

## CWSF 2013 - Lethbridge, Alberta



### Roi Levy

#### The Effect of Temperature, Salinity and pH on Brine Shrimp Hatching Success

**Challenge:** Environment

**Category:** Junior

**Region:** Toronto

**City:** North York, ON

**School:** Dublin Heights E. & M.S.

**Abstract:** The brine shrimp (*Artemia Salina*) is a halophile, micro-crustacean species in salt-water ecosystems. In this study, impacts of pH, temperature and salinity on the *Artemia*'s resistant encysted embryo's hatching rate, was measured to determine optimal hatching conditions. The results revealed this species' ability to thrive and decline under specific conditions. The *Artemia* model depicts adaptation as a complex response to critical life conditions.

#### Biography

Roi Levy, 13, is a highly regarded, top student of grade 8 gifted in Dublin Heights EMS, Toronto, Ontario. Having an overall average of 99.1, he was accepted to attend the prestigious Math&Computer Sciences program in Mackenzie Cl. Roi holds numerous achievements that demonstrate current and past successes. He won first place in his school in CNML 2012-2013, three sequential honour rolls 2011-13, School representative to Math and Science Olympics 2012-13, a first place winner of the school speech competition 2011 and gold medalist in the Toronto Science Fair 2013 with his distinguished research of "Environmental Effects on Brine Shrimp Hatching Success". Outside the classroom, Roi has organized school's events as student council class representative of 2011-2012 and volunteers at Baycrest Hospital and L'Chaim Retirement Home. He is also a passionate environment sustainability activist, 2nd place winner of Legrand Canada sustainability contest. It is his 7th season playing ice-hockey with the Duffield Devils, playing baseball with AH Baseball League and swimming with RAMAC swimming club. Roi plans of graduating Harvard medical school and becoming a pediatrician. He believes that "If you imagine it, you can achieve it; if you dream it, you can become it." - William Arthur...

#### Awards

#### Value

Excellence Award - Junior - Bronze Medal Sponsor: Youth Science Canada	\$100
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
<b>Total</b>	<b>\$1 100</b>