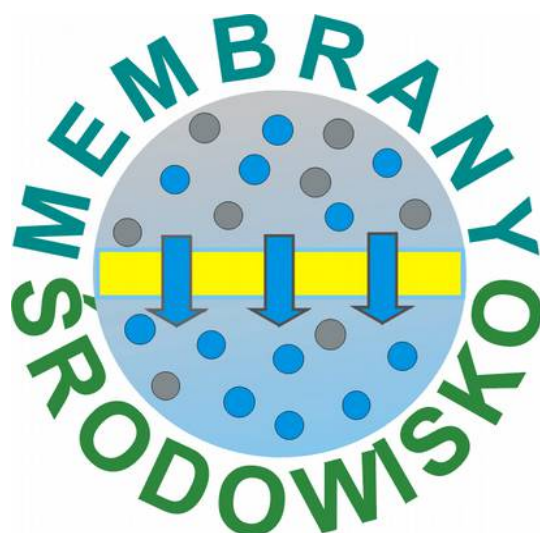


X Jubileuszowa Konferencja Naukowa
MEMBRANY I PROCESY MEMBRANOWE
W OCHRONIE ŚRODOWISKA

MEMPEP 2014

11 – 14 czerwca 2014 r.
Zakopane



10th Scientific Conference
MEMBRANES AND MEMBRANE PROCESSES
IN ENVIRONMENTAL PROTECTION

MEMPEP 2014

June 11 – 14, 2014
Zakopane, Poland

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WYSTAWY/EXHIBITIONS



*Wybrane rozwiązania membranowe
w procesach filtracji*



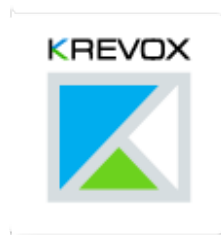
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PROGRAMME

10th Scientific Conference „Membranes and Membrane Processes in Environmental Protection”

MEMPEP 2014

June 11 – 14, 2014, Zakopane (Poland)

11.06.2014 WEDNESDAY

15⁰⁰ - 22⁰⁰ RECEPTION OF PARTICIPANTS

18⁰⁰ - 22⁰⁰ SUPPER

12.06.2014 THURSDAY

8⁰⁰-9⁰⁰ BREAKFAST

9⁰⁰-9⁰⁵ OPENING OF THE CONFERENCE

9⁰⁵-9²⁰ MAREK BRYJAK

Blue energy

9²⁰-9³⁵ PIOTR DYDO, KRZYSZTOF LABUS, MARIAN TUREK

Membrane treatment of flowback from fracturing of shale gas formations

9³⁵-9⁵⁰ MARIA ELEKTOROWICZ, ZOHREH ARIAN, SHARIF IBEID

Submerged membrane electro-bioreactor for water recovery

9⁵⁰-10⁰⁵ PETER HUCK

Biological filtration as a pre-treatment for membranes in drinking water treatment – new developments

10⁰⁵-10²⁰ ANDRZEJ CHWOJNOWSKI, EWA ŁUKOWSKA, CEZARY WOJCIECHOWSKI,

TOMASZ KOBIELA, PIOTR DOBRZYŃSKI, MAŁGORZATA PASTUSIAK, ANNA SMOLA
Preliminary studies of the influence of solvents on the structure of polysulfone-polyester blend ultrafiltration membranes

10²⁰-10³⁵ BRUNO BASTOS SALES

Membrane capacitive deionization for advanced separation processes

10³⁵-10⁵⁰ JAROSŁAW IŁNICKI

Pall Corporation

10⁵⁰-11²⁰ COFFEE BREAK

11²⁰-11³⁵ DOMINIKA DAROWNA, ANTONI W. MORAWSKI, SYLWIA MOZIA

The investigations on the fouling phenomenon of a polyethersulfone ultrafiltration membrane in a photocatalytic membrane reactor

11³⁵-11⁵⁰ ANNA M. CHRZANOWSKA, ANNA POLIWODA, PIOTR P. WIECZOREK

Liquid membranes as a sample preparation method in environmental analysis

11⁵⁰-12⁰⁵ PAWEŁ BIELUSZKA, GRAŻYNA ZAKRZEWSKA-KOLTUNIEWICZ, EWELINA CHAJDUK

Solvent extraction of uranium in the system with membrane contactors

12⁰⁵-12²⁰ MARTA WOŹNIAK, KRYSZYNA PROCHASKA

Phenomena associated with the separation of dicarboxylic acids by bipolar electro dialysis technique

12²⁰-12³⁵ ANNA ROZICKA, STANISŁAW KOTER, WOJCIECH KUJAWSKI

Thermopervaporative transport of single solvent and binary mixtures

12³⁵-12⁵⁰ JOANNA KUJAWA, JAN KUJAWSKI, WOJCIECH KUJAWSKI

The correlation between hydrophobicity and tribology of modified surfaces

12⁵⁰-13⁰⁵ MARTA BOJARSKA, IZABELA STĘPNIEWSKA, TOMASZ CIACH, WOJCIECH PIĄTKIEWICZ

Grafting of acrylic acid on the membrane surface by Fenton-type reaction

13⁰⁵-14⁰⁰ LUNCH

15⁰⁰-17⁰⁰ POSTER SESSION

18⁰⁰ BONFIRE (BARBECUE)

13.06.2014 FRIDAY

8⁰⁰-9⁰⁰ BREAKFAST

- 9⁰⁰-9¹⁵ RAFAL T. BRAY, KAROLINA FITOBÓR
Application of ferric chloride for arsenic removal in the integrated process: coagulation/microfiltration
- 9¹⁵-9³⁰ MAREK JASTRZEBSKI, JAROSLAW ILNICKI, PIOTR ZIARKO
Pall membrane separation system with hollow fiber modules for food and beverages applications
- 9³⁰-9⁴⁵ PRZEMYSLAW CHROBOT, MAREK MOLCZAN, TOMASZ KONIECZNY,
PAWEŁ MALINOWSKI
Pilot plant as a tool of the implementation of membrane techniques to water utilities sector
- 9⁴⁵-10⁰⁰ MAGDALENA M. MICHEL, LIDIA RECZEK
Pre-treatment of flowback water to desalination
- 10⁰⁰-10¹⁵ MAREK GRYTA, JUSTYNA BASTRZYK, WIRGINIA TOMCZAK
The application of membrane processes for separation of post-fermentation glycerol solutions
- 10¹⁵-10³⁰ KRYSZYNA KONIECZNY, JOANNA ĆWIKŁA, MAGDALENA SZOLTYSEK
The application of the membrane reactor to separation processes at a wastewater treatment plant
- 10³⁰-10⁴⁵ EWELINA MACHNIK, STANISLAW ZAWADZKI
Membrane application in wastewater treatment after feathers washing as a second stage after biological treatment in MBS reactor (Multi Bio System)

10⁴⁵-11¹⁵ COFFEE BREAK

- 11¹⁵-11³⁰ PIOTR GAJEWSKI, MARTA PRZEWOŻNA, ANDRZEJ SKRZYPCZAK, MARIUSZ B. BOGACKI
Transport of organic acids through the polymer inclusion membrane containing 1-alkyl-1,2,4-triazoles as a carriers
- 11³⁰-11⁴⁵ MARTA PRZEWOŻNA, PIOTR GAJEWSKI, ANDRZEJ SKRZYPCZAK, MARIUSZ B. BOGACKI
Transport of selected organic acids through PIM containing 1-(alkyloxy)methylimidazoles as a carrier
- 11⁴⁵-12⁰⁰ MONIKA BACZYŃSKA, MAGDALENA REGEL-ROSOCKA, MACIEJ WIŚNIEWSKI
Removal of zinc(II) from aqueous chloride solutions with polymer inclusion membranes
- 12⁰⁰-12¹⁵ MICHAŁ TYLMAN, KARINA SNOCHOWSKA
Membrane contactors using ionic liquids - an overview
- 12¹⁵-12³⁰ GRZEGORZ WICIAK, KATARZYNA JANUSZ-SZYMAŃSKA
The influence of selected parameters on the real coefficient selectivity of the membrane separator dedicated to the separation of CO₂ from flue gases
- 12³⁰-12⁴⁵ MARIA TOMASZEWSKA
Direct contact membrane distillation in a membrane reactor
- 12⁴⁵-13⁰⁰ The results of the competition for young scientists

13⁰⁰-14⁰⁰ LUNCH

14¹⁵-18⁰⁰ EXCURSION

- 19⁰⁰ CONFERENCE DINNER (around 8 p.m. – the performance of *Maria Koterbska Artistic Cellar from Bielsko-Biala*)

14.06.2014 SATURDAY

8⁰⁰-9⁰⁰ BREAKFAST

9⁰⁰-9¹⁵ ANDRZEJ KUBACZKA, WŁADYSŁAW KAMIŃSKI
Prediction of mass fluxes in the pervaporation process of the ethanol dehydration, based on the free volume theory

9¹⁵-9³⁰ DOROTA LEWIŃSKA, BARBARA KUPIKOWSKA-STOBBA, MARCIN GRZECZKOWICZ
Influence of liquid flow rates on alginate-polyethersulfone microcapsule structure

9³⁰-9⁴⁵ MICHAŁ POLUS, ANNA M. ANIELAK, MICHAŁ ZIELINA, ELŻBIETA ULMAN
Application of membrane processes for Archaea isolation

9⁴⁵-10⁰⁰ WOJCIECH KUJAWSKI, EMILIA JANISZEWSKA
Osmotic membrane distillation of carrot juice followed by its microencapsulation. Part I

10⁰⁰-10¹⁵ IRENEUSZ MIESIĄC
Water in the membrane processes

10¹⁵-10²⁰ CLOSING OF THE CONFERENCE

12³⁰-13³⁰ LUNCH

POSTER SESSION

Thursday, 12.06.2014, 15⁰⁰-17⁰⁰

1. PAULINA RDZANEK, JOANNA MARSZALEK, WŁADYSŁAW KAMIŃSKI
Immobilisation of ionic liquid (IL) on a flat pervaporation membrane
2. PAULINA ŁOBODZIN, MARIAN GRĄDKOWSKI
Dehydration of ethylene or propylene glycol - water mixtures using ceramic membrane by prototype pervaporation installation
3. KATARZYNA RYCHLEWSKA, KRYSZYNA KONIECZNY
Reduction of sulfur content in FCC gasoline using vacuum pervaporation method
4. PAULINA ZATORSKA, JOANNA KUJAWA, WOJCIECH KUJAWSKI
Comparison of the selectivity of polymeric membranes with different hydrophobicity in organic-organic pervaporation
5. MACIEJ SZWAST, MICHAŁ K. ZALEWSKI, LIDIA PROKOPOWICZ, RAMIN NIKPOUR
Novel mixed matrix membrane for gas mixture separation
6. JAKUB RAJEWSKI, PAWEŁ RELIGA, PAWEŁ GIERYCZ
The instability of supported liquid membrane system with di(2-ethylhexyl) phosphoric acid as a ion carrier
7. ANITA BEDNARSKA
The use of XPS technique for polymer membranes testing
8. JOLANTA BOHDZIEWICZ, GABRIELA KAMIŃSKA
Polymer membranes modified with carbon nanomaterials
9. BARTOSZ NOWAK, MARTA BOJARSKA, JAROSŁAW SKOWROŃSKI, WOJCIECH PIĄTKIEWICZ
Antibacterial and antifouling properties of polypropylene membranes modified with zinc oxide nanowires
10. KAROLINA KOTRA-KONICKA, JOANNA KALBARCZYK, WOJCIECH PIĄTKIEWICZ
Impact of chemical modifications on polypropylene membranes grafted with polyethylene glycol
11. ANDRZEJ MILEWSKI, PIOTR DYDO, MACIEJ KIJĄŃSKI, SYLWIA WAŚKIEWICZ, EWA LANGER
The polymeric membranes obtained from Schiff-bases plasticized with polyetherols
12. CEZARY WOJCIECHOWSKI, ANDRZEJ CHWOJNOWSKI, EWA ŁUKOWSKA, MARCIN GRZECZKOWICZ
Fabrication and characterization of polysulfone/cellulose acetate dual-layer capillary membranes
13. KATARZYNA SZYŃKIEWICZ, STANISŁAW KOTER
Filtration characteristics of membranes formed from the poly(styrenesulphonic acid-co-4-vinylpyridine)

14. KATARZYNA SMOLINSKA-KEMPISTY, JOANNA WOLSKA, MAREK BRYJAK
Surface imprinted polymer layers on membranes
15. MAŁGORZATA GNUS, GABRIELA DUDEK, ROMAN TURCZYN, ARTUR TÓRZ,
TOMASZ MACHOCZEK
The influence of cross-linking agent on chitosan membranes separation properties
16. GABRIELA DUDEK, ROMAN TURCZYN, MAŁGORZATA GNUS, ANNA STRZELEWICZ, MONIKA
KRASOWSKA
*The influence of iron-oxide nanoparticles on chitosan and PPO membrane separation
properties*
17. JOANNA WOLSKA, MAREK BRYJA
Preparation of chitosan microspheres by membrane emulsification
18. JOANNA KUJAWA, JAN KUJAWSKI, WOJCIECH KUJAWSKI
Partially hydrophobized ceramic membranes
19. EDYTA RYNKOWSKA, ANNE-MARIE KELTERER, LARISA KARPENKO-JEREB,
WOJCIECH KUJAWSKI, STEPHANE MARAIS, KATERYNA FATEYEVA, CORINNE CHAPEY
*Theoretical and experimental investigation of properties of Nafion-Li⁺ and
IonClad-Li⁺ membranes in contact with water and chosen polar solvents*
20. ANNA BRYŁA, WOJCIECH JUZWA, WOJCIECH BIAŁAS, GRAŻYNA LEWANDOWICZ
Nanoencapsulation of elderberry extract using a membrane contactor
21. ANNA BRYŁA, KAROLINA FRYCZYŃSKA, WOJCIECH BIAŁAS, GRAŻYNA LEWANDOWICZ
*An attempt to application of microfiltration membrane unit for nanoencapsulation of
elderberry extract into liposomes*
22. LUDOMIRA GRANICKA, ANNA GRZECZKOWICZ, MAGDALENA BORKOWSKA,
IZABELA LIPKA
Detection of nano-thin polyelectrolyte shells on biological material
23. JUSTYNA GÓRNA, KATARZYNA MAJEWSKA-NOWAK
*Removal of nitrates from aqueous solution by micellar-enhanced ultrafiltration with the
use of ceramic membranes*
24. PAULINA NIEŚCIOR-BROWIŃSKA, GRAŻYNA ZAKRZEWSKA-KOŁTUNIEWICZ,
EWELINA CHAJDUK
*The recovery of boric acid from PWR reactor cooling water and wastewater by using
micellar-enhanced ultrafiltration*
25. MARTA PRZEWOŻNA, BARTŁOMIEJ BYKOWY, PIOTR GAJEWSKI, MARIUSZ B. BOGACKI
*1-alkylimidazoles as carriers for organic acids transport through polymer inclusion
membranes*
26. BERNADETA GAJDA, MARIUSZ BOGACKI
*Transport of nickel(II), cobalt(II), zinc(II) and cadmium(II) ions through polymer
inclusion membrane. Influence of 1-alkylimidazoles concentration on ion separation*

27. IRENA KORUS, MAGDALENA BOBIK, MARIA BRACHMAŃSKA
Separation of Pb(II) by polymer enhanced ultrafiltration – spectrophotometric analysis
28. IRENA KORUS, MAGDALENA BOBIK, EWA NOWAK
Selective separation of Ni(II) and Cr(VI) ions by polymer enhanced ultrafiltration
29. MAŁGORZATA KOWALSKA
The effectiveness of removal of haloacetic acids from water using bioreactor with native enzymes
30. EWA ŁOBOS-MOYSA
The evaluation of MBR-NF operation on the basis LCFA biodegradation
31. JERZY ANT CZAK, KRYSZYNA PROCHASKA
Isolation and concentration of succinic acid from the post-fermentation broth resulting from the bioconversion of glycerol
32. MARTA WOŹNIAK, PIOTR SZYMAŃSKI, KRYSZYNA PROCHASKA
The separation and concentration of the components of synthetic and real post-fermentation broths by pressure and current membrane techniques
33. ZBIGNIEW MUCHA
Preliminary operating experience at the sewage treatment plant with membrane biological reactors
34. MACIEJ SZWAST, RAMIN NIKPOUR, ZBIGNIEW SZWAST
Variability of the permeate flow during the concentration of suspensions by microfiltration. Experimental studies
35. PAWEŁ HOLDA, TADEUSZ PORĘBSKI, EDYTA MAJEWSKA, SŁAWOMIR TOMZIK, KATARZYNA POLARCZYK
The laboratory study of process distributing the heterophase mixtures on ceramic membranes
36. MARZENA SMOL, MARIA WŁODARCZYK-MAKUŁA, JOLANTA BOHDZIEWICZ, KAROLINA MIELCZAREK
The use of integrated membrane systems in the removal of selected pollutants from pre-treated wastewater in coke plant
37. SYLWIA MOZIA, DOMINIKA DAROWNA, ANTONI W. MORAWSKI
Stability of polymer membranes in photocatalytic membrane reactors
38. KACPER SZYMAŃSKI, ANTONI W. MORAWSKI, SYLWIA MOZIA
Investigations on fouling and stability of ceramic membranes in a photocatalytic membrane reactor
39. MARIUSZ DUDZIAK
Application of sorption/photocatalysis/membrane separation in treatment of water containing estrogens and xenoestrogens
40. MARIOLA RAJCA
The effectiveness of ultrafiltration process used in photocatalytic membrane reactor

41. IZABELA KOWALSKA
Comparison of the effectiveness of spent detergent solution regeneration by means of ceramic and polymeric modules
42. AGNIESZKA URBANOWSKA, MAŁGORZATA KABSCH-KORBUTOWICZ
Chemical cleaning of ultrafiltration polymeric membranes fouled with natural organic matter
43. ANNA ŚWIERCZYŃSKA, JOLANTA BOHDZIEWICZ
The effect of the type of membrane-forming polymer on the occurrence of the fouling phenomenon
44. JOLANTA BOHDZIEWICZ, EDYTA KUDLEK-JELONEK, MARIUSZ DUDZIAK
Removal of selected pharmaceutical compounds from the simulated municipal secondary effluent using the nanofiltration process
45. ANNA KWIECIŃSKA, KRYSZYNA KONIECZNY
The application of membrane processes in animal slurry treatment
46. JUSTYNA BASTRZYK, MAREK GRZYTA, ALEKSANDER ORECKI
Fouling study of NF membranes using AFM microscopy
47. ANNA KOWALIK-KLIMCZAK, PAWEŁ RELIGA, PAWEŁ GIERYCZ
Mechanism of chromium(III) ions concentration in salt mixture solution using polymeric nanofiltration membranes
48. PAWEŁ RELIGA, ANNA KOWALIK-KLIMCZAK, KATARZYNA PISZCZEK
Nanofiltration of the chromium wastewater with the diafiltration method
49. EWA LASKOWSKA, PIOTR DYDO, MARIAN TUREK
Removal of sulphate in an integrated membrane - crystallization system
50. BARBARA TOMASZEWSKA, MICHAŁ BODZEK
The effectiveness of radionuclides removal from geothermal waters using double BWRO system
51. PAULINA CHOJNOWSKA, STANISŁAW KOTER, KATARZYNA SZYMKIEWICZ
Electrodialysis of ammonium salts solutions
52. MARIUSZ NOWAK, HANNA JAROSZEK, MAGDALENA TURKOWSKA
Conversion of waste sodium sulfate with bipolar membrane electrodialysis
53. HANNA JAROSZEK, ANETA LIS, PIOTR DYDO
Synthesis of potassium nitrate by metathesis-electrodialysis
54. DOROTA BABILAS, PIOTR DYDO
Electrodialytic regeneration of sulphate copper electroplating bath
55. KRZYSZTOF MITKO, MARIAN TUREK
Gypsum layer growth on a cation-exchange membrane