Independent research / externally funded

Based on proposals from researchers, and to proactively promote research, we began an independent research program using the organization's own funds from 2015 onwards. In September 2016, we were designated as a research institution for the Grant-in-Aid for Scientific Research (Kakenhi) program by the Minister of Education, Culture, Sports, Science and Technology and we have been awarded Kakenhi grants since 2017. We are working on improving the standard of our research in conjunction with research funded by the Environment Research and Technology Development Fund. Please scan the QR code on the right for details of research themes, etc.

Tokyo Metropolitan Climate Change Adaptation

Tokyo Metropolitan Climate Change Adaptation Center collects, organizes, analyses and diffuses information about the impact of and adaptation to climate change within the Metropolitan area as well as providing technical advice. Based on Article 13 of the Climate Change Adaptation Act, the Center was set up in the Tokyo Metropolitan Research Institute for Environmental Protection, which has been researching measures to combat urban heat islands, in January 2022 as a Local Climate Change Adaptation Center. We are working closely with the relevant departments in the Tokyo Metropolitan Government as well as with local authorities to promote climate change adaptation. Please use the QR code on the right to access the website for details.

LCCAC TOKYO

※LCCAC
Local Climate Change Adaptation Center

Information

Using the Reference Room

Documents related to the environment can be browsed and borrowed.
[Opening Hours] Weekdays 9:30am–12pm, 1pm–5pm [Closed] Wednesdays, Saturdays, Sundays, National Holidays, End of Year/New Year
Tel 03-3699-1346 (Reference Service) E-mail refer@tokyokankyo.jp

Tour of Research Facilities (Requires Reservation)

We provide facility tours for educational institutions and residents of the Metropolitan area as well as visits from government staff and overseas trainees, etc. Tours require reservation.
Please use the QR code on the right to access the website for the reservation procedure, etc.
[Tour Availability] 10am–4pm (excl. 12pm–1pm) *Outside of Saturdays, Sundays and National Holidays; other times may be available upon discussion.
[Required Time for Tour] Approx. 1 hour
[Tour Capacity] up to 20 people *We can accommodate whole classes of elementary/junior high school students on the tour, so please let us know when you apply.

Opening of the Facilities to the Public (Once a Year)

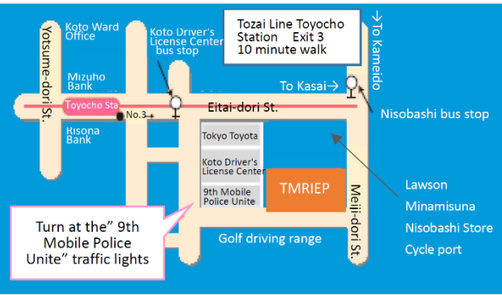
We offer scientific experiment classes held by researchers and workshops that visitors can participate in are offered. (Please see the website for the schedule.)

Public Research Presentations

We present our research results from December to February every year. (See the website for details.)

History

April 1968	Tokyo Metropolitan Government Pollution Research Institute (Yurakucho, Chiyoda Ward) established (as a research institution directly operated by the Tokyo Metropolitan Government)
April 1985	Tokyo Metropolitan Government Pollution Research Institute renamed Tokyo Metropolitan Research Institute for Environmental Protection and relocated from Yurakucho to a new building in its current location in Koto Ward
April 2000	Became a comprehensive environmental science research institution including waste management through integration with the former Tokyo Metropolitan Research Institute for Public Cleansing
April 2007	Operations transferred to the Tokyo Metropolitan Environmental Improvement Public Service Corporation
April 2012	Tokyo Metropolitan Environmental Improvement Public Service Corporation transitioned to a public corporation and became Tokyo Environmental Public Service Corporation



Tokyo Environmental Public Service Corporation
Tokyo Metropolitan Research Institute for Environmental Protection
〒136-0075 1-7-5 Shinsuna, Koto-ku, Tokyo
TEL 03-3699-1331 FAX 03-3699-1345
e-mail : kanken@tokyokankyo.jp
HP : https://www.tokyokankyo.jp/kankyoken/

Tokyo Metropolitan Research Institute for Environmental Protection

Tokyo Environmental Public Service Corporation

Tokyo Metropolitan Research Institute for Environmental Protection

The Role of the Tokyo Metropolitan Research Institute for Environmental Protection

We conduct investigations and research required to promote the environmental policies of the Tokyo Metropolitan Government and provide it and its residents with scientific findings.

Research and Investigation

We conduct research and investigation that contributes to the environmental administration of the Tokyo Metropolitan Government such as research using external funds from public and private companies, collaborative research with universities and other research institutions and research commissioned by Tokyo Metropolitan Government.

1 Research into verifying the reduction in environmental burden through reducing single-use plastic

We are investigating the status of single-use plastic use and disposal practices as well as reasons that its use cannot be avoided and are researching resource circulation and environmental impact over the plastic life cycle.

▲ Waste Composition Survey

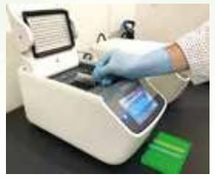
▲Investigating seawater extractions

2 Research into conserving the water environment

In order to contribute to improving the water environment within the Metropolitan area, we are researching the following: understanding the growth and habitat conditions of coastal area aquatic organisms, verifying the results of the effectiveness of environmental restoration techniques, and the distribution of sanitary indicator bacteria and estimating their sources, etc. We are also conducting research into assessing the current status of groundwater within the Metropolitan area.

3 Research and investigation with a view to strengthening protection measures for wildlife of conservational importance

We are conducting research and investigation into the status of replacement by invasive species and changes in habitat by monitoring wildlife and plants that are important in terms of conservation such as fish and amphibians within the Tokyo Metropolitan area through environmental DNA surveys and so on.



Environmental DNA amplification experiment using the PCR method ►

4 Research into risk assessment and management of hazardous chemical substances

We are conducting research and investigation into chemical substances within the Metropolitan area that have the potential to impact the environment and the identification and reduction of emission sources and environmental risk. We are also developing methods to analyse early discovery in the case of chemical substance leaks and initiatives for the visualisation of chemical substance risks.

◄ Analysis of hazardous chemicals

5 Research into comprehensive initiatives for automotive environmental measures

We conduct research and investigation into verifying that cars comply with the latest regulations, the emissions reduction effect of low-pollution vehicles and understanding the emissions status of unregulated substances as well as the actual reduction of carbon dioxide emissions through hybrid vehicles, etc.

▲ Chassis dynamometer for large

6 Research into reduction in concentration of fine particulate matter

▲ $PM_{2.5}$ measurement device and analysis

We are investigating factors that cause $PM_{2.5}$ high concentrations and researching effective countermeasures for reducing such concentration. We are investigating high concentration factors by gaining an understanding of the current environmental concentration in the air within the Metropolitan area.

7 Research into measures to reduce high concentrations of photochemical oxidants

We are investigating the status of Volatile Organic Compounds (VOC) which are considered to be the substances that cause photochemical oxidants and their estimated sources.

8 Research and investigation into the decarbonisation of facilities

We investigate actual energy consumption in government facilities and SME business premises and, along with estimating the effects of a reduction in CO^2 emissions through promoting energy-saving or introducing renewables, organise business types and facility uses that present significant hurdles in terms of decarbonisation and consider methods to promote decarbonisation.

9 Research and investigation with a view to implementing hydrogen energy

We are conducting the investigation and research required for the implementation of hydrogen energy within the Metropolitan area such as considering the level of hydrogen with fewer greenhouse gas emissions and the level of contribution to decarbonisation in order to promote the adoption of green hydrogen.

Technical Support

We provide technical support to the Metropolitan Government and local authorities including technical training, analysis accuracy management and understanding the concentration of fluorocarbons in the atmosphere.

1 Technical support for staff at the metropolitan government and local authorities

We hold training sessions so that people can acquire and pass on knowledge and technology related to the environment such as energy-saving measures, using renewables, analysing dioxins, and VOC measurement and waste composition analysis.

▲ Technical support training sessions

▲ Administrative sample analysis

2 Precision control for administrative samples

Tokyo Metropolitan Government Bureau of Environment implements duplicate testing analysis for parts of analysis relating to water quality regulations for wastewater from business premises and water quality monitoring for groundwater and public bodies of water contracted out to private companies and ensures their reliability.

3 Technical support for understanding concentrations of fluorocarbons in the atmosphere

We select target substances and consider measurement conditions for fluorocarbons, which are a greenhouse gas, and promote the understanding of the current situation with a view to promoting measures for reduction by continuously implementing investigations into concentrations in the atmosphere within the Metropolitan area.

▲ Analysis system responding to both Volatile Organic Compounds and fluorocarbons

▲ Introducing research to foreign researchers

4 Technical support for international environmental cooperation

We promote international environmental cooperation projects through advanced and specialized information and the diffusion and interaction of technology for the fields of air quality improvement and climate change in research institutes in cities overseas.

Please use the QR code on the right for other research themes, etc. ▶▶▶