NIOSH Center for Direct Reading and Sensor Technologies

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Introduction to the Center

The NIOSH Center for Direct Reading and Sensor Technologies (NCDRST) was established in May 2014 to coordinate research and develop recommendations on the use of these 21st century technologies in occupational safety and health. The NCDRST is a virtual center hosted by the NIOSH Division of Applied Research and Technology.

Strategic Goals

1. Coordinate a national research agenda for direct reading methods and sensor technologies;
2. Develop guidance documents pertinent to direct reading methods and sensors, including validation and performance characteristics;
3. Develop training protocols; and
4. Establish partnerships to collaborate in the Center’s activities.

To address the needs of the occupational safety and health community, NIOSH began an initiative in 2008 to advance the development, validation, and application of direct reading methods and monitors and are exploring new ways to use these technologies to improve occupational safety and health.

NIOSH efforts align with conclusions of The National Research Council report on Exposure Science in the 21st Century: A Vision and a Strategy released in September 2012, which identified direct reading methods and monitors as being an important driver for the future of exposure sciences.

Through its activities, partnerships, and collaborations, NIOSH intends to advance the development, validation, and application of these technologies to occupational environments.

NIOSHSensor Program Examples of Guidance, Resources, Methods, and Opportunities

Components for the Evaluation of Direct Reading Monitors for Gases and Vapors

DHHS (NIOSH) Publication No. 2012-162

Addendum for Hazard Detection in First Responder Environments

DHHS (NIOSH) Publication No. 2012-163

NIOSH Manual of Analytical Methods: A Story of Impact

DHHS (NIOSH) Publication No. 2012-113

Lead Colorimetric Method

MethAlert and MethChek

Personal Dust Monitor (PDM)

Extramural Funding Opportunities

Our NIOSH Extramural Grants Program is described at: http://www.cdc.gov/niosh/oep/default.html

Specific information about several of our standing research announcements that include interests in sensors and sensor technologies can be found at:

ANNOUNCEMENT NO. PAR-12-129: Occupational Safety and Health Research (R21); Contact Person: Maria Licce, MD, (404) 498-2550; (Expiration Date: May 8, 2015).

ANNOUNCEMENT NO. PAR-12-200: NIOSH Small Research Grant Program (R03); Contact Person: Linda Frederick, Ph.D., (404) 498-2550; (Closing Date: September 8, 2015).

ANNOUNCEMENT NO. PAR-12-252: NIOSH Exploratory and/or Developmental Grant Program (R21); Contact Person: Linda Frederick, Ph.D., (404) 498-2550; (Closing Date: September 8, 2015).

Life-Cycle Approach to Direct Reading and Sensor Technologies

We welcome opportunities to partner

We can partner to develop and apply direct reading and sensor technologies to:

- Anticipate,
- Recognize,
- Evaluate,
- Control, and
- Confirm

SUCCESS in proactive understanding and management of potential hazards, exposures, and resulting risks to safety, health, well-being, and productivity by applying a science- and practice-based approach to build and sustain leaders, cultures, and systems that are relevant and reliable and over which we have influence.

Roles and Responsibilities for Sensor Informatics

We partner with:

- Customers
- Creators
- Analysts

Information and Collaboration Contacts

Questions and comments are welcome to

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