

Bionetix® Newsletter

February 2021

Celebrating 10 Years as Part of the Cortec® Family!

For those of you who may not receive the BioCortec® newsletter, we wanted to note an important milestone for Bionetix® International: 10 years of being with Cortec® Corporation!

Bionetix® joined the Cortec® family on November 10th, 2010, allowing Cortec® Corporation, a specialty company that focuses on corrosion inhibitors for industrial rust prevention, to reach its third technological platform of biotechnology to harness natural mechanisms for environmental cleanup, wastewater treatment, agricultural enhancement, and more!

A look at the last ten years reveals several exciting areas of growth for Bionetix®!

- Our reach has expanded in the U.S., Latin America, Asia, and Europe
- Our new products have grown the Bionetix® lineup by 20%
- Our Quality Management System has upgraded from ISO 9001:2000 to the latest ISO 9001:2015
- Our website has been freshly redesigned and is more user-friendly
- Our product data sheets are now available in more languages
- We have hosted two World Sales Meetings (2013 and 2015)
- We now have a biannual newsletter!

On behalf of Bionetix® International, Office Manager Monica Yang offers hearty thanks to all of you, our Bionetix® Friends & Family: "Thank you for supporting and inspiring us in all these years. Your satisfaction is what motivate[s] us to continue."

Here's to another 10 years of growth together!



10
YEARS
ANNIVERSARY





BIONETIX® NEWS

New Bionetix® Biotechnology Article Published in Pumps & Systems Magazine!

We are excited to share a new Bionetix® article that was published in the October 2020 edition of Pumps & Systems magazine!

The article, entitled “When Concentrated Waste Calls for a Concentrated Attack,” points out that specialization and mass production can have many benefits but also lead to problematic side effects, especially true in the food industry where high organic waste loading can slow down biodegradation and generate bad odors and waste discharge fees.

It goes on to describe how biodegradation of waste works and how problems can be remedied by the addition of specialty nutrients and microorganisms to get wastewater effluents into balance. The article looks at some of the specific challenges in treating wastewater from the processing of vegetable, fruit, starch, and high-fat food waste and shows photos documenting the effect of biological treatments on a wastewater aeration tank and a grease trap.

The article is a great way to introduce your customers to the benefits of biotechnology or simply to give yourself a refresher for the next time you are networking with your contacts in the food and beverage or wastewater treatment industry. Read it for yourself here: <https://www.pumpsandsystems.com/when-concentrated-waste-calls-concentrated-attack>



Specialty Chemical Distributor Switches to Bionetix® for Better Service

A specialty chemical company recently decided to start sourcing its biological cleaning concentrates and I&I (industrial and institutional) products from Bionetix® after experiencing unsatisfactory customer service from another company that sourced competitor products. The competitor's distributor had been sold and was providing subpar customer service. Deliveries were taking longer and becoming more expensive from the U.S. to Canada. The specialty chemical company reached out to Bionetix® for alternatives after connecting at a trade show. They liked the Bionetix® product line and decided to replace their previous supplier with cleaning products from Bionetix®, who was much easier to work with and also was located in the same country.

We are honored to welcome this new Bionetix® distributor and look forward to supporting them and other distributors with the best customer service and product quality we can provide!

If you are interested in learning more about our line of “green” cleaning additives and concentrates, click here and feel free to give us a call or email to discuss options: <http://www.bionetix-international.com/products/additives-and-concentrates/>



Soil Bioremediation Experiment in Bulgaria

An oil and gas extraction company and one of Bionetix's distributors teamed up in mid-2019 to do an experimental bioremediation treatment on a pile of soil contaminated with hydrocarbons at its site in Bulgaria. Although testing of contaminants was interrupted due to COVID, available data showed an immediate drop in petroleum contamination from the initial measurements of approximately 39,574 mg/kg, with levels nearing the project's goal (5,000 mg/kg) by November 2020.

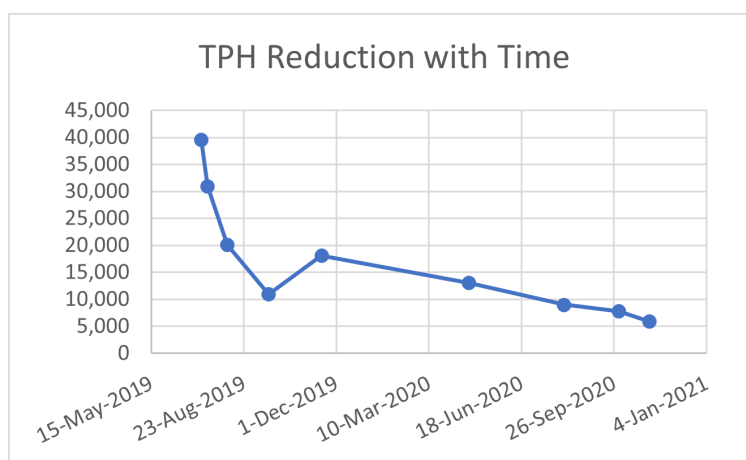


Application

Soil moisture was adjusted as necessary and extra nitrogen and phosphorus were added to the soil to feed critical microorganisms that perform biodegradation. The soil was aerated when needed, and other organic nutrients and surfactants (BIOSURF™) were added together with BCP35S™, a bioremediation product containing microorganisms specially suited to degrading hydrocarbons. The product was diluted and sprayed on the pile of soil three times in 2019: July 8th, August 5th, and September 9th.

Measurement

TPH (total petroleum hydrocarbon) levels were periodically measured according to ISO 16703-2004 – Soil Quality, a method that determines the content of hydrocarbons in the range of C10-C40 using gas chromatography. Phenanthrene and naphthalene had been the most common contaminants found in soil samples provided by the oil and gas company, and after the first month of treatment, these were almost gone.



Success in Spite of Challenges

Testifying to the fact that bioremediation is sometimes an art, the last treatment was deemed unnecessary after a spike in TPH was recorded, which could be due to a variety of reasons including a false positive or even an increase in shorter chain hydrocarbons due to the desired degradation of longer chain hydrocarbons into smaller pieces. TPH continued to decline following the spike. Unfortunately, testing was temporarily interrupted due to COVID and later to freezing temperatures in the winter. However, as of November 2020, TPH values were nearing the goal of 5000 mg/kg and showed a significant TPH reduction of approximately 85% since the start of the trial. We look forward to seeing further improvements when testing restarts.

Results From Experimental Soil Treatment in Bulgaria

Date of sampling	Name of index	Unit of quantity (% reduction)	Test results	Conditions of examination
July 08, 2019 (begining)	Petroleum products	mg.kg ⁻¹	39 574 ± 1 588 (-----)	(21 ± 2) °C
July 15, 2019 (after 1 week)	Petroleum products	mg.kg ⁻¹	31 019 ± 1 214 (21 %)	(21 ± 2) °C
August 5, 2019 (after 4 weeks)	Petroleum products	mg.kg ⁻¹	20 043 ± 3 588 (49 %)	(20 ± 2) °C
September 19, 2019 (after 9 weeks)	Petroleum products	mg.kg ⁻¹	10 919 ± 816 (72 %)	(21 ± 2) °C
November 15, 2019 (after 17 weeks)	Petroleum products	mg.kg ⁻¹	18 049 ± 7 329 (-----)	(21 ± 2) °C
April 22, 2020 (in 50 weeks)	Petroleum products	mg.kg ⁻¹	13 049 ± 300 (67 %)	(21 ± 2) °C
August 03, 2020 (in 65 weeks)	Petroleum products	mg.kg ⁻¹	8 990 ± (77 %)	(21 ± 2) °C
October 01, 2020 (in 73 weeks)	Petroleum products	mg.kg ⁻¹	7 770 ± (80 %)	(21 ± 2) °C
November 03, 2020 (in 78 weeks)	Petroleum products	mg.kg ⁻¹	5 899 ± 900 (85 %)	(21 ± 2) °C

Bionetix® Opportunities in Latin America

We are excited about the growing demand for waste treatments in Latin America, especially Brazil. Our Latin America Sales Rep, Oscar Caceres, has been leading the way in exploring and developing these waste treatment opportunities. Here's a look at some of the virtual venues he has been making the most of during COVID limitations!

Learning From Canada-Brazil Wastewater Webinar

As Bionetix® works on expanding its reach to meet more aquaculture and wastewater treatment needs in Latin America, Oscar has been finding ways to take advantage of economic development opportunities facilitated by the Canadian government. One of these was a one-hour webinar on September 17th, organized by Investissement Québec International in conjunction with the Trade Commissioner Service and the Canadian Consulate General in São Paulo.

Oscar found the webinar to be very interesting as he listened to a group of five people from the Brazilian government and the Quebec office in São Paulo talk about regulations and the overall wastewater treatment market in Brazil. The overview discussed the following points:

1. Actual situation of water sanitation
2. Regulations
3. Main companies that deal with WWT
4. Ethic code to follow
5. Export and import goods
6. Brazilian business culture

Oscar was already familiar with much of the information but took the opportunity during the Q&A session to ask about biological treatments with companies that work with the government. He is looking forward to expanding opportunities in a nation where half of the people are still without wastewater collection and the country is looking for new ways to promote efficiency and reduce costs in wastewater treatment.

Exhibiting Leadership at Virtual WEFTEC Connect

Despite online conferences lacking the same dynamics as in-person conventions, Oscar was also ready to dive in to the virtual WEFTEC Connect event, October 5th-9th. He found a user-friendly online format that worked 100% of the time, introduced him to important resources for Canadian companies, and strengthened Bionetix's position in the water quality industry.

Oscar attended two presentations, "Opportunities and Best Practices for Doing Business in Latin America" and "Tapping into North America: Drivers and Technologies," and was able to meet key actors facilitating trade between Canada and multiple Latin American countries. He paid especially close attention to the Brazilian market, where there are important opportunities for involvement in the water/wastewater sector.

In the process of learning and making new connections, Oscar was also able to contribute to the conversation by speaking on Bionetix's bioremediation process. He received a positive response and noted that "everyone was happy to know that this technology is evolving and growing as a good alternative to conventional process[es.]" By participating in these types of events, Oscar believes that Bionetix® has already come to be known as a regular partner in the arena.

If you would like to learn more about opportunities to work with Oscar and wastewater treatment in Latin America, be sure to contact him at ocaceres@bionetix.ca.

UPCOMING EVENTS

We're probably all holding our breath to see how the year 2021 unfolds, but for now, we hope to see you in November at the ISSA North America Show! Mark your calendars now!

ISSA North American Show 2021
November 16th – 18th, 2021
Las Vegas Convention Center
Las Vegas, NV
Booth # 6609
<https://www.issashow.com>



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