General Principles of Chromatography

**Size Exclusion Chromatography**

- **Toyopearl® Resins** for SEC
- TSK-GEL® 5PW
- Toyopearl HW 50 for SEC

**Ion Exchange Chromatography**

- **Toyopearl® Resins** for IEC
- Toyopearl QAE-550
- Toyopearl HW 50

**Affinity Chromatography**

- **Toyopearl® Resins** for AFC
- Toyopearl AF-Tresyl-650
- Toyopearl AF-Amino-650

**Adsorption Chromatography**

- **Toyopearl® Resins** for RPC
- Toyopearl 650
- Toyopearl AF-Chelate-650

**Bioseparation: how to achieve the separation of molecules using the biocompatibility of TOSOH resins.**

- The separation results of molecules should be reproducible, and the packing should allow for a wide range of molecular masses to be resolved, including large biomolecules and small peptides.

<table>
<thead>
<tr>
<th>Molecular Mass (kDa)</th>
<th>Theoretical Recovery (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10,000</td>
<td>95</td>
</tr>
<tr>
<td>20,000</td>
<td>92</td>
</tr>
<tr>
<td>30,000</td>
<td>90</td>
</tr>
<tr>
<td>40,000</td>
<td>88</td>
</tr>
<tr>
<td>50,000</td>
<td>85</td>
</tr>
</tbody>
</table>

- The separation results should be reproducible, allowing for a wide range of molecular masses to be resolved, including large biomolecules and small peptides.

**Specifications**

- Bioseparation: how to achieve the separation of molecules using the biocompatibility of TOSOH resins.

**Contact Information**

- TOSOH BIOSCIENCE
  - 3-8-2, Shiba, Minato-ku
  - info@tosoh.co.jp
  - www.tosoh.com

**Additional Information**

- Order & Service: +1 800 3 66 48 75
- www.tosohbioscience.com
- 156 Keystone Drive
  - America
  - 70567 Stuttgart
  - Europe
  - info.sep.am@tosohbioscience.com
  - info.sep.eu@tosohbioscience.com
  - info.sep.asia@tosohbioscience.com

**Affinity Chromatography (APC)**

- Ion Exchange Chromatography (IEC)
- Affinity Chromatography (APC)
- Size Exclusion Chromatography (SEC)
- Reversed Phase Chromatography (RPC)
- Immunoaffinity Chromatography (IMAC)

**Explanations to These Products**

- **Tosoh Biosecure**: offers a comprehensive line of products and provides solutions for all common obstacles of purification. Offered solutions include Bioseparation, Bioconcentration, Elution, and Affinity.

**Table Data**

- The table data can be used as a starting point in various experimental setups and can be scaled over the pH 1-10 range.