

The Occupational Safety & Health Research Institute(OSHRI) is dedicated to performing cutting-edge research and preemptively responding to the occupational safety and health requirements of the future industrial environment based on a scientific approach.



OSHRI

We study the future of occupational safety and health

OSHRI

Occupational Safety &
Health Research Institute

KOSHA 

We study
the future of
occupational
safety and
health

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OSHRI responds to the future industrial environment, occupational safety, and health issues with a scientific approach

Since its inception in 1989, OSHRI has led developments in the industrial accidents prevention policy by undertaking comprehensive research on occupational health and safety issues and carrying out specialized projects.

Over the years, OSHRI has grown into a global institution with a dedicated team of professional researchers, a strong research infrastructure, and years of quality research resulting in a wide range of accumulated research outcomes.

OSHRI is dedicated to cutting-edge research, preemptively responding to occupational safety and health issues of a future industrial environment based on a scientific approach.

Based on a strong foundation of valuable research and communication, OSHRI is committed to becoming a global hub of occupational safety and health research. Your interest and support for the activities of OSHRI would be deeply appreciated.

Thank you.

Director General of Occupational Safety and Health Research Institute

Eun A Kim





We study the future of occupational safety and health

With sophisticated research capability equipped with cutting-edge technology relating to occupational safety and health, OSHRI supports research on safety and health policy and systems with a team of professional researchers and a well-developed research infrastructure. OSHRI seeks to implement fundamental accident prevention programs and foster a safe and comfortable workplace, protect the health of workers by studying physical, chemical, and biological hazards, assess exposure to these hazardous agents in the workplace and find measures for environmental improvement. To secure the fundamental security and health of workers at workplaces, OSHRI supports fatal accident investigations, conducts epidemiological surveys of occupational diseases, performs quality control at work environment measurement institutions, asbestos investigation organizations, and special health examination agencies, assesses the risks of chemicals and conducts working environment, occupational safety, and health status surveys.

**OSHRI is
a research institution that engages
experts to lead the development of
occupational accident prevention policies**

Vision & Strategy

OSHRI is a research institution that establishes occupational accident prevention methods and leads the improvement of occupational safety and health policies and systems

Vision

OSH research institution leading "occupational accident prevention policy"



Strategic goal

Lead and support occupational accident prevention policy

Promoting strategy

Research focusing on policy

- Timely response to social issues based on scientific evidence
- Addressing occupational safety and health issues at workplaces
- Prediction of and response to issues that may arise in the future industrial environment

Research focusing on communication & cooperation

- Public-oriented research through communication and cooperation
- Contribution to international society by activating global cooperation and sharing of knowledge
- Secure wider foundation to enhance social commitment by upgrading OSH infrastructure

Enhancement of performance improvement & utilization system

- Continuous creation of research outcomes in tandem with environmental changes
- Enhancement of efficiency in research performance and assessment systems
- Systematically foster research capacity leading OSH field

History

Enhancement of efficiency in research performance and assessment systems

- Apr. 1977 ○ The National Labor Scientific Institute was established under the umbrella of the Labor Administration
- Feb. 1989 ○ The National Labor Scientific Institute was dismantled
- Jul. 1989 ○ The Occupational Safety & Health Research Institute (OSHRI) was founded under the umbrella of the Korea Occupational Safety and Health Agency (KOSHA)
 - Won-Gap Kim became as the 1st Director General of the OSHRI
- Jan. 1992 ○ OSHRI was divided into the Occupational Safety Research Institute (OSRI) and the Occupational Health Research Institute (OHRI)
 - Sang-Hak Suh became the 2nd Director General of OSRI
 - Gyu-Cheol Jung became the 2nd Director General of OHRI
- Apr. 1994 ○ Young-Han Mun became the 3rd Director General of OHRI
- Jun. 1995 ○ Han-Hoon Lee became the 3rd Director General of OSRI
- Sep. 1997 ○ The National Center for Occupational Toxicology was created within the OHRI (inside the Daedeok Innopolis)
- Dec. 1998 ○ The OSRI and the OHRI were integrated into OSHRI
- Jan. 1999 ○ Ho-Geun Jung was appointed as the 4th Director General of OSHRI
- Mar. 1999 ○ The Occupational Epidemiology Team was created for epidemiological survey
- Dec. 2001 ○ The Safety Management Policy Research Department was created to reinforce research and investigation into safety and health at the sociological, legal, and policy level
- Feb. 2003 ○ Gwang-Jong Kim became the 5th Director General of OSHRI
- Apr. 2004 ○ The Occupational Disease Research Team was created for the prevention of musculoskeletal disorders and cerebrovascular and cardiovascular diseases
- Feb. 2006 ○ Doo-Yong Park was designated as the 6th Director General of OSHRI
- May 2006 ○ For independence and autonomy of research personnel, OSHRI came under the immediate control of the President of the KOSHA instead of the Vice President for Technology thereof
- Jan. 2009 ○ Sung-Gyu Kang became the 7th Director General of OSHRI
- Jul. 2009 ○ The OSHRI marked the 20th anniversary of its founding
- Jan. 2012 ○ Jung-Sun Park became the 8th Director General of OSHRI
- Dec. 2013 ○ Occupational Health Research Center was divided into the Occupational Health Research Bureau and the Work Environment Research Bureau
- Feb. 2014 ○ The OSHRI moved to its new headquarters in Ulsan with creation of the Research & Strategy Team
- Sep. 2014 ○ Hyuck-Myun Kwon became as the 9th Director General of OSHRI
- Dec. 2015 ○ Established the Chronic Inhalation Toxicity Research Center
- Nov. 2016 ○ Jang-Ho Kim became as the 10th Director General of OSHRI
- Jan. 2017 ○ Separated from the Research Institute, expanding and reorganizing safety certification functions
- Jan. 2019 ○ Jae-Cheol Ko takes the office of the 11th Director General of OSHRI
 - The international safety and health periodical of OSHRI, SH@W has been included in the Social Sciences Citation Index (SSCI) and the Science Citation Index Expanded (SCIE).
- Jul. 2019 ○ Celebrating the 30th anniversary of OSHRI
- Jan. 2021 ○ Eun-A Kim took charge as the 12th Director General of OSHRI



Performance Highlights



1989~1993

- Develop a technical guideline for the KOSHA's statutory program and conduct standard research for performance verification available for businesses
- Build a research platform for core technology and system for recognition, measurement, evaluation, and overhaul of hazardous factors as a basic mechanism for the management of the work environment
- Conduct experimental research to lay the foundation for the evaluation, diagnosis, and study of health disorders as precautions against occupational diseases and a fact-finding survey on the work environment and the health status of workers

1994~1999

- Perform policy research activities to improve various policies and systems for occupational safety and health
- Pave the way for the practical use of research outcomes by taking out a patent on technological research output and granting the right to ordinary execution to businesses
- Devise diverse measures for the health protection of workers in terms of occupational hygiene by changing the mindset of employers and employees
- Demonstrate the OSHRI's toxicological research capacity on a global state by clarifying the cause of collective reproductive malfunction at an electronic company in Yangsan and unveiling its findings through academic journals at home and abroad
- Distribute an automatic search program for the risk features of over 60 chemicals with a research focus on the prevention of serious accidents

2000~2005

- Spearhead a pragmatic study through the creation and execution of a mid-term (more than 3 years) research plan
- Work on systemic development of occupational safety and health trend survey to build a basis for the creation of occupational safety and health policies and programs, starting from the first survey in 2002
- Introduce the NIOSH's Health Hazard Evaluation Program for the first time in Korea
- Develop new methods for health management and diagnosis of occupational diseases and identify a new mechanism in response to changing disease patterns due to the prevalence of knowledge-based industries, thereby building a research platform for the development of indicator materials
- Reinforce inhalation toxicity research capacity through ongoing study on inhalation toxicity of particulate matters (volatile organic solvents, particles, asbestos, and welding fume) and conduct the first domestic research on the evaluation of hazards of nanomaterials

2006~2010

- Formulate the mid and long-term research strategies for occupational safety and health and lay the foundation to address the policy research challenge of reducing top 3 disasters at work
- Expand policy support to meet customer demands like actual needs arising in the workplace
- Conduct comprehensive exposure assessment of the work environment at the first tire factory as part of pragmatic study to prevent occupational diseases and create a comfortable work environment, thereby presenting a model for the evaluation of the work environment in the rubber industry
- Devise measures for the health protection of researchers, professionals & specialists, service workers, and foreign workers when more people come under the occupational health coverage according to the Occupational Safety and Health Act and old, female and foreign workers increase
- Strengthen an integrated study on chemical hazards and risks, including chemical information, policies, toxicity, and hazards

2011~2017

- Performance of projects on current issues requested by the Ministry of Employment and Labor and KOSHA and support for reflection of research findings in order for occupational accident prevention policies and systems to promptly respond to changes in industrial sites
- Procurement of socio-scientific grounds for safety and health policies through reinforcement of policy studies and enhancement of investigative functions, and construction of DB capable of identifying current situation of nationwide safety and health
- Execution of troubleshooting-oriented researches on current issues of safety and health at industrial sites hardly addressed by private research institutions
- Provision of chemicals information suitable to consumers' understanding pursuant to implementation of GHS system by building a website dedicated to Open API (Application Programming Interface) to enhance accessibility and applicability of MSDS DB in order to fulfill the "Materialization of Public-oriented Service Government 3.0"
- Execution of chronic and oncogenic inhalation exposure experiments by building and operating chronic inhalation toxicity test facility and identification of causative substance for occupational cancer

2018~2022

- OSHRI research has led to a paradigm shift in occupational accident prevention. The OSHRI initiatives will enable stakeholders to cope with future industrial environments, protect public interests by solving outstanding issues relating to its areas of core competence, strengthen the foundation for safety and health, and promote R&D on safety and health. To achieve all of the above, now and in the years to come, OSHRI has developed KOSHA OSHRI Research Agenda or KORA – a long-term research agenda
- To respond to new employment categories in the changing job environment and prevent industrial accidents, OSHRI has conducted research on occupational accident prevention policies for special employees and platform workers
- OSHRI has conducted research on practical issues which can have direct implications for worker safety. Precedence safety handrails, elevator scaffolds, and multi-stiffeners have been developed by OSHRI, and the related technology has been transferred to the private sector
- In response to significant changes that impact businesses and workers, such as the revision of the Occupational Safety and Health Act and the enforcement of the Serious Accidents Punishment Act, OSHRI has conducted research on the supplementation of safety and health policy, laws, and systems
- Through data-based research, OSHRI has been able to predict occupational disease risks. OSHRI has also been conducting research on customized accident prevention programs for hazardous business sectors and groups.

Occupational Safety and Health Research Institute(OSHRI) is established in 1989 in purpose of accident prevention. It, has continuously been producing research results which are responding changes in new environment equipped with its expertise in OSH field for 30 years since its establishment.

Key Activities



Research Activities



- 1 Occupational Safety & Health Policy Research
- 2 Occupational Safety Engineering Research
- 3 Occupational Health Research
- 4 Work Environment Research
- 5 Chemical Hazard & Risk Research

Occupational Safety & Health Services



- 1 Epidemiological Investigation into Occupational Diseases
- 2 Quality Control over Safety & Health Service Providers
- 3 Evaluation on the hazards and risks of chemicals
- 4 Evaluation on the inhalation toxicity
- 5 Publication of an international academic research periodical

OSHRI is committed to the prevention of occupational accidents through research to support policymaking for occupational accident prevention, solving safety and health issues at industrial workplaces, and creating future-oriented knowledge.

Key Activities

Research Activities



1



2

1. Occupational Safety & Health Policy Research

Study of Safety & Health Policies and Institutions

In response to environmental changes in industry, economy, society, and workplace, the OSHRI undertakes research to promote policy formulation and institutional overhaul for occupational safety and health, address social issues, and identify potential hazards and risks surrounding future industries.

- Research on improvement of occupational safety and health policies and systems
- Educational/social/psychological/economic research on legal system to prevent occupational accidents
- Establishment of mid-to-long-term goals for occupational safety and health researches and planning of such researches
- Monitoring of changes in working environment and execution of surveys to identify newly emerging harmful/risk factors (working environment survey, survey on OSH trends)

2. Occupational Safety Engineering Research

Research for the Fundamental Prevention of occupational accidents

OSHRI analyzes the causes of occupational accidents by business sector and accident type, presents preventive measures, and conducts research aiming to secure the fundamental safety of industrial machinery and facilities.

- Practical research regarding the prevention of common occupational accidents
- Research on safety measures related to new technology and new types of industrial machines
- Analysis to identify the causes of serious accidents



Research Activities

3. Occupational Health Research

Research for the Protection of Health of Workers

OSHRI performs its epidemiological study, research on institutional overhaul, and investigative and analytical research for precise diagnosis, scientific clarification, and prevention of occupational diseases. It focuses on social changes and on-the-spot demands.

- Research on the prevention of occupational diseases
- Research on occupational disease monitoring systems
- Study on improvement of workers' medical examination system
- Impact assessment on workers' health exposed to harmful factors and study on management measures

4. Work Environment Research

Study on a Comfortable Workplace

OSHRI studies physical, chemical, and biological hazards and legal and institutional overhaul to assess exposure to hazardous agents in the workplace and find measures for environmental improvement in terms of engineering.

- Study of exposure assessment and management methods for physical, chemical, and biological agents
- Research on the settlement of social issues in terms of occupational hygiene
- Research on methodological improvement and efficiency increase in work environment measurement
- Study on the development of standards for exposure to hazardous agents

5. Chemical Hazard & Risk Research

Study on the Toxicity and Risks of Chemicals

OSHRI performs research on health disorders due to chemicals manufactured and handled in the workplace, creation and operation of inhalation toxicity testing facilities in line with the GLP standards, and testing and evaluation of chemical hazards and risks like the characteristics of fire and explosion accidents.

- Research on the improvement of an information delivery system for chemicals
- Study on the toxic mechanism, inhalation toxicity, and genetic toxicity of chemicals
- Research on the prevention, identification of causes, and risk assessment of chemical accidents
- Study on the inhalation toxicity with animal test



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4



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For the safety of workers and the prevention of occupational health disorders, OSHRI operates professional services, including its epidemiological investigation into occupational diseases, quality control over analysis and measurement organizations, evaluation of chemical hazards and risk, database of chemical safety and health, statistic analysis of occupational accidents, and publish Journal of safety and health at work.

Key Activities

Occupational Safety & Health Services



1

1. Epidemiological Investigation into Occupational Diseases

OSHRI investigates the work environment and health examination of workers for the identification of occupational diseases, thereby devising preventive measures based on the relevance between occupational diseases and hazardous agents. It also keeps track of occupational diseases through collection of diagnostic data from hospitals and clinics and nurtures residents into specialists in the field of occupational and environmental medicine.

- Epidemiological Investigation into occupational Diseases
- Monitoring system for occupational diseases
- Training of medical residents in the field of occupational and environmental medicine

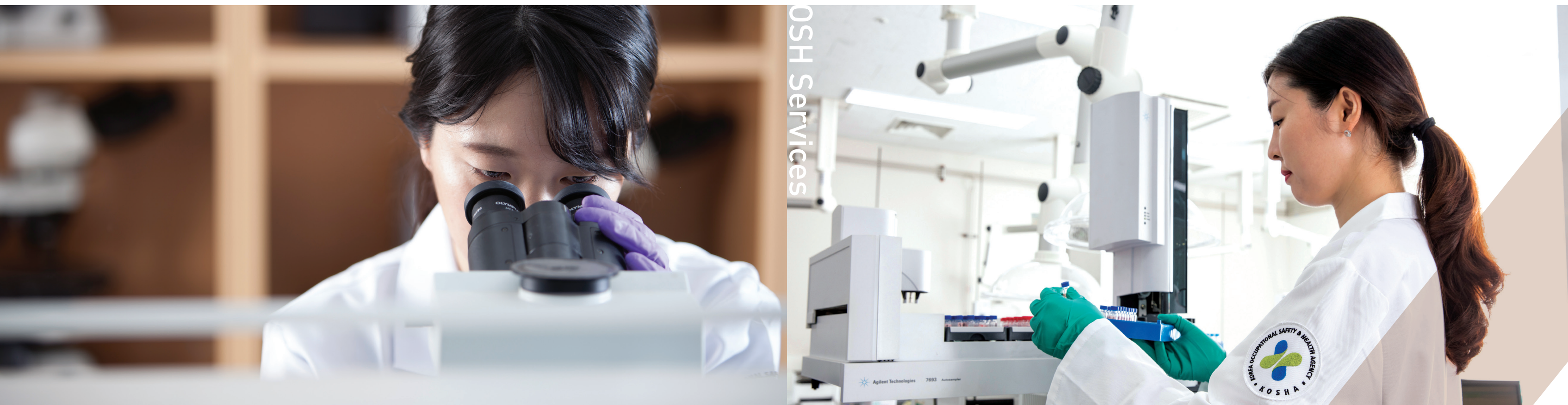


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2. Quality control of safety and health service providers

OSHRI carries out quality control projects to increase the analytical capabilities and enhance precision in the analysis of results of special health diagnosis providers, occupational environment monitoring agencies, and asbestos investigation institutions.

- Quality control over work environment measurement organizations
- Quality control over asbestos investigation organizations
- Quality control over special health examination agencies and pneumoconiosis examination agencies



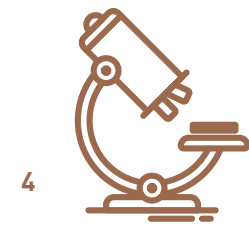


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3. Research on the toxicity and risks of chemicals

OSHRI has launched the Open API(Application Programming Interface) and a website to prevent health disorders due to chemicals in the workplace, thereby offering wide-ranging, integrated chemical information, including over 18,000 types of Material Safety Data Sheets(MSDS), classified data on chemical hazards and risks, and chemical information cards.

- Build Data base of Material Safety Data Sheets(MSDS) and provide information through website
- Assessment of new chemical hazards and risks, investigation of MSDS
- Evaluation of chemical hazards and risks using experimental animals
- Evaluate chemical hazards and risks for prevention and investigation on chemical accident



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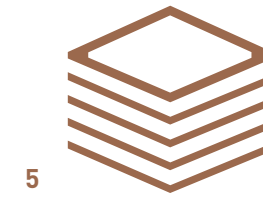
4. Inhalation toxicity testing and assessment

To ensure the reliability of inhalation toxicity test results, OSHRI implements good laboratory practice(GLP) and quality assurance(QA) programs and carries out inhalation toxicity tests and pathology examinations using laboratory animals.

- The good laboratory practice(GLP) program and reliability assessment
- Acute, sub-chronic, and chronic inhalation toxicity tests to assess the toxicity of chemicals
- Toxicologic pathology tests using laboratory animals



OSH Services

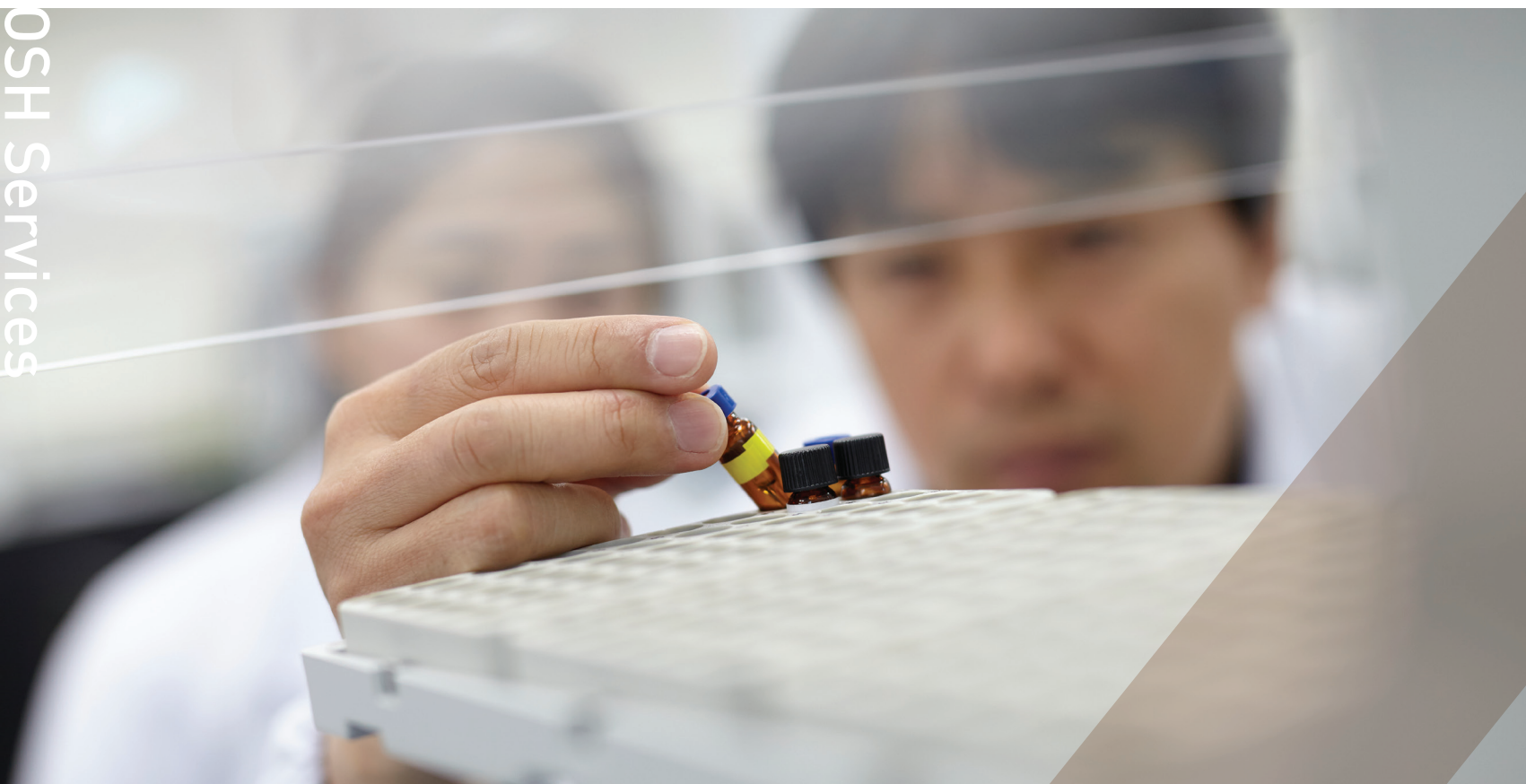


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5. Publication of an international academic research periodical

OSHRI publishes "SH@W," the only international academic periodical in Korea's occupational safety and health sector, that has been indexed in the Science Citation Index, and "OSHRI: View", a research periodical that analyzes occupational safety and health issues and research trends and delivers OSHRI's research results.

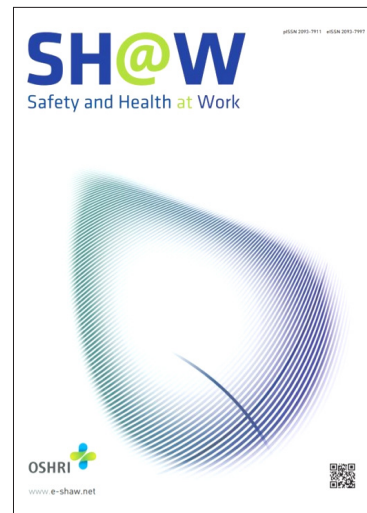
- Publishes an international scholarly periodical(SH@W)
- Publication of a research periodical(OSHRI: View)



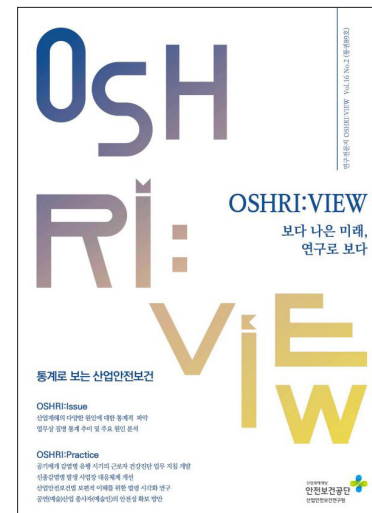
Publications



Research Report of the Occupational Safety & Health Research Institute



Journal of Safety and Health at Work SH@W(Safety & Health at Work)

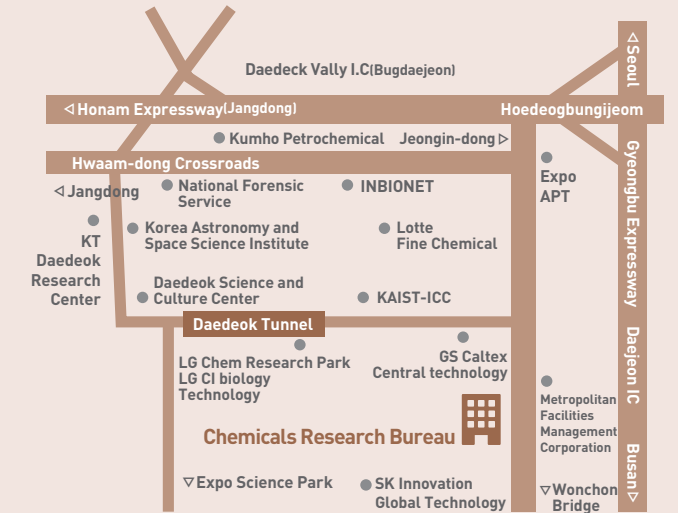


Safety and health research periodical OSHRI : View

* For further information on publications, refer to the OSHRI website(oshri.kosha.or.kr).



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