

## **Research Scientist**

Advanced Diamond Technologies, Inc. (ADT), the world leader in the development and commercialization of thin film diamond-enabled products, is seeking highly-motivated individuals to join the team as the company's commercial product sales begin to ramp up. ADT is a young, fast growing, award-winning high-tech company based in Romeoville, Illinois. ADT is currently developing products enabled by diamond for use within the nanomanufacturing, telecommunications, biomedical, and industrial sectors. We currently have an opening for a *Research Scientist*.

Position location: Romeoville, IL.

**Position Purpose:** The Research Scientist is a key member of the Research & Development team and is responsible for executing tasks related to R&D projects ongoing in ADT, to develop new diamond-enabled products for a number of applications. This individual is a fully competent and independent research professional, and can plan and execute research and development activities independently on assigned projects. Also has demonstrated experience making independent judgments regarding application of scientific techniques/procedures and conducts work requiring substantial adaptation or modification, and devises as needed new approaches to problems encountered and utilizes wide array of complex principles, theories and concepts.

Although experience in the science and technology of synthetic diamond thin films is highly desirable, experience in the field of diamond electrochemistry or biochemistry is also a major plus. An extensive background in chemistry (organic or electrochemistry), surface chemistry, and/or biochemistry is highly desirable, as ADT has several projects that involving the control of diamond surface chemistry and the covalent immobilization of biomolecules onto Chemical Vapor Deposition (CVD) diamond surfaces. Work on the development of gravimetric or electrochemical (amperometric) chemical and biological sensors is also highly desirable. Familiarity with system level issues associated with chemical and biological sensors is also desirable. Some knowledge of wafer-scale fabrication techniques, MEMS (microelectromechanical systems) device fabrication, or related subject is a definite plus.

Responsibilities include:

- Execute tasks and overcome technical difficulties associated with product development projects and contract research.
- Partner with teams of scientists and research technicians to execute tasks and deliver products to engineering for production.
- Resolve technical problems related to the integration of diamond thin films with other materials and/or chemical/biochemical modification of diamond surfaces

- Develop new approaches to control and manipulate the surface chemistry of CVD diamond films
- Communicate results of experiments performed in support of contract research projects and product development to the Chief Technical Officer and ADT senior management.
- Assist in the process of writing proposals and submitting reports to government agencies and contractors
- Conduct work in a timely, responsible manner, using good time management skills and attention to detail.

Required qualifications include:

- A Ph.D. in Physics, Chemistry, Materials Science, Biology, Engineering, or related field.
- 2+ years hands-on industrial experience required
- Postdoctoral experience at a United States academic institution, national laboratory or industry.
- Strong academic and industrial background related to the surface chemistry/biochemistry of diamond and/or carbon materials.
- Experience with wafer-scale microfabrication processes.
- Experience with common analytical techniques used for characterization of advanced materials
- Experience with nanomaterials and structure/properties relationship in these systems
- Strong ability to write proposals to obtain external funding from corporate or government sources.
- Ability and interest to work effectively in a team environment.
- Excellent interpersonal including oral and written communication skills.
- Good judgment, clear sense of purpose, and accountability working to solve problem under pressure
- A positive attitude and enthusiasm

ADT offers a competitive compensation package including salary, bonus potential, health care benefits, paid vacation and stock options.

How to apply:

For consideration please email your resume or CV to: [jobs@thindiamond.com](mailto:jobs@thindiamond.com)

Please include your last name and the position title in the email subject line.

No third parties or phone calls.

For more company information please see: <http://www.thindiamond.com>

ADT is an equal opportunity employer