

ENVIRONMENTAL MANAGEMENT

A S S O C I A T I O N

1ST QUARTER / 2020 NEWSLETTER

PRESIDENT'S CORNER [LARRY RUSSETTE, PRESIDENT]

Happy New Year!!! As we enter 2020, I would like to take a moment and thank all the efforts by the 2019 board. We had an active year and have laid a great foundation for future success. I would also like to thank Nancy Kapral and Trish Wanamaker for their efforts in keeping us going. The work they do behind the scenes does not go unnoticed, and is greatly appreciated by us all. We are also entering 2020 with a new Vice President on the Board, Mike Logan of Michigan Consulting & Environmental. Mike joined the board at the end of 2018 and has been a huge supporter of our organization for some time. His insights and help on the 2019 Board lead to a unanimous vote on his nomination to Vice President.

All of our events of 2019 proved to be greatly successful, with our Science Fair Success mentoring program in November rounding out the year. This is the third year we partnered with the Science & Engineering Fair of Metro-Detroit, and each year has been better than the last. The involvement of our volunteer mentors is what inspired us to expand our membership options to Individuals and Students, with benefits catered specifically to each. More details on both of these membership types will roll out during this first quarter of the year.

There is great excitement with this new Board and our upcoming non-profit designation change. This has been an uphill battle for the past year with the designation change with MANY obstacles and hoops in our way to get through. We firmly believe that this will be a game changer for the growth of our organization and benefit offering to members and our science educational activities.

The future is BRIGHT for the EMA.

Thanks for your continued support and let's make 2020 an incredible year!!

SCIENCE FAIR JUDGING **UPCOMING** Wednesday, March 11 EVENTS

8:00am COBO Center

EMA BOARD MEETING IMMEDIATELY FOLLOWING All judges welcome to join for lunch & meeting

EAA NOMINATIONS

DUE BY MARCH 1 submit your nominations online at http://emaweb.org/events/eaa/

BOARD OF DIRECTORS

LARRY RUSSETTE, President CUSTOM ECOLOGY, INC. Ijrussefte@outlook.com

MIKE LOGAN, Vice President MICHIGAN CONSULTING & ENVIRONMENTAL mlogan@michenv.com

JOE ZEHETMAIR, Treasurer PPG Industries zehetmair@ppg.com

CHELSEA MILLER, Secretary MARINE POLLUTION CONTROL cmiller@marinepollutioncontrol.com

KEVIN O'MARA MIDWEST ANALYTICAL SERVICES kevin@e4mas.com

JEANA GARCIA-MOIR ADVANCED UNDERGROUND INSPECTION, LLC jeana_aui@yahoo.com

VICKIE LEWIS VMX INTERNATIONAL, LLC vlewis@vmxi.com

MARY LEMM US ECOLOGY mary.lemm@usecology.com

KEVIN TURNER PROS SERVICES, INC. kevin@prosenvironmental.com

MIKE FAVOR ENERGY RENEWAL PARTNERS mfavor@energyrenewalpartners.com



SCIENCE FAIR SUCCESS: 2019 A SUCCESS

[TRICIA WANAMAKER, EMA EXECUTIVE DIRECTOR]



For its third year in a row, the EMA held its annual Science Fair Success: Mentorship Program in conjunction with the Science & Engineering Fair of Metro-Detroit. The partnership began in 2017 when SEFMD member Tim Fino offered their partnership in helping expand the EMA's annual mentoring event. Science Fair Success is a two-part event wherein students first learn the

ins and outs of constructing a proper science fair project, and later have the opportunity to interact with industry professionals—our volunteer mentors—to discuss their project ideas and get inspired. Each year we have more participants, including return students who are excited to attend.

No part of this event would be possible if not for our volunteer mentors. Our volunteers come from a range of backgrounds from engineering to chemistry to waste management, all of which provide students with different perspectives and approaches to science. This event also would not be possible if not for our sponsors, whose support is what helps make this event so memorable and exciting for all involved. THANK YOU to all who supported our 2019 event!!

CONTINUED ON PAGE 6





ADVANCED UNDERGROUND INSPECTION http://www.auinspection.com

AEVITAS SPECIALTY SERVICES https://www.aevitasdetroit.com/

BIO-CHEM LABORATORIES, INC. http://www.bio-chem.com

BROWN & BROWN COMMERCIAL INSURANCE & RISK MANAGEMENT http://www.bbdetroit.com

BUTZEL LONG of BLOOMFIELD HILLS http://www.butzel.com

> DTE ENERGY http://www.dteenergy.com

ENERGY RENEWAL PARTNERS, LLC http://www.energyrenewalpartners.com

ERG ENVIRONMENTAL SERVICES http://www.ergenvironmental.com

> ENVIROSOLIDS LLC http://www.envirosolids.com

GOODWILL GREENWORKS http://www.goodwillgreenworks.com

H.M. ENVIRONMENTAL SERVICES http://www.hmenvironmental.com

> HEALTHMARK INDUSTRIES http://www.hmark.com

> > ITC HOLDINGS CORP. http://www.itc-holdings.com

> > K2-KM PLANT SERVICES http://www.k2industrial.com

M.L. CHARTIER, INC. http://www.michartier.com

MARINE POLLUTION CONTROL http://www.marinepollutioncotrol.com

MICHIGAN CONSULTING & ENVIRONMENTAL

MIKE ALBU SENIOR CONSULTANT MLA Consultants LLC

MIDWEST ANALYTICAL SERVICES http://www.midwestanalytical.com

THE ELECTROCOAT "CLOSED-LOOP" PROCESS CONSERVES PAINT, WATER, AND ENERGY

[JOE ZEHETMAIR, PPG INDUSTRIES]

Modern automotive bodies have a much greater resistance to corrosion than their counterparts of 50 years ago. Much of this increased corrosion resistance is due to a paint layer that is referred to as electrocoat, ecoat, or elpo. Electrocoat is applied through an immersion process whereby a grounded vehicle body is submerged into a tank of positively charged paint. Due to the opposite nature of the charge on the vehicle and the paint, the paint is drawn towards the vehicle body and ultimately creates a smooth coating on the exterior, interior and in the cavities of the vehicle. Once coated, prior to entering a bake oven, the excess paint is rinsed off the vehicle body with a solution that is derived from the paint itself, known as permeate. Once applied, the permeate and excess paint solids are recycled back



into the electrocoat tank for reuse. This "closedloop" process allows for process efficiency, cost savings and water and energy conservation. In order to maximize all the benefits of a closed-loop system, a high permeate flow rate is necessary.

Permeate is produced by passing the electrocoat paint through a bank of ultra Itration (UF) membranes. The membranes Iter the liquid (permeate) out of the paint and return the paint solids back to the tank. Over time, these membranes become fouled with paint solids and lose their ef ciency to generate the needed permeate output (ux). Once the ux degrades to an unacceptable level, incomplete rinsing allows unused paint solids to exit the closed-loop potentially increasing the unit cost, affecting the appearance, and potentially affecting the electrocoat Im performance. To regain the appropriate ux, the membranes either need to be replaced or cleaned. If done properly, the most economical solution is to clean them.

CONTINUED ON PAGE 5

2020 MEMBERSHIP

MLA CONSULTANTS, LLC

NATIONAL INDUSTRIAL MAINTENANCE https://nimmi.com/

PPG INDUSTRIES, INC. http://www.ppg.com

PROFICIENT TRAINING & CONSULTING http://www.proficienttc.com

PROS SERVICES, INC. http://www.prosenvironmental.com

SCHULTZ, INC. http://www.schults-inc.com

SOMNIO GLOBAL, LLC http://www.somnioglobal.com

UNIVERSAL WASTE SERVICES

USHER OIL COMPANY http://www.usheroil.com

VESCO OIL CORPORATION https://www.vescooil.com/

VMX INTERNATIONAL, LLC http://www.vmxi.com

WASTE MANAGEMENT OF MICHIGAN https://www.wm.com

ZERVOS INSURANCE GROUP http://www.zervosgroup.com



NEW MEMBERSHIP TIERS: STUDENT & INDIVIDUAL [TRICIA WANAMAKER, EXECUTIVE DIRECTOR]

As we enter a new year and a new decade of the EMA, we are excited to continue branching out both externally with our education and recognition-oriented events, and internally with what we offer to our members. We have had an increasing interest on an individual level with people interested in volunteering with the EMA and getting involved in our outreach events such as the Science Fair Success and science fair judging for our scholarship program.

This quarter, we are introducing two new membership offerings: Individual and Student. Individual memberships are ideal for those who wish to support the EMA and our events but may work in a field unrelated to environmental or STEM-focused industries, may not be associated with a company, retired or otherwise. These members will receive the same treatment as our company members on an individual level.

Our Student memberships are intended for undergraduate and graduate students involved in environmental and STEM-related studies. We have had an increasing number of student mentor volunteers over the past several years, as well as students attending our enviroCHAT events last year. We want to create an arena for these students who wish to get their name out there in the industry, offer a space on our website to share research opportunities they may be involved in or seeking, give them a platform to meet and mingle with people, and ultimately build relationships with major universities in Michigan.

While we are still working through the logistics of the student membership to ensure its value is at maximized potential, we are excited to begin spreading the word and building relationships with more people and universities in the industry. Stay tuned for more information as we roll out these new memberships in 2020.

FOR MORE INFORMATION

on becoming a member, please contact Tricia Wanamaker at emadirector@gmail.com or visit our website at http://www.emaweb.org

THE ELECTROCOAT "CLOSED-LOOP" PROCESS (cont.)

PPG not only formulates and supplies electrocoat paint but also an entire line of paint cleaners and purge solvents, leveraging their intimate knowledge of paint chemistry. The PPG ChemKleen 39 Series of products have been formulated and optimized especially for various electrocoat cleaning applications. In particular, the new CK39ABZ is specifically designed for quick, thorough membrane penetration, resulting in a faster cleaning cycle, using less solvent, more sustainable content and requiring less rinse water when compared to traditional cleaning products. Customers that have used CK39ABZ have been extremely pleased,

reporting high flux recovery, and significantly extended membrane service life as compared with other products and processes (even those provided by membrane suppliers).

The same concept that allows CK39ABZ to more effectively penetrate spiral membranes also becomes an advantage for electrocoat tank and system cleaning (commonly referred to as boilouts). The synergistic blend of surfactants quickly



penetrates uncured electrocoat build up and solubilizes resins to release paint solids more effectively than competitive products. Due to ChemKleen CK39ABZ's reduced residual acidity, less time and water is needed to adequately rinse prior to refilling the system. This translates into reduced downtime and increased productivity.



For more information on the unique cleaning products that PPG can offer, please contact a PPG Services Product Manager at (888) 868-4423

DO YOU HAVE AN ARTICLE TO SHARE?

We are always looking for interesting information to share with everyone, be them articles, infographics, news stories, member company highlights, etc.

Please send submissions via e-mail to emadirector@gmail.com

SCIENCE FAIR SUCCESS: 2019 [cont.]

For more photos from our 2019 program, visit us on the web at http://emaweb.org/events/science-fair-success/ or check us out on Facebook!!





THANK YOU to all our volunteer mentors

LIKE US ON FACEBOOK

Find us by searching Environmental Management Association - EMA and Like our page to stay up to date!!









EARTH DAY IS EVERY DAY

We love hearing from our members!

Please feel free to send us information about your business and what strides you are making in environmental sustainability, information on upcoming events in the professional community, or any interesting articles related to green practices and environmental sustainability.

Please e-mail all inquiries to Tricia Wanamaker at emadirector@gmail.com

The purpose of the EMA is to establish and maintain an active information exchange between government and industry professionals involved with environmental management to arrive at solutions to environmental issues within a framework of ethics appropriate to the environmental field. The EMA believes in and supports the application of integrity, common sense, sound sciences, and fiscal responsibility in all matters affecting the environment.