

## FILTRATION - VOLUME 6(1)

Studies on a micro hydrocyclone for liquid-liquid separation

R. Wengeler, H. Nirschl, F. Herbstritt and W. Ehrfeld

Sand filter design and water wastage

D.G. Stevenson

Advances in non-conventional flotation for oily water treatment

M.V. Melo, O. de A. Pereira, R.F. de Jesus and L.A. Duarte dos Santos

Can the success of a process depend on solids washing?

T. Sparks

Hot gas filtration case study - testing and monitoring

A. Startin

Filter media selection – An overview & manufacturer's perspective

E. Hardman

High performance nanofibre coated filter media for engine intake air filtration

P. Trautmann, M. Durst, A. Pelz and N. Moser

Development of a filter cake permeability test methodology

W. Li, C. Kiser and Q. Richard

Porosity model for cake filtration of flocculated suspensions

J. Dueck, D. Purevjav and Th. Neesse

Characterisation of the transition between the filtration and consolidation stage from liquid pressure measurements

M.L. Christensen, N.P.R. Andersen, M. Hinge and K. Keiding

Dynamic modelling of a pilot scale crossflow filtration process

J.A. Gantt, E.P. Gatzke, V. van Brunt, T.J. Deal, R.B. Haggard, M. Poirier, S. Fink and C. Nash

## FILTRATION - VOLUME 6(2)

Filter design software (FDS) for filter process simulation  
E.S. Tarleton and R.J. Wakeman

Production of potable water with UF membranes: A case study from piloting to plant expansion, New Braunfels, Texas  
R.A. Suozzo and D.J. Davenport

Scaling-up filtering centrifuges  
C. Grimwood

Optimising usage of pretreatment chemicals  
G. Moody and P. Norman

Bubble size, shape and rise velocity in the flotation process  
D. Horn, P. Basařová and V. Machoň

Towards process intensification using a mini rotary vacuum filter (RVF)  
K. Turner

Experiences in high pressure dewatering in fine pigment slurries  
P. Rantala

Reducing uncertainty in particle size measurement for liquid filter testing  
B.M. Verdegan and R. Fletcher

Evaluating the operational stability of a biofilter  
W.-L. Lai, L.-F. Chen, J.-H. Lin and B.-M. Yang

Modelling flow in monofilament filter cloths: 1. Prediction of pressure losses  
K.C. Ting, R.J. Wakeman and V. Nassehi

Improved CFD modelling of particle-wall collision by including interception  
M.J. Lehmann

Control of structure of thin filter cake formed by PSL particles  
M. Furuta, Y. Mukai and E. Iritani

Computer simulation of air filtration including electric surface charges in  
3-D fibrous microstructures  
S. Rief, A. Latz and A. Wiegmann

## FILTRATION - VOLUME 6(3)

Laboratory testing protocols used for biosolids dewatering  
E. Mayer

New cellulose fibres for filter media  
T. Brattberg, T. Blomberg and R. Lundberg

Flash decompression: The key to a new filter cleaning process  
B. Longworth, J.P. Millington, J. Norris, P. Norris and C. Reid

Low pressure vacuum plasma treatment of nonwovens and needlefelt  
for filtration applications  
P. Lippens, A. Vanlandeghem, P. Martens and M. Pauwels

New and improved hot gas filters for difficult applications  
A. Startin and G. Elliott

Microfiltration membranes with straight pore channels formed by high  
speed fiberlaser perforation of stainless steel foils  
M. Baumeister, K. Dickmann, M. Duka and T. Hoult

Nano- and macro- filtration media based on carbon technologies  
S. Tennison

Practical considerations in pressure filter selection  
I. Townsend

Colour removal by micellar enhanced ultrafiltration  
D.-J. Chang

Asphalt emulsion enhanced fine coal dewatering

B.L. Allen and D. Tao

Modelling flow in monofilament filter cloths: 2. Effect of weave structure and non-Newtonian fluid properties on pressure losses

K.C. Ting, R.J. Wakeman and V. Nassehi

Smart material composite membranes based on molecularly imprinted nanoparticles used for selective filtration

M. Herold, M. Lehmann, H. Brunner and G.E.M. Tovar

Pressure drop and penetration for pre-charged and neutral particles on fibrous and membrane filters

H. Bin, Y. Qiang, X. Hai-Wei, L. Zheng-Wei and L. Shui-Qing

## **FILTRATION - VOLUME 6(4)**

Direct flow air filters – A new approach to high performance engine filtration

T. Jaroszczyk, S.L. Fallon, Z. Gerald Liu, S.W. Schwartz, C.E. Holm, K.M. Badeau and E. Janikowski

Polymeric nanofibres in high efficiency filtration applications

V. Kalayci, M. Ouyang and K. Graham

Use of micellar enhanced membrane filtration system for humic acid removal from water

D.-J. Chang

Testing of filter media for liquid filtration – Introduction and review

C. Peuchot

Quantitation of filtration by magnetic resonance imaging (MRI)

L. Hall, F. Heese and P. Robson

Determination method to find an optimal depth filter layer combination for aerosol separation in the mineral wool industry

C. Ehrenberg and W. Höflinger

Pore size distributions on the surfaces of filter media determined via image analyses

P.R. Johnston

Tracing the centrifugal separation of fine particle slurries by analytical centrifugation

T. Sobisch, D. Lerche, T. Detloff, M. Beiser and A. Erk

3-D numerical study on fluid flow and pressure loss of mixing channel and wall flow inside a diesel particulate filter

X. Zhang, M. Romzek, M. Keck, D. Tsang and C. Morgan

Magnetic field enhanced cake filtration

B. Fuchs, M. Stolarski, W. Stahl and H. Nirschl

Separation of titanium dioxide from photocatalytically treated water by nonwoven fabric membrane

M.-C. Chang, R.-Y. Horng, H. Shao and Y.-J. Hu