Izabeba Witkowska M.Sc., P.Eng. Principal Engineer/Senior Airworthiness Engineer StandardAero (SAL), Winnipeg, MB



Born, raised and educated in Europe (Poland). Attended the **TECHNICAL UNIVERSITY OF LODZ** (**POLAND**), Department of Mechanical Engineering and completed post graduate studies obtaining her **MASTER'S DEGREE in MATERIALS SCIENCE** in 1986. Immediately after graduation she was hired by the TECHNICAL UNIVERSITY OF LODZ, Materials Engineering Department as a Professor's Assistant. Until 1989 her experience included the areas of Failure Analysis, research work on thermochemical heat treatments and corrosion protection coatings (CVD, PVD). Fluent in three languages (Polish, Russian and German) she left Poland in 1989 (one year sabbatical from University) to travel to Indiana, USA, to study English. The same year she applied in Canadian Consulate in Chicago for immigration to Canada and obtained the landed immigrant entry visa. She arrived in Canada in 1990 and that's when her North American engineering journey started. Having advantage of being able to communicate in English (verbally and in writing) she found employment after one week of immigration. Working for local Winnipeg companies she was exposed to the wide range of materials, processes and other aspects of the mechanical engineering profession in Canada.

Working together with (and being mentored by) Professional Engineers she became aware of differences between engineering in Poland vs. engineering in Canada, identified a need for additional training and gained invaluable experience and expertise in her profession. The process of becoming recognized as a Professional Engineer in the province of Manitoba took few years due to lack of time (full time employment) and also financial constraints (no support). After challenging three professional knowledge exams prepared by the Association of Professional Engineers in Alberta she obtained the Professional Engineer status in 1996. This was a milestone in her carreer, since it opened up multiple options for professional employment, providing similar opportunities, positions and benefits offered to Engineers educated and trained in Canada.

Since 1996 she is working for a major international aerospace company, StandardAero Ltd. (SAL) in Winnipeg, currently holding the position of the Principal Engineer. Soon after joining SAL she was "moving up" within the organization – a few times - for constantly more responsible/challenging positions, including a managerial job in charge of over 10 engineers. After four years working for SAL her knowledge, international experience and expertise was recognized by the higher management and she was promoted to work as Airworthiness Engineer for the Design Approval Organization (DAO). Working for the DAO she is able to fully utilize her skills, education and abilities in metallurgy/materials science/mechanical engineering/compliance approvals and achieve a level of excellence within the company.

In 2005 she obtained the Delegation of Authorization from Transport Canada in functional specialty Powerplants (Engines, Propellers and Gas Turbine Auxiliary Power Units). As a TC Delegated Engineer she is authorized to approve major repairs in her area of specialty on behalf of the Minister of Transport, including issuance of Major Repair Designs Approvals (RDA) and Limited Supplemental Type Certificates

(LSTC). In 2008 she was appointed by the Royal Australian Air Force (Department of Defence) as a Deputy Senior Design Engineer for C130J aircraft Propulsion Systems. In December 2012 she celebrated 12 years with the DAO (16 years with SAL). She continues to provide support for the DAO, Research and Development projects, processes, training and mentoring for majority of engineers within the organization.

Q. Who inspired you to become a Mechanical Engineer?

A. My uncle, a Materials Science Professor at a leading Technical University.

Q. What made you decide to become a Mechanical Engineer?

A. I always wanted a profession which would give me a lot of flexibility, employment opportunities/choices, would constantly change/evolve/advance to provide high level of satisfaction, and at the same time would offer financial rewards which would allow me to travel and observe the world.

Q. Who do you admire most?

A. I am impressed by everyone who has a positive impact on the society, who's global thinking and acts of kindness will leave the earth as a better place. I admire individuals who find the time and effort to help me to be successful, who encourage me to constantly develop and challenge me to be exceptional.

Q. What's one piece of advice you would give to Women in Engineering?

 ${f A}_ullet$ Mechanical Engineering is for you if:

 you like job flexibility, challenges and working in a fast pace environments

- you come across some situations thinking that anything someone can do you could do better
- you enjoy creativity/research/implementation and working on projects with logical, rationally thinking team members
- you would like to develop your carrier globally
- you want to combine your interests in traveling the world, making observations and using your experiences to solve problems and make a difference
- you are decisive and ready to accomplish great things



