

The Engineering Division of YMC Europe GmbH  
Schoettmannshof 19

D-46539 Dinslaken, Germany

phone: +49 (0) 2064 / 427-0, fax: +49 (0) 2064 / 427-222, E-mail: info@kronlab.com

## ***Questionnaire for Custom Chromatography System Engineering***

### **A) CUSTOMER ADDRESS:**

Title/Name:

Phone:

Company:

Fax:

Department/Function:

PO Box/Street:

City/Post code:

Country:

### **B) GENERAL ASPECTS, APPLICATION, SEPARATION PROBLEM:**

Flowrate:

System pressure:

Biocompatibility:

Location:

Coldroom?

### **C) ELUENTS, ELUENT SELECTION:**

Aqueous (AB) (state salt type and concentration):

Organic solvents (SR):

Number/type of solvent components:



### **D) PUMPS:**

Double piston pumps (KD, 50-300bar)

Triple piston pumps (Armen, 50-250bar)

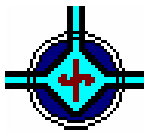
Flash pumps (Armen, 25bar)

Valve-less pumps (VP, 0-7bar)

Peristaltic pumps (0-2bar)

Membrane pumps (0-300bar)

additional pulse dampeners

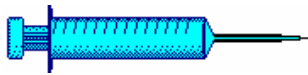


**E) GRADIENT MIXING:**

Isocratic  
Binary  
Ternary  
Quarternary

Low pressure mixing  
High pressure mixing

dynamic  
static



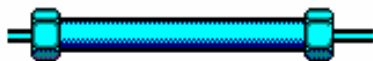
**F) SAMPLE INJECTION:**

Sample volume from \_\_\_\_\_ ml to \_\_\_\_\_ ml

Injection method:

sample injector  
with system pump  
separate pump

manual injection valve (HDV)  
motorised injection valve (HSV)  
autosampler



**G) COLUMNS:**

Existing  
To be supplied

ID [mm]:

Bed height [mm]:

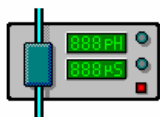
Column type/construction:

Bubble trap

Column by-pass  
Column back flush

Column switching

Packing material:

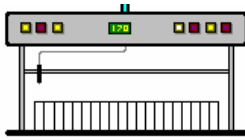


**H) DETECTION:**

UV/VIS  
DAD  
Refractive index (RI)  
pH  
Conductivity  
Pressure  
Other (specify)

from \_\_\_\_\_ nm to \_\_\_\_\_ nm  
from \_\_\_\_\_ nm to \_\_\_\_\_ nm

2-channel



**I) FRACTIONATION:**

- manual
- automatic valve
- fraction collector
- motorised valve

Volume per fraction:  
Number of fractions:

Collection vessel diameter [mm]:

Other special features of the system (Valve switching, bypass, etc.), dimension of system, rack requirements):

**J) DATA ACQUISITION AND SYSTEM CONTROL:**

Manually controlled

Computer controlled

Data acquisition, number of channels:

20Bit

24Bit

Line writer, number of channels:

Printer



Control options

Peak sampling (fractionation by peak slope and/or height)

Autosampler Table (autosampler control and sequential run of different methods)

System requirements:

**K) DOCUMENTATION:**

Document of conformity, Suppliers certificates, instrument manuals

OQ-support

PQ-support

GMP-conformity

Validation report

Notes:

**L) TIMELINE:**

Date for installation:

Date for order:

Responsible parties:

Project leader Customer:      Name:  
   Department:  
   Telephone:  
   e-mail:

Project leader Kronlab:      Name: Lars Henning  
   Department: System Engineering  
   Telephone: +49 / 2064 / 427-0  
   Fax: +49 / 2064 / 427-115  
   e-mail:henning@ymc.de

Decision maker customer:      Name:  
   Department:  
   Telephone:

Budget (Who is responsible for paying/financial decision, budget limits, availability of money):

**M) SKETCH OF SYSTEM**

