



## Amsterdam–Rotterdam, Netherlands

Amsterdam–Rotterdam is the top-ranked cluster, out of 2 Dutch clusters, that falls within the top 100 S&T clusters in 2023. It filed **608 PCT applications** and published **7,602 scientific articles**, both per 1 million inhabitants over the last five years, making it the:

**26<sup>th</sup>** largest science and technology cluster in 2023 (down one spot from 2022)

**53<sup>rd</sup>** S&T cluster by intensity (relative to population density) in 2023 (up three spots from 2022)

### Top PCT applicants

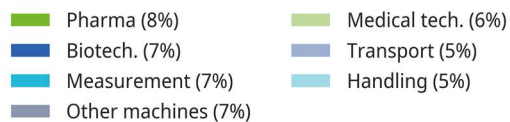
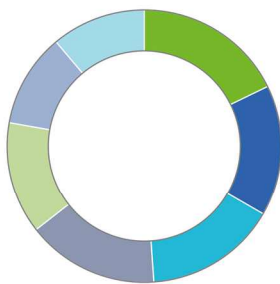
|   |                                | Patents | Share |
|---|--------------------------------|---------|-------|
| 1 | TNO                            | 303     | 7%    |
| 2 | Delft University of Technology | 178     | 4%    |
| 3 | Shell                          | 164     | 4%    |

### Top publishing organizations

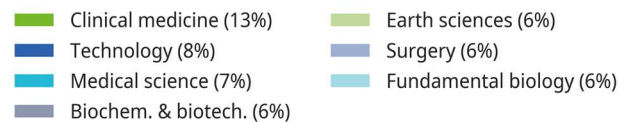
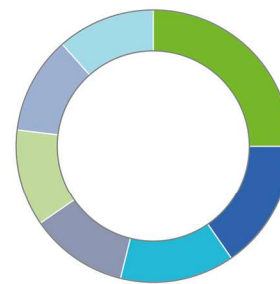
|   |                                | Articles | Share |
|---|--------------------------------|----------|-------|
| 1 | Utrecht University             | 7,716    | 15%   |
| 2 | Delft University of Technology | 7,041    | 13%   |
| 3 | Vrije Universiteit Amsterdam   | 5,600    | 11%   |

### Top technology fields in Amsterdam–Rotterdam

Patents



Publications



**24%** of Amsterdam–Rotterdam's PCT patent applications are filed in collaboration with other inventors, with **Nijmegen**, **Eindhoven** and **San Jose–San Francisco** emerging as the top collaborative locations.

**71%** of Amsterdam–Rotterdam's scientific articles are published in collaboration with other organizations, with the top three collaborating locations being **Nijmegen**, **London** and **Paris**.