10 Reasons

Why **gre**ater Rotterdam The Hague is the Hotspot for **Optics**













10 reasons why greater Rotterdam -The Hague is the **hotspot for optics**

Greater Rotterdam - The Hague contains a unique optics cluster. It includes the complete chain of academic knowledge & research, application development and original equipment manufacturers (OEM's) combined with a wide range of component suppliers to industries like aerospace, agriculture & food, ICT, maritime, health & life science equipment, automotive, manufacturing industry, energy, infrastructure, building & construction, semicon. We present our top 10 reasons to cooperate with or invest in our region:

10 REASONS WHY

ACCESS TO KNOWLEDGE & TALENT

TU DELFT

15+ research groups working in optics, 24.000 students, 6000 graduates every year.

Universities of Applied Sciences

Leiden, The Hague & Delft Mechatronics and Precision Engineering, 1000 students

Leidse

Instrumentmakers School:

Senior Secondary Vocational Education and Training, 300 students

RESEARCH & INNOVATION

TNO, the Netherlands Organisation for applied scientific research VSL (National Metrology Institute)



200+ professionals working on optical instrument development

AREAS OF TOP EXPERTISE

Imaging

Spectroscopy

Nanophotonics

Biomedical optics

(Fiber) Sensors

Optics Design & Manufacturing

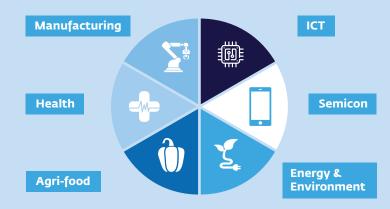
Optomechatronics



INNOVATION HOTSPOTS

Fieldlabs:

- Dutch Optics Centre (all application areas)
- RoboValley (Industrial robotics)
- SAMXL (Smart advanced manufacturing)
- Medical Delta (Life Sciences & Health)
- Big Data Innovation Hub



DUTCH OPTICS CENTRE

optics industry by increasing utilisation of science through joint R&D. Covering the entire value chain from academia to industry in research and development projects supported by networking, education activities and assistance for startup companies.

Dutch Optics Centre (DOC) aims at boosting the

Netherlands are active in photonics with a total turnover of EUR 5.500 million. 10% of the **5.500** million is reserved for R&D in optics

300+ companies in the



SHARED LAB FACILITIES

- VLL: Van Leeuwenhoek Laboratory is with its cleanrooms one of the largest nanotechnology research facilities in the Netherlands • VLLAIR: Van Leeuwenhoek Laboratory for Advanced Imaging Research
- EKL: Else Kooij Laboratory for semiconductor research & manufacturing
- TU Delft Aerospace Structures and Materials Laboratory
- OuTech quantum lab is the advanced research centre for Quantum Computing
- and Quantum Internet



LEADING COMPANIES































INCUBATOR

Ranked in top 5 in world university business incubators YES!DELFT

PLNT LEIDEN

ESA BIC

ERASMUS CENTRE OF ENTREPRENEURSHIP

(INTER)NATIONAL RESEARCH AND EDUCATION ECOSYSTEM

4TU Federation Universities: TU Delft, TU Eindhoven, University of Twente, Wageningen

University. (Research) ecosystem: Photon Delta, PhotonicsNL, Holst Centre. (inter)

national ecosystem: Innovation Attaché Network (RVO), Dutch Embassies and Consulates.

DOC: <u>Dutch Optics Centre</u>.



(IMEC) INTERUNIVERSITY Microelectronics Centre: is an

international research & development organization, active in the fields nanoelectronics and digital technologies. **SPIE**, the international society for optics and photonics **EPIC:** European Photonics Industry

Consortium **Photonics21** (represents the photonics community of industry and research organisations) Kipp & Zonen: solar and atmospheric



Airbus Defence and Space Netherlands: satellite instruments for monitoring worldwide

air quality and climate, and satellite solar arrays

TNO & TUD: R&D enabling ASML's

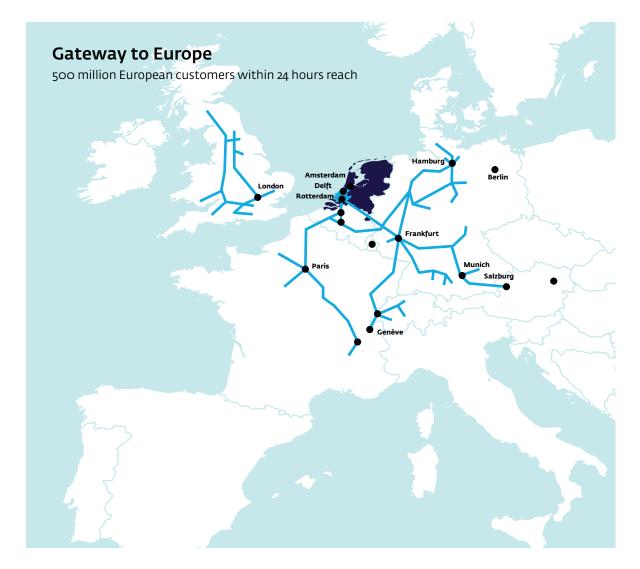
science instruments

wafer steppers, solar powered vehicles, and quantum communication









InnovationQuarter is the regional economic development agency for the province of Zuid-Holland, also known as the greater Rotterdam – The Hague area. We provide free of charge assistance and advice to international companies interested in expanding to our region. In addition, we facilitate co-operation between companies, academic institutes & government and we invest in innovative and fast-growing businesses in the region.

invest & innovate

Rotterdam – The Hague

in Greater

OUR REGION OFFERS YOU

- A strategic location in the heart of Europe
- State-of-the-art business, research and incubation facilities
- Highly educated and multilingual workforce
- Excellent quality of life
- A competitive tax climate
- Advantageous tax incentives for R&D activities
- A dedicated foreign investment team, offering confidential, free of charge services to international companies.



InnovationQuarter

WTC The Hague Prinses Margrietplantsoen 32 2595 BR The Hague The Netherlands Arife Karaosmanoglu - Aker

Senior Account Manager High Tech +31 (o)88 - 4747 255 arife.aker@innovationquarter.nl