the Stanford Graduate School of Business, where he was an Arjay Miller Scholar. He remains involved in course development at the Stanford Graduate School of Business and School of Earth Sciences.

