



OPEN POSITION for Ph.D. Candidate

to be sponsored between Bruker and Pasteur-Lille under the CIFRE program

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SUMMARY OF RESPONSIBILITIES:

This position will drive the development of **high throughput AFM applications for SME and Pharma** by:

- Working with end users to obtain relevant application data on the middle to high throughput AFM.
- Analysis of large data sets to develop both results and best practices.
- Development of online and offline software to support applications and data reduction.
- Coordination and bridging of technical activities **between Bruker and the Research Group of F. Lafont at the Institut Pasteur de Lille, France.**
- Publishing peer reviewed papers as well as application notes on developed techniques.
- Additionally, developing novel combinations of AFMs and super resolution optical microscopes (PALM, STORM) at Pasteur.

This position is a Graduate student position, sponsored by Bruker Corporation in collaboration with the Lafont's Team (<http://www.cmip.cnrs.fr/?lang=en>), under the CIFRE - ANRT program.

ESSENTIAL FUNCTIONS:

- Develop and create a strategic portfolio of technical collaborations within University and Industrial research segments to find problems which can be addressed by high throughput AFM.
- Hands on programming of online and offline AFM functionality on Bruker's proprietary SW platforms.
- Quarterly review and presentation of collaborative and technical results.
- **Co-location 50/50 between Bruker's Santa Barbara operations and Institut Pasteur, Lille, France.**

KNOWLEDGE, SKILLS, AND ABILITIES:

- Solid scientific background (engineering in physics and electronic, man-machine interface)
- **Strong background in programming (C, C++)**
- Ability to work in an interdisciplinary environment, self organized
- **Fluent English both written and spoken**, preferred fluency in French
- Excellent presentation, written, and verbal skills
- Ability to manage and organize multiple groups of 3-6 scientists to a common technical goal

EDUCATIONAL/EXPERIENCE REQUIREMENTS:

- Prepared to start Ph.D. degree in a physics, chemistry, biology or equivalent.
- Product knowledge of Bruker Scanning Probe Microscope operation preferred
- Experience in atomic force microscopy and optical microscopy is highly desirable
- Experience in biology, microbiology, and/or cell biology is highly desirable
- Broad based proficiency in science