



Toxcon Health Sciences Research Centre Inc.

R. E. Rogers, Ph.D, DABT, P.Biol. - President
9607-41 Avenue Edmonton, AB Canada T6E 5X7

Tel: (780) 435-9028
Fax: (780) 431-2189
www.toxcon.com

Toxcon Health Sciences Research Centre (HSRC) Inc. is a wholly-owned Canadian company that was established to meet the growing demand in Canada, the U.S., and internationally for expertise in occupational and environmental health, toxicology, and clinical research. From its inception in 1984, Toxcon has been dedicated to providing high quality clinical and non-clinical exposure and health risk assessments, health science R&D, regulatory standards setting and toxicological services to our clients. These clients include companies from the pharmaceutical, biopharmaceutical, consumer product, household and agricultural chemical, environmental and medical device industries.

Expertise

Toxcon has a staff of professionals who have a broad range of expertise conducting multi-disciplinary research in a variety of areas including, but not limited to medicine, toxicology, engineering/exposure assessment and modeling, aerosol characterization, health risk assessment, regulatory compliance, analytical chemistry, project management, and business development.

Our staff has been actively involved in the areas of general, occupational and environmental health and toxicology at the field, management and research levels for over 20 years, participating in the resolution of numerous high profile occupational, environmental and consumer products problems, as well as in the development of exposure standards for both provincial and federal government agencies

Research

Toxcon is involved in cutting-edge clinical and non-clinical research in the areas of pesticide residues, asthma, allergies, fragrances, and indoor air quality. The results from many of our studies have been presented at various international meetings, conferences and information exchanges.

Risk and Exposure Assessment

Toxcon has been actively developing approaches to address the environmental health risks from chemical exposure, including the application of both deterministic and probabilistic (e.g. Monte Carlo) modeling methods. We assist litigators, government agencies, and a variety of private sector companies. We routinely conduct quantitative human health and/or environmental risk assessments consistent with US and Canadian regulations; determine sampling requirements at contaminated sites; provide toxicity assessment on priority and non-priority chemicals; develop exposure standards for both provincial and federal government agencies; evaluate potential exposure to chemicals of concern; develop site-specific clean-up criteria from contaminants in soil water and air; and provide risk management solutions for contaminated sites.

Toxcon has designed and conducted both small (e.g., residential and office indoor air quality) and large scale (e.g., community ambient and indoor air quality) field exposure studies for a variety of contaminants (e.g., VOC's/SVOC's, mold, other organic compounds, inorganics, pesticides, antimicrobials, etc.).

Toxcon has extensive experience with data collection instruments ranging from public awareness/health questionnaires to real-time monitors or passive dosimeters.

ZELT PSI Inc.

BRIAN W. ZELT, Ph.D., P.Eng.

Brian Zelt is an independent consultant specializing in air quality, contaminant fate and transport; and, human and ecological risk assessment. He has developed human and ecological, exposure and risk models for both screening and refined assessments on projects across Canada, United States and Internationally.

Brian Zelt is a professional engineer with a Ph.D. in mechanical engineering in air dispersion modelling. He has 7 years of postgraduate numerical analysis, time-series analysis, and application programming development, and more than twelve years of industrial applied experience in the fields of air quality modelling, surface water quality modelling, exposure assessment, environmental and human health risk assessment, report writing and project management.

Deterministic and probabilistic models have been developed for projects such as: ecological sub-population models in the Alberta oil sands; human health exposure to ambient and industrial emissions in the Alberta oil sands and Cold Lake developments; U.S. superfund sites; Bow River cleanup for creosote; Calgary's downstream wasteload allocation mixing zone modelling; and, particulate air quality and exposure modelling.

Since 2000, Dr. Zelt has continued his role as a contaminant fate and transport modeller in assessments on industrial emissions including: PAHs, VOCs, particulates and arsenic.

EDUCATION

University of Alberta, PhD, Mechanical Engineering, 1992

University of Alberta, BSc, Mechanical Engineering, 1984

PROFESSIONAL HISTORY

2000 – Present	<i>ZELT Professional Services Inc.</i>	<i>President</i>
1998-2000	<i>E2 Environmental Alliance Inc., Partner</i>	<i>Air Quality; Human Health Risk Assessment</i>

AFFILIATIONS

Professional Engineer, Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA)

Air and Waste Management Association (AWMA)

SALMO Consulting Inc.

TERRY M. ANTONIUK, P. Biol., RPBio.

Terry Antoniuk is an independent consultant with wide-ranging environmental and public involvement experience. He has designed, conducted, and managed environmental and socio-economic programs in freshwater, terrestrial, and marine settings across Canada and internationally.

Trained as a biologist, Mr. Antoniuk spent thirteen years with an energy company. During this time, he directed biophysical baseline studies, impact assessments, and research programs in British Columbia, Yukon, Northwest Territories, Alberta, and Newfoundland, among others. He also coordinated a multi-million dollar mercury site remediation program in Quebec.

Since 1978, Mr. Antoniuk has investigated contaminant effects on: groundwater; surface water; marine and freshwater aquatic habitat and biota; soils; vegetation; and terrestrial biota; and air quality. Specific contaminants have included hydrocarbons, metals, sulphur, sediments, salts, acid, and nutrients.

EDUCATION AND TRAINING

University of Alberta, B.Sc. (Honors), Zoology, 1978

Habitat Evaluation Procedures, (HEP) Certification, 1983

PROFESSIONAL HISTORY

1992 – Present	SALMO Consulting Inc.	Principal
1977, 1978 – 1991	Gulf Canada Resources Ltd.	Environmental Coordinator and Advisor
1975, 1976	Alberta Fish and Wildlife Division	Fisheries Technologist

AFFILIATIONS

Association of Professional Biologists of BC

Alberta Society of Professional Biologists