

## **Research Associate: Ultrasonic Imaging and Ultrasonic Nondestructive Evaluation**

**NSERC/Chrysler Industrial Research Chair  
Institute for Diagnostic Imaging Research  
University of Windsor  
Windsor, ON**

**Description:** This is a grant-funded position under the NSERC/Chrysler Industrial Research Chair in the Physics Department at the University of Windsor in collaboration with the Institute for Diagnostic Imaging Research (IDIR), in ultrasonic imaging and ultrasonic nondestructive evaluation. This position will focus on the scientific research and development of new methods and equipment for diverse applications. The successful candidate will conduct academic research and develop breakthrough technologies for the next generation of ultrasound devices from concept through production. Develop advanced signal processing algorithms for various ultrasound industrial and biomedical applications; conduct research on optimal data acquisition and image reconstruction methods; develop new methods that expand the use of diagnostic ultrasound. He/she will also need to have successful project management and leadership experience and capable of mentoring graduate students.

### **Required Qualifications:**

- PhD in Electrical Engineering, Computer Science, Physics or Biomedical Engineering with at least 5 years post-degree experience in a research and development environment in Academia or industry.
- Demonstrated knowledge in ultrasound physics, ultrasound image analysis or ultrasound system engineering.
- Demonstrated expertise in broad-level high frequency (1-100MHz) analog circuit design.
- Demonstrated expertise in digital hardware design, complex computer system design, low-level programming, data acquisition, data processing as well as user interface development.
- Demonstrated track record of developing novel ideas and driving them to fruition.
- Record of Publications and/or patents.

**Preferred Qualifications:** Project management and project leadership experience; Strong analytical skills; Good written and verbal communication skills; Ability to work individually or as a team member; Desire to make a difference in ultrasound science and industry.

**Duration:** Initial appointment will be for 1 year, beginning May 1, 2010, or upon a date to be mutually agreed, with the possibility of renewal for a second year upon satisfactory performance and available funding.

**Salary:** This is a grant funded position. Salary will be competitive and commensurate with experience.

**Application:** Candidates should submit a CV including a list of publications as well as the names and contact information of three references electronically to:

Sarah Beneteau  
Administrative Manager  
Institute for Diagnostic Imaging Research  
University of Windsor  
Windsor, Canada  
([beneteh@uwindsor.ca](mailto:beneteh@uwindsor.ca))

Applications will be reviewed beginning March 22, 2010 and will continue until the position is filled. All applicants are thanked in advance; only those selected for further consideration will be contacted.

In pursuit of the University of Windsor's Employment Equity Plan, members from the designated groups (Women, Aboriginal Peoples, Visible Minorities, and Persons with Disabilities) are encouraged to apply. In accordance with Canadian Immigration Requirements, all qualified candidates are encouraged to apply, however, Canadian citizens and permanent residents will be given priority.

**Application Deadline:** Open until filled