

## Resume for Corjan Buma, M.Sc., P.Eng.



Mr. Buma is a private consultant specializing in room acoustics, building acoustics and noise control. After completing his M.Sc. work in 1986 at the University of Alberta, he conducted experimental work in duct-borne noise. Since early-1990 he has been involved in most aspects of acoustical consulting including environmental noise studies, but has more-recently concentrated on managing projects in architectural acoustics. Current activities mostly involve optimizing building designs for appropriate acoustical conditions, including reverberation control, HVAC noise control and room-to-room sound isolation. He is also a musician, specialized in organ, piano and choir.

### EDUCATION

M.Sc. 1986 Mechanical Engineering, University of Alberta

-Thesis work on Multiple-Source Excitation of Acoustic Resonances of Small-Room Enclosures.

B.Sc. 1983 Mechanical Engineering, University of Alberta

### WORK EXPERIENCE

**Associate Consultant / Director** - aci Acoustical Consultants Inc. 1997 – present

- Project management for a wide variety of projects with a focus on architectural acoustics (reverberation control, ventilation noise and room-to-room isolation)

**Laboratory Manager**, University of Alberta, Mech. Eng. Acoustics Lab (“MEANU”) 2000 – present

- Project management and conduct measurements to determine STC (“Sound Transmission Class”) of walls, windows, doors, etc. and NRC (“Noise Reduction Coefficient”) of sound-absorbing products

**Associate Consultant**, Alberta Infrastructure, Edmonton 2002 – 2003

- Review proposed school constructions for adequate noise control

**Associate Consultant**, Bolstad Engineering, Edmonton 1990 – 1997

-Perform measurements, analysis, predictions and compile engineering reports for a variety of projects including environmental noise monitoring, compiling noise control recommendations and managing architectural-acoustic projects.

### PROFESSIONAL AND TECHNICAL ASSOCIATIONS

-P.Eng., Association of Professional Engineers and Geoscientists of Alberta (APEGA)

-Member, Canadian Acoustical Association (CAA)

- member of Association’s national Board (2002 – 2006)

- Chair, October 2003 Conference Steering Committee

- Member, Acoustical Society of America

### PUBLICATIONS

- Proceedings of the Spring 2000 Conference on Environmental and Occupational Noise, Calgary, AB: "Generating Sound Level Data as per the Noise Control Directive (or ‘Seeing both the Forest AND the Trees’)"

- Proceedings of CAA 1987 Convention, Calgary, AB: "Computer Simulation of Lined Expansion Chamber Silencers - Experimental", page 139 (co-author: A. Craggs)

- Proceedings of CANCAM 1985, London, ON: "Multiple-Source Excitation of Acoustic Resonances in Small-Room Enclosures", page B-169 (co-author: A. Craggs)

- Applied Acoustics, 28 (1989) 229-239: "The Effect of an Absorbent Lining on the Natural Frequencies and Modal Damping Factors of a Small Room", Primary Author: A. Craggs