RESUME
LAURIER L. SCHRAMM

ADDRESS: Saskatchewan Research Council, 15 Innovation Blvd., Saskatoon, SK, Canada, S7N 2X8
Email: schramm@src.sk.ca

SUMMARY: As President and CEO, Dr. Schramm has led record-breaking growth at the Saskatchewan Research Council (SRC), doubling the number of employees by 2009, and tripling revenues by 2010. He has previously served as Vice President of Alberta Research Council, and President and CEO of the Petroleum Recovery Institute. In addition to corporate management and leadership, he has over 30 years of R&D experience in colloid, interface, and petroleum science, has received major national awards for his research, and is known for his research involving petroleum industry applications of suspensions, emulsions, foams, and surfactants. He has substantial R&D management experience, having worked in each of the industry, not-for-profit, university, and government sectors, and has taught academic and industrial courses in his field, both domestically and internationally. He holds 17 patents, has published 9 books and over 350 other scientific publications and proprietary reports, and has given over 150 national and international, plenary, invited, and other scientific/technical presentations. Many of his inventions have been adopted into commercial practice.

ACADEMIC AND PROFESSIONAL HONOURS:

2009-2010	Member, Canada Foundation for Innovation (CFI) Expert Panel on Oil Sands Processing.
2009-pres	Member, CREATE Program Grant Selection Committee, Natural Sciences and Engineering Research Council of Canada (NSERC).
2008	Carl C. Coffin Lectureship for 2008, Dalhousie University, Halifax, NS.
2007-2008	Chair, Sustainable Energy Systems II Committee, Strategic Grants Program, Natural Sciences and Engineering Research Council of Canada (NSERC).
2007-pres.	Member of the "Member Council", Sustainable Development Technology Canada (SDTC).
2007-pres.	Member of the Editorial Board, "Encyclopedia of Petroleum Science & Engineering".
2005	Saskatchewan's Centennial Medal, for significant contributions to society and outstanding achievements, including rejuvenating the Saskatchewan Research Council.
2005-2006	Member, Minister's National Panel of Experts on Sustainable Energy Science & Technology (NRCan).
2004-2007	Group-Chair (Engineering); also Member, Committee on Grants and Scholarships (NSERC).
2001-2004	Chair (03/04) and Member, NSERC Chemical and Metallurgical Engineering Grant Selection Committee.
2000-pres.	Member, CFI New Opportunities Fund College of Reviewers.
2002	Canada's Queen Elizabeth II Golden Jubilee Medal, for sustained series of creative contributions to Canadian petroleum technology and significant contribution to Canada.
2000	Canadian Society for Chemistry "Milestone of Canadian Chemistry in the 20th Century" award (one of only 80 for the entire millennium) for the development of oil-tolerant foams for enhanced oil recovery.
1999-2000	Member, Minister's Intellectual Infrastructure Partnership Program Review Panel, Gov. of Alberta.
1998	Co-Chair, Canada Foundation for Innovation - Institutional Innovation Fund Panel.
1997/98	Principal investigator on experiments in "Foam Stability Related to Improved Oil Recovery" and "Fluid Flow in Porous Media" flown on NASA's space shuttle flight STS-91 (June, 1998).
1997	Canadian Society for Chemical Engineering - Bayer Award in Industrial Practice (distinguished contribution in the application of industrial chemistry to the industrial sphere).
1996-1998	Member, NSERC Strategic Projects Selection Panel for Energy.
1995	NSERC-Conference Board Synergy Award, Best Practices in University-Industry R & D Partnership.
1993	Awarded Fellowship in the Chemical Institute of Canada (FCIC).
1976-1980	Isaac W. Killam and National Research Council Post-Graduate Scholarships, Dalhousie University.

PROFESSIONAL EXPERIENCE:

Saskatchewan Research Council, Saskatoon/Regina

2001-present, President and CEO

Responsible for leadership and direction of Saskatchewan's primary applied R&D provider and one of the province's top 75 companies (over 400 employees; >$60 million per year). Champion of continuous improvement in safety. Responsible for submission to Cabinet review of the rationale for government involvement in R&D and SRC's mandate, role, approach, and scope of activities (Cabinet approved, 2001). Responsible for developing SRC's strategic 5-year business plans (2002-2007; 2007-2012) plus risk management, technical excellence, communications/branding, CSR, and other related strategic plans. Initiated economic impact audit process, now institutionalized, to demonstrate SRC's impact on the economy and "quality of life." Internal champion for safety. Led record-breaking growth through internal development of teams, teamwork, culture, and business focus: more than doubling the number of employees by 2009; and tripling company revenues by 2010. Currently leading focus on our mission to benefit Saskatchewan by conducting applied RD&D, partnering with universities and industry, commercializing and transferring scientific and technological solutions, and thereby strengthening the economy with quality jobs and a secure environment. Led SRC to contribute $3 billion in direct incremental economic activity in Saskatchewan alone in the past seven years (cumulative economic impact audit results).

University of Calgary

2001-2010, Adjunct (Full) Professor, Department of Chemical and Petroleum Engineering

Collaborative research in improved oil and bitumen recovery processes (principal investigator for some), and service in university affairs, including graduate student advisory and examination committees.

1995-2001, Adjunct (Full) Professor, Department of Chemistry
1991-1995, Adjunct Associate Professor, Department of Chemistry

Teaching of industrial and colloid and interface science (undergraduate and post-graduate); supervising Ph.D./M.Sc. students, associates and assistants in research relevant to improved oil recovery processes. Continuous research-grant funding. Service in departmental affairs, graduate student advisory and examination committees; external examiner for Ph.D./M.Sc. defences, in science and engineering, in Canada and internationally.

Alberta Research Council, Edmonton/Calgary

2000-2001, Vice President, Energy Technologies

Responsible for leadership and direction of ARC's integrated energy technology development activities including the Petroleum Recovery Institute (PRI), Fuels and Lubricants unit, C-FER Technologies Inc., and ARC's partnership in the National Centre for Upgrading Technologies, NCUT (ca. 120 FTE). Led an emphasis on our mission to benefit Alberta by providing opportunities, and technologies, for more effective utilization of its energy resources and securing Alberta's energy future. Maintained excellent safety record and focus. Grew revenues by 36% to over $16 million, and corporate contribution from loss position to + $1.9 million for 2000/01. Forecast revenues on leaving were $17.5 million and contribution of $2.4 million for 2001/02.

2000, Executive Director, Petroleum Recovery Institute

Change agent responsible for integrating formerly competing business units (65 FTE) and their reservoir recovery R&D activities within the new PRI, an Institute of ARC. Led continued emphasis on strategic technology development, growing revenues through research consortia, and advancing technologies to field demonstration and commercialization. Maintained excellent safety record and focus. Grew consolidated revenues by 16% to over $9 million, and corporate contribution by >300% to over $1.5 million for 2000/01.

Petroleum Recovery Institute, Calgary

1999-2000, President and CEO

Responsible for all aspects of PRI's operations and Chair of its senior management team. Led PRI into operation as a subsidiary of the Alberta Research Council, stabilizing PRI's operations, effectively eliminating negative corporate contribution position, and adding $2.5 million per year to ARC's consolidated revenues. Actively engaged in growing revenues (85% from industry), building research consortia, advancing technologies to field demonstration, and refocusing the Institute.

1998-1999, General Manager, Research and Technology Division
1995-1998, Manager, Research and Technology

Reporting to the CEO, responsible for the Institute's medium- to long-range research and technology development activities leading to new technology products and services. Line responsibility for half of the Institute's staff, facilities, and budget. Implemented annual R&D project initiation/review process involving continuous internal/external idea gathering, objective short-listing, and customer feed-back based final selection/continuance process. Active basic and applied research related to improved oil recovery processes.

1992-1995, Senior Staff Research Scientist; Group Leader, Process Sweep Improvement
1990-1992, Senior Staff Research Scientist; Group Leader, Chemical Enhanced Oil Recovery
1988-1990, Staff Research Scientist

Progressively increasing breadth and responsibility culminating in leadership of the Institute's largest research group (budget of about $0.95 million per year) of eleven scientists, engineers and technologists as well as numerous students. Active basic and applied research into novel oil recovery processes, including applications of colloid and petroleum science to foam, polymer and surfactant flooding processes; numerous inventions.

Syncrude Canada Ltd., Research Dept., Edmonton

1984-1988, Senior Research Scientist
1980-1984, Research Chemist

Active experimental research into fundamental aspects of the hot water flotation process for recovering oil from oil sands. Consistent development of applications into new technology. The research often required the invention or development of new experimental techniques. Several patented inventions put into commercial practise. The area of greatest research concentration was in colloid and interface science of the oil recovery processes.

UNIVERSITY EDUCATION:

2007-2008	Chartered Director Program, The Directors College, McMaster University – Conference Board of Canada
2000-2001	Corporate Executive Program, School of Business, University of Alberta.
1976-1980	Ph.D. in Chemistry, Dalhousie University. Physical chemistry with specialization in colloid chemistry and thermodynamics. Supervisor: Prof. J.C.Th. Kwak
1972-1976	B.Sc. in Chemistry, First Class Honours, Carleton University. Specialization in analytical and aquatic chemistry. Supervisor: Prof. C.L. Chakrabarti

TEACHING:

1990-1999	As industrial scientist: course director, editor and lecturer for intensive short courses in Emulsion and Foam Technology in the Petroleum Industry. These courses were given numerous times in Canada, and abroad, for participants from Canada, U.S., Trinidad, Ecuador, P.R. China, Romania and Venezuela.
1989-1999	As adjunct professor: taught colloid and interface chemistry and industrial chemistry in various undergraduate and graduate courses at the Chemistry Dept., University of Calgary. Invited lecturer (1998) in oil sands Conditioning and Separation, part of the Certificate in Oil Sands Technology program at the University of Alberta in Edmonton, and at Keyano College, Fort McMurray, AB.
1987-1988	Taught several applied colloid chemistry courses for Syncrude Canada Ltd., Research Dept.

SESSION CHAIRS, PLENARY AND INVITED PRESENTATIONS:

1988-present	Over 30 keynote or special invited lectures at national and International conferences in Canada, US, Norway; 8 Symposium Chairs or Co-Chairs at national conferences in Canada and the US
1992	Served as Conference Chairman and Organiser, International Energy Agency Collaborative Project on EOR, 13th. International Workshop and Symposium, Banff, Alberta, Sept. 27 - Oct. 1.

REVIEWS:

Reviewer for Canada Foundation for Innovation, NSERC strategic, operating, and CREATE grants and awards, Atlantic Canada Opportunities Agency/Atlantic Innovation Fund grants and programs, Intellectual Infrastructure Partnership Program grants, Canadian Society for Chemistry awards, American Chemical Society and Oxford University Press books, John Wiley books and Encyclopedias, and numerous international journals (AOSTRA J. Res., Can. J. Chem., Can. J. Chem. Eng., Colloids & Surfaces, Fuel Processing Technol., J. Can. Petrol. Technol., J. Colloid Interface Sci., J. Surfactant and Detergents, Langmuir, Society of Petroleum Engineers, SPE Journals).

PROPRIETARY RESEARCH, DEVELOPMENT & TECHNOLOGY TRANSFER:

Proprietary research (over 220 technical reports) involving processibility of oil sands, hot water flotation, and reservoir recovery of light and heavy crude oils; rheology of suspensions, emulsions, and foams; electrokinetic properties of dispersed solids, oil, and gases; interfacial tensions and phase attachments; foam stability in bulk and porous media; structure/performance behaviour and adsorption of surfactants. Many of these results are reflected in issued patents and in current commercial practice, particularly in the Canadian oil sands industry. Have also participated in proprietary petroleum industry brainstorming and innovation workshops for companies such as Imperial Oil / Exxon.

EXTERNAL BOOKS, PUBLICATIONS, PATENTS AND PRESENTATIONS:

9 books published, 17 patents issued, over 130 scientific papers and book chapters published, over 150 other scientific presentations and invited scientific seminars.

SECURITY CLEARANCE: Secret (Level II). Regular participant in classified energy infrastructure briefings.

OTHER PROFESSIONAL NOTES:

2010-present Director, Innovation Saskatchewan Inc., Regina, SK

2007-present Founding Member and Director, presently Board Chair (previously Vice-Chair, Secretary), Innoventures Canada Inc. (I-CAN), Winnipeg, MB

2007-present Member, Sustainable Development Technology Canada (SDTC), Ottawa, ON

2001-present Director and Secretary, Saskatchewan Research Council, Saskatoon, SK

Past Boards: Member (2001-2010; also a Director from 2001-2009) of Petroleum Technology Research Centre (PTRC), SK; Director of C-CORE Inc., NL (2002-2008); Chair of the Management Committee, Sask. Office of Energy Conservation (2003-2008); Director of Petroleum Technology Alliance Canada (PTAC, 2000-2006); Member of Sask. CTN Innovation Council (2001-04); Director of C-FER Technologies Inc., AB (2001); Member of the Network Coordinating Council of the Canadian Oilsands Network for Research and Development (CONRAD, 2001); Member of the Oil Sands Industry Task Force (2001); Member, Management Committee, National Centre for Upgrading Technology, AB (2000-2001).

Associations: Professional and Chartered Chemist (ACPO,ACPA). Chartered Director (C.Dir.). Member, past Director, and past Registrar (1993-96), Association of the Chemical Profession of Alberta. Member, Association of the Chemical Profession of Ontario. Fellow of the Chemical Institute of Canada (CIC). Member, past Vice-President, past Secretary, for the Calgary section CIC. Also a member of the American Chemical Society, ACS Division of Colloid Chemistry, Prospectors and Developers Association of Canada, Society of Petroleum Engineers. Past member of Innovation Management Association of Canada (IMAC), Petroleum Society of CIM. Judge in Calgary and Saskatoon elementary/secondary school science fairs.

Listed in: Canadian Who's Who, Milestones of Canadian Chemistry in the 20th Century, Contemporary Authors, The Writers Directory, Selected Alberta Science and Research Success Stories.