

Master thesis review

Title: Preparation of Nanofibrous Membranes for Oil/ Water Separation

Author: Evren Boyraz

Thesis advisor: Fatma Yalcinkaya, MSc. Ph.D.

Thesis reviewer: Jakub Hruza, MSc. Ph.D.

Thesis utility: This work solve very important branch – the waste water treatment, specifically water/oil separation. As it is written in pages 16-18, the water/oil separation is important part of water treatment for household, services, industry, agriculture and other economic sectors.

Thesis evaluation: This work fulfills required assignment. The text is properly structured to introduction, theoretical part, objective, experiments, results, conclusion, references and appendix. The author is very clear about what he wants to do, how he will do it, and what it takes to complete the goals. He proceeds from universal presumptions to specific materials and modifications. The different commercial methods of water/oil separation are mentioned too. I have some remarks and questions:

- It is interesting, how different are consumptions of water spreaded out for particular countries (tab. 1.2.). Do you have some opinion about these differences?
- What type of membrane in picture 2.3. are used nanofibrous membranes (it is maybe question of scale)?
- The rising of water permeability after KOH, NaOH and TiO₂ particle treatment is really significant. It was possible to find some degradation or pore size growth for each samples?

I'm satisfied with this thesis and in my opinion it

fulfils conditions to obtain Master's degree. I recommend this work to thesis defence and I suggest the valuation "výborně" (1).

Date: 14th May 2019

Signature: .....