



Aim

During the last decades, membrane filtration has found its way to industrial application. Primarily mild water based streams are treated with polymer membranes, while at the same time ceramic UF and MF are becoming mature technologies in more harsh circumstances. Furthermore, it becomes more and more clear that a lot of solvent based separations, especially in the chemical and pharmaceutical industry, could benefit from solvent resistant membranes. These separations are primarily situated in the range of nanofiltration or pervaporation which has led to a growing activity in the development of solvent resistant polymer and ceramic membranes, especially for nanofiltration. Different products are already commercialized or are in commercialization stage.

More and more experience is available with solvent filtrations; experimental observations show that filtration behavior in solvents is much more complex than in water. A thorough understanding of the solvent performance of membranes, both permeability and retention, is essential for a successful application and implementation in the chemical and pharmaceutical industry.

It is the aim of this workshop to gather all, primarily European, researchers and process engineers active and/or interested in solvent filtration, both from universities and industry. The oral programme will exclusively consist of lectures from key-persons in the field. Both experimental data, from research studies and application tests, and theoretical modelling will be discussed. All participants will be invited to send in posters with their contribution. The purpose of the workshop is to exchange ideas and experiences concerning solvent filtration; therefore, sufficient time for interaction will be scheduled.

General information

Date

March 23-24, 2006

Venue

The workshop will be held at the new Campus Library Arenberg of the University of Leuven, located at the science campus near the historical centre of Leuven (Belgium).

Registration

Please fill out the enclosed registration form and send or fax it to the Conference Secretariat before February 28, 2006. You can also register on-line at our website www.vito.be/english/events.

Registration fee

Regular participant	400 EUR (excl. 21 % VAT)
Student	250 EUR (excl. 21 % VAT)
Industrial poster*	800 EUR (excl. 21 % VAT)

The fee includes lunches, coffee and dinner.

Payment is due before March 10, 2006.

* fee includes registration of 1 attendee

Accommodation

At www.vito.be/english/events you can find a list of hotels where reservations can be made at reduced prices by mentioning "Workshop Solvent Filtration".

Posters

Abstracts for posters (max. 1 A4 page) can be submitted via www.vito.be/english/events until January 31.

The abstract of all accepted posters will be published in the proceedings of the conference.

Conference Secretariat

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International Workshop

Membranes in Solvent Filtration

March 23-24, 2006
Campus Library Arenberg
Leuven (Belgium)

Organized by
VITO NV and KULeuven
in collaboration with
UGent
Belgium

With financial support from FWO
(Fund for scientific research – Flanders)

Programme

Thursday, March 23, 2006

- 09:00 **Arrival, registration & coffee**
09:15 Keynote lecture
Progresses in solvent filtration with microporous and dense membranes
E. Drioli, University of Calabria (I)
- 10:00 **Use of ceramic NF for the treatment of solvents**
P. Ayrat, University of Montpellier (F)
- 10:30 **Coffee**
- 11:00 **Organophilic NF: fundamentals and applications View of GKSS**
M. Dijkstra, GKSS (D)
- 11:30 **Solvent NF: fundamentals and applications View of Imperial College**
A. Livingston, Imperial College (UK)
- 12:00 **Observations on the permeation performance of SRNF membranes**
D. Stamatialis, TU Twente (NL)
- 12:30 **Lunch**
- 14:00 **Recent developments in applications of PV/VP**
M. Roza, Sulzer Chemtech (NL)
- 14:30 **Water and/or methanol separation by PV with inorganic membranes**
H. Van Veen, ECN (NL)
- 15:00 **Separation of methanol from MTBE by PV using a methylated silica membrane**
F.T. de Bruijn, TU Delft (NL)
- 15:30 **Coffee**
- 16:00 **Zeolite membrane for dehydration of organic solvents**
M. Kondo, Mitsui (JP)
- 16:30 **Segmented polymer networks as novel PV membranes**
F. Du Prez, UGent (B)

Programme

Friday, March 24, 2006

- 09:00 **Organophilic NF facilitating chemical processes**
P. Cuperus, Solsep N.V. (NL)
- 09:30 **Combinatorial synthesis techniques and high throughput membrane screening as tools to optimize**
I. Vankelecom, KULeuven (B)
- 10:00 **Filtration in SC-CO₂**
L.J.P. van den Broeke, TU Eindhoven (NL)
- 10:30 **Coffee**
- 11:00 **Solvent resistant NF: developing understanding of transport mechanisms**
S. Tarleton, University of Loughborough (UK)
- 11:30 **Modelling of solute transport in non-aqueous NF**
J. Geens, KULeuven (B)
- 12:00 **Modelling of solvent transport through NF membranes**
J. Crespo, University of Lisboa (PT)
- 12:30 **Lunch**
- 14:00 **Membrane technology for solvent recovery in pharmaceutical industry : pitfalls and opportunities**
B. De Witte, Janssen Pharmaceutica (B)
- 14:30 **Effect of liquid properties and operating conditions on membrane performance during NF of organic liquids**
G. Bargeman, Akzo (NL)
- 15:00 **Ceramic membranes for NF in organic solvents**
M. Mutter, Bayer/Inocermic (D)
- 15:30 **Successful industrial application of diafiltration with ceramic NF**
B. Levecque, Orafti/VITO (B)
- 16:00 **Final drink**

How to get there

By car

Leuven is positioned on the crossroad of 2 highways, the E40 London – Brussels – Liège (Luik) – Keulen and the E314 (A2) Leuven – Hasselt – Aachen.

To arrive at the Campus Library Arenberg, take the exit 15 on the E314 Leuven – Hasselt, and you will drive on the Koning Boudewijnlaan. At the second traffic lights, take the Celestijnenlaan on the right. Drive up to the T-point with the De Croylaan.

The Library is located on the crossing at your right. You can park on the car park of the department “Werktuigkunde” in the Celestijnenlaan, just before the Library.

By train

The international line London – Brussels – Liège – Keulen passes Leuven. Coming from another direction, you'll need to change in Brussels. Trains from Brussels to Leuven leave at least every half hour. Brussels Airport has its own train station with direct connection to Leuven, every half hour. We will organize a bus/taxi/car transfer from the train station to the hotels/ the Library.

