

Global Innovation Index 2024

Cologne, Germany



Cologne is the second-ranked cluster, out of 8 German clusters, that falls within the top 100 S&T clusters in 2024. It filed **731 PCT applications** and published **3,463 scientific articles**, both per 1 million inhabitants over the last five years, making it the:

27th largest science and technology cluster in 2024

79th S&T cluster by intensity (relative to population density) in 2024

Top PCT applicants

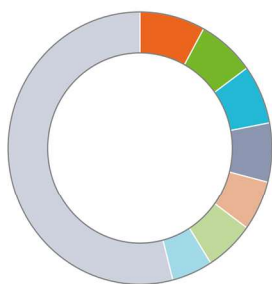
| | | Patents | Share |
|---|----------------------|---------|-------|
| 1 | HENKEL | 524 | 8% |
| 2 | COVESTRO DEUTSCHLAND | 406 | 6% |
| 3 | BAYER | 399 | 6% |

Top publishing organizations

| | | Articles | Share |
|---|------------------------|----------|-------|
| 1 | UNIVERSITY OF BONN | 5,104 | 15% |
| 2 | UNIVERSITY OF COLOGNE | 4,556 | 14% |
| 3 | RUHR UNIVERSITY BOCHUM | 4,226 | 13% |

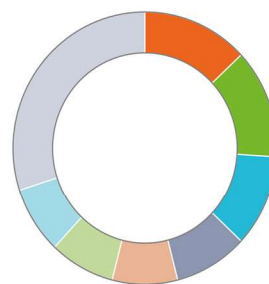
Top technology fields in Cologne

Patents



- Basic materials chem. (8%)
- Molecular chem. (7%)
- Organic fine chem. (7%)
- Civil engineering (7%)
- Electrical machinery (6%)
- Transport (6%)
- Mechanical elements (5%)
- Other (54%)

Publications



- Chemistry (13%)
- Clinical medicine (13%)
- Physics & math (11%)
- Technology (9%)
- Engineering (8%)
- Surgery (8%)
- Fundamental biology (8%)
- Other (30%)

30% of Cologne's PCT patent applications are filed in collaboration with other inventors, with **Aachen**, **Frankfurt am Main** and **Berlin** emerging as the top collaborative locations.

70% of Cologne's scientific articles are published in collaboration with other organizations, with the top three collaborating locations being **Berlin**, **Munich** and **Frankfurt am Main**.