Dalian, China

Dalian is the eighteenth-ranked cluster, out of 24 Chinese clusters, that falls within the top 100 S&T clusters in 2023. It filed 306 PCT applications and published 7,735 scientific articles, both per 1 million inhabitants over the last five years, making it the:

69th largest science and technology cluster in 2023 (unchanged from 2022)

67th S&T cluster by intensity (relative to population density) in 2023 (up eight spots from 2022)

### Top PCT applicants

<table>
<thead>
<tr>
<th>Rank</th>
<th>Organization</th>
<th>Patents</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dalian University of Technology</td>
<td>568</td>
<td>52%</td>
</tr>
<tr>
<td>2</td>
<td>Dalian Institute of Chemical Physics, Chinese Academy of Sciences</td>
<td>145</td>
<td>13%</td>
</tr>
<tr>
<td>3</td>
<td>Shenzhen Eaglesoul Technology Co., Ltd.</td>
<td>36</td>
<td>3%</td>
</tr>
</tbody>
</table>

### Top publishing organizations

<table>
<thead>
<tr>
<th>Rank</th>
<th>Organization</th>
<th>Articles</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dalian University of Technology</td>
<td>14,039</td>
<td>51%</td>
</tr>
<tr>
<td>2</td>
<td>Dalian Institute of Chemical Physics, Cas</td>
<td>2,565</td>
<td>9%</td>
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<tr>
<td>3</td>
<td>Dalian Maritime University</td>
<td>2,493</td>
<td>9%</td>
</tr>
</tbody>
</table>

### Top technology fields in Dalian

- Computer tech. (11%)
- Organic fine chem. (7%)
- Electrical machinery (5%)
- Transport (5%)
- Measurement (10%)
- Chemical engineering (8%)
- Machine tools (7%)

### Top PCT applicants

- Chemistry (26%)
- Engineering (25%)
- Technology (12%)
- Physics & math (10%)
- Biochem. & biotech. (5%)
- Earth sciences (5%)
- Applied biology (2%)

12% of Dalian's PCT patent applications are filed in collaboration with other inventors, with Shenzhen–Hong Kong–Guangzhou, Beijing and Shanghai–Suzhou emerging as the top collaborative locations.

60% of Dalian's scientific articles are published in collaboration with other organizations, with the top three collaborating locations being Beijing, Shenzhen–Hong Kong–Guangzhou and Shanghai–Suzhou.