# Assist, Prof. Kozet YAPSAKLI



Marmara University, Faculty of Engineering, Environmental Engineering Department, 34722,

Goztepe, İstanbul, Turkey.

Tel : +90 216 348 0292- ext. 290

Fax : +90 216 348 1369

e-mail : <u>kyapsakli@marmara.edu.tr</u>

web : <u>meg.marmara.edu.tr</u>

## **EDUCATION**

1994 - 1999 B.S. Environmental Engineering - Marmara University, Engineering

Faculty, Department of Environmental Engineering, Istanbul, Turkey

**2000 - 2002** M.S. Environmental Engineering - Marmara University, Institute for

Graduate Studies in Pure and Applied Sciences, Istanbul, Turkey

**2002 - 2008** Ph.D. Environmental Engineering - Bogazici University, Institute for

Environmental Sciences, Istanbul, Turkey

Foreign languages English- Fluent

German-Intermediate

## **ACADEMIC EXPERIENCE**

Research Assistant Marmara University, Faculty of Engineering, Department of

Environmental Engineering, Istanbul, Turkey (2000-2008)

**Assist. Prof.** Marmara University, Faculty of Engineering, Environmental

Engineering Department, Istanbul, Turkey (2009-....)

### FIELDS OF EXPERIENCES & INTERESTS

Water treatment Technologies, Biological Activated Carbon (BAC), Adsorption, Advanced Oxidation Processes, Water reclamation and reuse, Wastewater engineering, Environmental biotechnology: Nitrogen converting microorganisms, Anaerobic Ammonium Oxidation (ANAMMOX) and SHARON processes.

## **GRADUATE STUDENTS**

Çiğdem Kalkan Tertiary Treatment of Paşaköy Advanced Wastewater Treatment

Plant Effluent by Biological Activated Carbon (BAC). M.S.,

2010.

## **COURSES TAUGHT**

CHEM 101- General Chemistry I

CHEM 102 - General Chemistry II

ENVE 435 - Microbiology for Wastewater Engineering

ENVE 497 / 498 - Engineering Project

ENVE 301 - Environmental Engineering Unit Operations

ENVE 302 - Environmental Engineering Unit Processes

ENVE 401 - Physical Chemical Processes

ENVE 821 - Removal of Refractory Organics

## **SCHOLARSHIPS**

The Scientific and Technological Research Council of Turkey (TÜBİTAK), Research Fellowship Programme, (10/04/2006 – 10/10/2006) Dresden Technical University, Dresden/Germany (Modeling of natural organic matter removal in drinking water biofilters)

The Scientific and Technological Research Council of Turkey (TÜBİTAK), Post-Doc Research Fellowship Programme, (01/12/2008 – 01/12/2009): Marmara University. (Identification and activity of sensitive microorganisms in a leachate treatment plant with the help of molecular microbiological methods)

### **PROJECTS**

- 1. Investigation of free ammonia inhibition in an Anammox reactor packed with Kaldnes Rings, Marmara University Scientific Research Projects Committee (BAPKO), FEN-A-080410-0075, Project Supervisor, 4.2010-4.2012.
- 2. Application of biological activated carbon (BAC) for reclamation purposes TÜBİTAK, 109Y205, Project Supervisor, 1.2010-1.2011.
- 3. Investigation of sensitive bacteria in a biological activated carbon filter for drinking water, Marmara University Scientific Research Projects Committee (BAPKO), FEN-A-060308-0045, Researcher, 2008-2010.
- 4. Application of real-time PCR technique for the quantitative determination of active gene, TÜBİTAK, 107T281, Researcher, 2007-2008.
- 5. Behaviour of selected organic and inorganic xenobiotics in biological systems and formation of structure –activity relationship (SAR) models, TÜBİTAK, ÇAYDAG-105Y379-COST, Researcher, 6.2006-6.2009.
- 6. Application of Biological Activated Carbon (BAC) in drinking water treatment, Boğaziçi University Scientific Research Project, 05Y103D, Researcher, 2.2005-7.2008.
- 7. Investigation of floc structure of waters with high organic carbon content, TÜBİTAK Projesi, ÇAYDAG-104Y269, Researcher, 2005-2007.
- 8. Biological activated carbon for drinking water treatment, TÜBİTAK, İÇTAG-Ç110, Researcher, 2004-2007.

### **PUBLICATIONS**

#### SCI Index

- 1. D. Akgul, C. Kalkan Aktan, **K. Yapsakli**, B. Mertoglu, "Treatment of landfill leachate using UASB-MBR-SHARON-Anammox configuration", <u>Biodegradation</u>, DOI: 10.1007/s10532-012-9597-y.
- 2. C. Kalkan Aktan, **K. Yapsakli**, B. Mertoglu, "Inhibitory effects of ammonia on Anammox bacteria", <u>Biodegradation</u>, 23 (5), 751-762 pp., 2012.
- 3. B. Ozdemir, B. Mertoglu, **K. Yapsakli**, C. Aliyazicioglu, A.M. Saatci, O. Yenigun, "Investigation of nitrogen converters in membrane bioreactor", <u>Journal of Environmental Science and Health-Part A</u>, 46 (5), 500-508 pp., 2011.
- 4. **K. Yapsakli**, C. Aliyazicioglu, B. Mertoglu, "Identification and quantitative evaluation of nitrogen converting organisms in a full-scale leachate treatment plant", <u>Journal of Environmental Management</u>, 92 (3), 714-723 pp., 2011.
- 5. C. Kalkan, **K. Yapsakli**, B. Mertoglu, D. Tufan, A. Saatci, "Evaluation of Biological Activated Carbon (BAC) process in wastewater treatment secondary effluent for reclamation purposes", <u>Desalination</u>, 265 (1-3), 266-273 pp., 2011.
- 6. **K. Yapsakli**, "Co-occurrence of nitrogen converting organisms in full-scale wastewater treatment plants", <u>Journal of Environmental Science and Health- Part A</u>, 45, 1060-1070 pp., 2010.
- 7. **K. Yapsakli**, B. Mertoglu, F. Cecen, "Identification of nitrifiers and nitrification performance in drinking water Biological Activated Carbon (BAC) filtration", Process Biochemistry, 45, 1543-1549 pp., 2010.
- 8. **K. Yapsakli**, F. Cecen, "Effect of type of granular activated carbon on DOC biodegradation in biological activated carbon filters", <u>Process Biochemistry</u>, 45, 355-362 pp., 2010.
- 9. **K. Yapsakli,** F. Cecen, O. Aktas, Z.S. Can, "Impact of surface properties of granular activated carbon and preozonation on adsorption and desorption of natural organic matter", <u>Environmental Engineering Science</u>, 26(3), 489-500 pp., 2009.
- 10. **K. Yapsakli,** Z.S. Can, "Interaction of ozone with formic acid: A system which suppresses the scavenging effect of  $HCO_3^-/CO_3^{2--}$ ", Water Quality Research Journal of Canada, 39(2), 40-148 pp., 2004.

#### Others

1. **K. Yapsakli**, F. Cecen, "Use of an enriched inoculum for determination of biodegradable dissolved organic carbon (BDOC) in drinking water", **Water Science and Technology: Water Supply**, 9 (2), 149-157 pp., (2009).

### National Publications

**1. K. Yapsakli**, C. Kalkan Aktan, B. Mertoglu, "SHARON Prosesinin sızıntı suyu arıtımında kullanılması", Marmara Üniversitesi Fen Bilimleri Dergisi, 1-10 pp., 2012.

### Conference Proceedings

- 1. **K. Yapsakli,** B. Mertoglu, Fourth IWA Specialty Conference Natural Organic Matter: From Source to Tap and Beyond "Fluorescence Spectroscopic analysis of Omerli Reservoir Water at different ozone doses", pp., Costa Mesa, California, USA, 27-29 July 2011.
- B. Mertoglu, K. Yapsakli, D. Akgul, B. Yuzer, Fourth IWA Specialty Conference Natural Organic Matter: From Source to Tap and Beyond "Characterization of dissolved organic matter in landfill leachate by Fluorescence Spectroscopy", - pp., Costa Mesa, California, USA, 27-29 July 2011.
- 3. C. Kalkan, **K. Yapsakli**, B. Mertoglu, International Sustainable Water and Wastewater Management Symposium "Enrichment of Anammox bacteria in reactor packed with Kaldnes Rings", pp., Konya, 26-28 October 2010.
- 4. C. Aliyazicioglu, **K. Yapsakli**, B. Mertoglu, F. Cecen, "International Sustainable Water and Wastewater Management Symposium" "Analysis of denitrification process in Biological Activated Carbon (BAC) used for drinking water treatment", pp., Konya, 26-28 October 2010.
- 5. **K. Yapsakli**, C. Kalkan, D. Tufan, B. Mertoglu, "IWA World Water Congress and Exhibition" "Tertiary treatment of Paşaköy Advanced Wastewater Treatment Plant by Biological Activated Carbon (BAC)", Manuscript Number: IWA-3359 pp., Montreal, Kanada, 19-24. Eylül. 2010.
- K. Yapsakli, F. Çeçen, "Natural Organic Matter: From Source to Tap" "Optimization of ozonation for the production of biodegradable dissolved organic carbon (BDOC) in Ömerli Reservoir Water", 331-337 pp., Bath, England, 2-4 September 2008.
- 7. B. Mertoglu, **K. Yapsakli**, F. Cecen, "Natural Organic Matter: From Source to Tap" bildiri kitapçığındaki "Detection of nitrifier population in BAC columns", 696-699 pp., Bath, England, 2-4 September 2008.
- 8. B. Mertoglu, **K. Yapsakli**, B. Ozdemir, "Specialised Conference on Microbial Population Dynamics in Biological Wastewater Treatment Plant" "Evaluation of long term nitrification and denitrification activity in a full-scale oxidation ditch sytem", pp., Aalborg, Denmark, 24-27 May 2009.
- 9. **K. Yapsakli**, F. Cecen, "Micropol and Ecohazard Conference" "Adsorption and desorption of natural organic matter onto several granular activated carbon types", 552 pp., Frankfurt/Main, Germany, 17-20 June 2007.
- 10. **K. Yapsakli**, F. Cecen, "IWA World Congress" "Use of different granular activated carbons (GAC) in drinking water treatment", Manuscript Number: 604977 pp., Beijing, China, 10-14 September 2006.

# Conference Proceedings (Turkish)

1. **K. Yapsakli**, S. Yiğit, A.G. Yilmaz, B. Mertoglu, Türkiye'de Çevre Kirliliği Öncelikleri Sempozyumu konferansı dahilinde "Türkiye'de Çevre Kirliliği Öncelikleri Sempozyumu" bildiri kitapçığındaki "Zeolit dolgulu filtrelerde Anammox kültürünün yetiştirilmesi", 378-382 pp., Gebze, İzmit, 28-29 Mayıs 2009.