Melike Dizbay-Onat, Ph.D. 1/6

capture"

This study focused on reduction of carbon footprint and VOCs from industrial emissions. Several methods have been investigated to prepare activated carbon composites from natural fibers. Physical adsorption properties of activated carbon composites including porosity, SEM and adsorption capacity measurements have also been obtained.

Master of Electrical Engineering, Electrical and Computer Engineering

2008

Auburn University Auburn, AL

Advisor: Dr. Hulya Kirkici (Professor) *GPA:*

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RESEARCH EXPERIENCE

Graduate Research Assistant

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Lab Instructor December 2014 -

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Posters & Presentations

Dizbay-Onat M., and Akscyn R., "UAB-CORD (Community OutReach Development) and GEAR UP-Birmingham (Gaining Early Awareness and Readiness for Undergraduate Programs) Collaboration, Poster Presentation, STEM Teaching and Learning Conference, Savannah, GA, March 2018

Dizbay-Onat M., and Akscyn R., "UAB-CORD (Community OutReach Development) and GEAR UP-Birmingham (Gaining Early Awareness and Readiness for Undergraduate Programs) Collaboration, Presentation, Postdoctoral Research Day, UAB, Birmingham, AL, February 2017

Dizbay-Onat M., Vaidya U.K and Lungu C.T, "Preparation and Characterization of Sisal derived Activated Carbon for Toluene Adsorption", Poster Presentation, Tennessee Valley Section of the American Industrial Hygiene Association Fall Conference and PDC, Knoxville, TN, October, 2014

Hassen A.A., **Dizbay-Onat M.**, Bansal D., Bayush T., Vaidya, U.K., "Thermal and Mechanical Characterization of Polypropylene Filled with Naturally Driven CaCO3 from Eggshell", Poster Presentation, Workshop on Thermal Analysis and Rheology of Polymeric Materials Birmingham, AL, May 2014

Dizbay-Onat M., Vaidya U.K. and Lungu C.T, "Natural Fiber and Egg Shell Based Activated Carbons for Industrial Emissions Minimization and Capture", Oral presentation, Deep South Center for Occupational Health & Safety Dillon – Carnahan Research Symposium, Birmingham, AL, April 2014

Dizbay-Onat M., Vaidya U.K. and Lungu C.T., "Preparation of High Microporosity Natural Fiber Derived Activated Carbon for Respiratory Application", Poster Presentation, 33th International Activated Carbon Conference, Orlando, FL, February 2014

Dizbay-Onat M., Vaidya U.K and Lungu C.T., "Effects of Carbonization and Activation Parameters on Natural Fiber Derived Activated Carbons", Poster Presentation, NSF-The Science and Technology Open House, Montgomery, AL, February 2014

Dizbay-Onat M., Vaidya U.K and Lungu C.T., "High Porosity Activated Carbon Derived From Natural Fibers For Respiratory Filter Application", Poster Presentation, International Porous and Powder Materials Symposium and Exhibition, Izmir, Turkey, September 2013

Dizbay-Onat M., Vaidya U.K., Floyd Evan and Lungu C.T "Preparation of High Microporosity Natural Fiber Derived Activated Carbon for Respiratory Application", Poster Presentation, NSF-The Science and Technology Open House, Montgomery, AL, April 2013

Dizbay-Onat M., Vaidya U.K., Floyd Evan and Lungu C. "Preparation and Characterization of Sisal Derived Activated Carbon for Respiratory Protection Applications", Poster Presentation, AIHce 2013, Montreal, Canada, May 2013

Dizbay-Onat M., Vaidya U.K., "Natural Fibers and Egg Shells Waste for Filtration Products", Presentation, NSF Workshop on Emerging Technologies for Sustainable Green Materials and Products, UAB, Birmingham, AL, July 2012

Dizbay-Onat M., Vaidya U.K., "Carbon Dioxide Capture using Eggshell based Activated Carbons", Poster Presentation, NSF-Science and Technology Open House, Tuskegee University, AL, April 2012

Dizbay-Onat M., Brown D., Onat L., Roy L., Ghossein H., "Carbon Dioxide Capture using Eggshell based Activated Carbons", Presentation, Graduate Student Research Day, UAB, Birmingham, AL, February 2012

Dizbay-Onat M

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RESEARCH FUNDING

NSF EPSCoR RII Track-4: Internal Competition, A Novel Method for Preparation of Activated Recycled Carbon Fiber Mats for Carbon Dioxide (CO₂) Filtration, Role: **PI**, 2020, Submitted.

EPS1158862 - NSF EPSCoR Graduate Research Scholar Program (GRSP) RII- Nano and Biomaterials Thrust, Round 9 Recipient, Natural Fiber and Egg Shell Based Activated Carbons for Industrial Emissions Minimization and Capture, Role: **PI**, 2014

EPS1158862 - NSF EPSCoR Graduate Research Scholar Program (GRSP) RII- Nano and Biomaterials Thrust, Round 8 Recipient, Natural Fiber and Egg Shell Based Activated Carbons for Industrial Emissions Minimization and Capture, Role: **PI**, 2013

EPS1158862 - NSF EPSCoR Graduate Research Scholar Program (GRSP) RII- Nano and Biomaterials Thrust Round 7 Recipient, Carbon Capture and Control of Industrial Emissions, Role: **PI**, 2012

2T42OH008436 - National Institute for Occupational Safety and Health (NIOSH),

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2006 Auburn University Regional Science Olympiad Tournaments, Appreciation Award
2003-2008 Auburn University, Teaching Assistant (full tuition waiver) Award
1996-2000 TCMB- Central Bank of the Republic of Turkey Undergraduate Scholarship Award
2000 Balikesir University-Turkey, Third Highest Undergraduate GPA Award

PROFESSIONAL ACTIVITIES AND SERVICES

Reviewer: Journal of Inorganic and Organometallic Polymers and Materials Composites Part B