



Fuquan Yang, Ph.D.
Specialist
Air Quality, Meteorology, Wind & Climate

Experience Summary

- More than 20 years of experience with developing numerical weather forecast models and their application to climate change and air quality. Joined Novus Environmental in 2010.
- Background in numerical weather prediction on Meteorology. Extensive consulting experiences on climate change, weather forecast, regional air quality, wind and climate for construction engineering.
- Select project experience: **Alberta Environment South Saskatchewan Region Plan (SSRP)** emission inventory harmonizing for air quality modeling input project; **Calgary Region Airshed Zone (CRAZ)** emission processing and weather pattern classification associated with high ozone episodes; **Historical wind and snow** (freezing rain) analysis for several major North America international airports, **Mercury Emission Allocation** and Modelling File Development, for Environment Canada.
- Expert in regional meteorological modeling including **MMS, WRF**, with a deep understanding of weather forecast mathematical algorithms and software architecture inside the models.
- Expert in air quality modeling including **MCIP, SMOKE, CMAQ**. Extensive experience with developing mathematical algorithms to apply these model's output on various projects.
- More than 20 years experience with programming languages such as Fortran 77, 90 and Unix / Linux C shell programming. Familiar with Linux administrative and related software management.
- Research Officer on weather and air quality in **National Research Institute of Canada**, Ottawa (2006-2009)
- Research Associate on weather and air quality, **University of Waterloo**, Canada(203-2006).
- Researcher of Meteorology in **Beijing Institute of Meteorology**, Beijing, China(1997-1999, 2001-2003).
- Post Doctoral work at **National Disaster Prevention and Earth Technology Institute**, Japan (1999-2001).
- Ph.D. of Numerical weather prediction in Meteorology, **Peking University**, China(1994-1997)
- Master of weather dynamics in Meteorology, **Peking University**, China (1991-1994).
- Bachelor of Meteorology, **Nanjing Institute of Meteorology**, 1989, China