Principal R&D Scientist - MEMS and Microsensors
Job Number: 00087861

Description
Honeywell International is a $34B diversified technology and manufacturing global leader with a long and
demonstrated heritage of both innovation and achievement. Its biggest business division, Honeywell Aerospace,
is a leading global provider of integrated avionics, engines, systems and service solutions for aircraft
manufacturers, airlines, business and general aviation, military, space, and airport operations.

This position will work within the Advanced Technology organization, comprising a staff of prestigious
Engineers and Scientists, focusing their efforts on the conception, development, and prototyping of new
technologies to a level required for product development.

Within Advanced Technology, there is a need for a Scientist/Engineer to perform and coordinate the development
of new technologies for advanced sensors and microsystems. The successful candidate will have domain and
application knowledge of modern technologies being used for advanced sensors, including MEMS, integrated
optics, integrated packaging.

The successful candidate will be an experienced scientist or engineer who will pursue applied research in the area
of Micro-Electrical-Mechanical Systems (MEMS). Other potential areas of research and development include
sensors and micro systems for Honeywell’s Aerospace product lines, integrated optics, integrated packaging, and
nanotechnology. The candidate will be expected to develop new concepts, write project proposals, and develop
new technologies for future products. As such, this person will have market domain knowledge on how these
technologies can be consumed and by whom, their express values, and the market impact of features and the
development cycle.

The candidate must have a demonstrated track record of winning multiple significant (>$1M) government R&D
(≤6.3b) contracts in the last 5 years. The candidate must have strong organizational, leadership skills, and be
good at working and negotiating with customers and partners. The candidate must have experience and a
successful track record of understanding customer requirements, translating those into device and product
requirements, writing research and development proposals, project cost estimating, budgeting, and program
management.

The person filling this position will be expected to lead technical teams that set the strategic direction for
product/process technology as well as support long-range technology planning.

The candidate must have experience in several of the following areas:

- Expert knowledge of MEMS, MEMS device design, silicon processing, integrated optics, sensor
electronics, and/or sensor technology.
- Analytical capability to design transducers, sensors, or micro systems using mechanical and electrical
  analysis and simulation. The person needs to understand the physics and demonstrate capability of
  modeling sensors and micro systems using first principles, equations, and simulation tools, and translate
  these modeling results into improvements in device performance.
- Experience designing or leading the design of MEMS sensors or integrated devices, integrated optics,
digital and/or analog electronics hardware and software.
- Capable of leading, planning, and execution of the development and testing of sensors.
- Experience using the following tools: mathematical tools such as Matlab/Simulink, also Microsoft Office,
  Microsoft Project.
This position reports to the Advanced Sensors and Microsystems Navigation Sensing Technologies Manager. Relocation Assistance is available for this position.

BASIC QUALIFICATIONS

- A Master's or Ph.D. degree in Engineering or Physics is required. An Electrical or Mechanical Engineering degree is preferable. Physics is acceptable, provided the candidate has a hands-on, laboratory background.
- The candidate must have a demonstrated track record of winning multiple significant (> $1M) government R&D contracts in the last 5 years.
- A minimum of 5 years industry experience is required. At least five (5) years of related technical work is desired.
- Willing to travel moderately (10% - 25%)
- The candidate must be a US citizen, with a clean background to successfully procure a US Security Clearance. A US Permanent Resident who has filed for naturalization more than 1 year ago may be considered, based on technical background, experience, and proximity to actual Citizenship.

ADDITIONAL QUALIFICATIONS

- Prior experience procuring technical government projects from DARPA or DOD (AFRL, ONR, Army) would be highly preferred.
- An Active US Security Clearance would be helpful.
- Prior experience with biological, optical, pressure, or magnetic microsensors, as well as nanotechnology, would be highly desired.
- Prior technical project management or leadership experience would be preferred.
- The candidate must have strong communication and presentation skills.

As an Equal Opportunity Employer, we are committed to a diverse workforce.

To apply for the position,

1. Please go to: [http://www.honeywell.com/careers/jobsearch.html](http://www.honeywell.com/careers/jobsearch.html) or, copy and paste the following link to your Browser’s address box: [https://honeywell.taleo.net/careersection/9/jobdetail.ftl?lang=en&job=946402](https://honeywell.taleo.net/careersection/9/jobdetail.ftl?lang=en&job=946402)
2. Look for Requisition # 87861
3. Apply online with a Word-formatted resume detailing your relevant coursework and experience.