

June 2023 FVEAA Newsletter

Fox Valley Electric Auto Association

The FVEAA is a Not-For-Profit Illinois Corporation and the Chicago-area chapter of The Electric Auto Association

This month's meeting is on Friday MORNING June 16, 2023
9:00 a.m. to Noon for those who have already signed up for the

Argonne National Lab tour.

There is NO EVENING Meeting June 16th

Location: Argonne National Laboratory >> for those registered Meet at the visitor center 9700 S. Cass Avenue, Lemont, IL 60439

Topic: FVEAA Monthly Meeting

Time: Fri June 16, 2023 8:30 a.m. check in at the Argonne Visitor Center

Tour starts 9:00 a.m. to Noon

Agenda

- 8:30 a.m. meet at Argonne Visitor Center 9700 S. Cass Ave. Lemont
- 9:00 a.m. Tour of Argonne = DON'T BE LATE!
- 30-45 min. Building 371 high bay.
 Dynamometer for testing vehicles, especially EVs.
- 15 min to move between building 371 and 300,
- 30 min at building 300 equipment for charging infrastructure development and standards work.
- Move to ATLAS
- Tour of Argonne Tandem Linac Accelerator System
- 12:00 NOON END

President's Words Jeff Miller

June Morning Meeting

The **June** meeting will be on FRIDAY **MORNING** 9 AM at **Argonne National Laboratory**, make sure you clear your calendar. See Bruce's post below for instructions on how to attend. I remember going to this many years ago and how much fun it was. Make sure you register in advance and follow the instructions. I registered the other day, and look forward to this outing.

May Meeting

Thanks to William McDaniel for bringing his electric drivetrain. He is making many of the parts to integrate the controller, contactors, and motor all in one beautiful package. His blog on the topic is:

http://evbimmer325i.blogspot.com/

I am sad I missed this presentation. William has spent years building various parts around Netgain motors, and while he has given us a glimpse of things in the past, this should be an exciting presentation showing a very tidy product.

Thanks to Simon for the overview of CAN bus.

Rental Tesla in Seattle

After the discussion in the April meeting about renting Tesla's from Hertz, I rented a Tesla from Hertz at the Seattle airport. While Hertz will rent a Tesla at other locations, the price is MUCH higher. At SeaTac, it was \$250 a week before taxes and fees. Officially the free charging ended at the end of March, however I still haven't been charged for the Tesla charging I did while on vacation. It could still come through eventually of course, but it hasn't yet.

When I picked up the rental car I checked to see if it had it's charging kit, and it was missing it's J1772 to Tesla adapter. It has the 120 volt 15 amp charging kit, but nothing else. I went back and asked the person for the adapter, but they didn't have any. I eventually persuaded them to let me check the Tesla next to it, and they allowed me to use it's adapter. I will probably bring that adapter too next time I plan to do this.

I brought the CCS to Tesla adapter with me so I could take advantage of CCS stations as required. The TSA did dig it out of my bag to see what that giant chunk of metal was, which didn't surprise me. On the way home I put it in the bin with my wallet and phone. I did use the CCS adapter as there was a 62.5KW Chargepoint station 0.6 miles from the place we were staying that was only 10 cents per KWH. I pulled 135 KWH from that station.

We drove about 1000 miles in the 10 days we were there. I used J1772, CCS and Tesla Superchargers. At one point we stayed in Forks WA, which was very amusing to my wife, as the Twilight book series was set there. The Bed and Breakfast we stayed at didn't have charging, so I got to work on the owner and that night he ordered a WallBox charging station and the kit to make sure it didn't overwhelm his service. Of course it wasn't installed while I was there, but many others will enjoy it in the future. If you ever find yourself looking for a place to stay in Forks check Miller Tree Inn in Forks WA. I am not related in any way to this inn, regardless of the name on the sign, but I did have a small part to do with it having a charging station.

My rental was a Model 3 Standard Range, and I was impressed with the car in a couple of specific ways. It was quieter than my 2020, and it charged pretty fast for a standard range car. I didn't feel like it lacked range compared to my car, it certainly had a bit less, but it wasn't noticeable for the regional driving I was doing. It was surprisingly fast to get all the way to 100%. My car slows down quite a bit above 90% where this car kept moving pretty well even up to 95 or so. Kyle pointed out that all Tesla Model 3's now get the full \$7500 tax credit, and that makes for a pretty compelling deal if people are in the market for a Model 3.

The downsides of it being a rental, no data plan, no app access, and required to use the keycard for everything. The data plan was most noticeable because it wasn't aware of the Seattle traffic. That required someone to fire up nav on a phone to make sure we weren't driving into a wall of stopped traffic. The app access meant I had no idea if the car was done charging or not, or what

it's status was at any time. The app access is also handy as it makes it easy to find your car when you park it in a strange city. Using the massive key card as a key is pretty terrible, and on top of that it's in a thick plastic thing. You have to use it to lock and unlock the car, and of course start it if you didn't hit the brakes right after unlocking it. I would still do it again though. The other down side is it wasn't a performance model, but that is asking a bit much!

Vice President's Words

Tracey McFadden

I have some good news and some bad news for all things EV in the State of Illinois. First, two items of good news:

- 1. The recently signed budget for the state includes the EV charging act which requires EV capable parking spaces for all new single-family homes and newly constructed or renovated multi-unit residential buildings.
- 2. The Illinois EPA announced \$12.6 million is being awarded to 10 applicants for electric vehicle (EV) charging infrastructure. The grants will fund 348 new Direct Current Fast Charging (DCFC) ports at 87 locations throughout Illinois. These grants were made possible after the Pritzker Administration committed to focus Illinois' remaining VW Settlement allocation on electric transportation and infrastructure.

Now for the bad news: The original Illinois Climate and Equitable Jobs Act allocated \$17.9 million for the electric vehicle rebate program. However, recently the number of applications requesting the \$4,000 off the price of their new EV exceeded the available funding amount. This year's budget for this program was reduced to \$12.5 million.

Tom Coleman and I will be giving a two hour talk on electric vehicles later this month at Waubonsee Community College as part of their lifelong learning program.

Finally, I am eagerly looking forward to attending this month's Argonne National Lab Tour with the FVEAA. I'm sure this will be an exciting and rewarding experience. I'm also looking forward to seeing all of you in July when we will meet outside in the Pavilion at Wheeler Park in Geneva.

Stay Charged! Tracey

JUNE 16, 2023 MEETING AT ARGONNE NATIONAL LABORATORY

Bruce Jones

Our Friday **JUNE** 16th Meeting will be a morning 3 hour tour of Argonne National Lab.

We will NOT be having an evening meeting!

Aim to Arrive at 8:30 a.m. and tour is 9am - 12pm.

The tour starts promptly at 9 a.m. so don't be late.

Wear long pants and closed toe shoes! Bring a Real ID or Passport!

Current List of Attendees registered per Argonne as of 6/11/2023

(Duplicate names will be fixed during check in, at the visitor center when you get your visitor pass)

Belovicz, Martin Charles Bergman, Stephen Ross

Bergman, Stephen Ross Bergman, Stephen Ross Bergman, Stephen Ross Brainard, Andrew A Brezina, Douglas P Coleman, Coleman Fuller Coleman, Thomas f Gibson, Simon Martin Gibson, Simon M Hirschberg, Richard E Howell, Joseph W Johnson, Kenneth R Johnson, Raymond H Jones, Bruce L Kitch, Alfred Lynn Martinson, David A McFadden, Tracey Erskine Miller Jeffrey Scott **Moravek Michael Joseph** Platt, Kyle J Stillman, Maureen J Velazquez Olivera, Ana G Young, Christopher Robert Young, Phillip D

EV and Charging Research - Mike Duoba, who works at Argonne, hosted part of the tour in 2015 and is a former FVEAA member who will lead us on the custom half the tour with the EV, Battery and High Speed Charging areas includes Building 371 high bay with vehicle dynamometer for testing all kinds of vehicles especially EVs, and Building 300 with equipment for charging infrastructure development and standards work.

We'll see their 350 kW charging station as well.

Then we'll tour another area of the Lab, the national facility for nuclear structure research, the **Argonne Tandem Linac Accelerator System (ATLAS)**, the world's first superconducting linear accelerator for heavy ions at energies in the vicinity of the Coulomb barrier.

Thank you for your interest in touring Argonne National Laboratory! Argonne can host the Fox Valley Electric Auto Association members on Friday, June 16th, 2023, from 9:00 a.m. until 12:00 p.m. Please read this email in its entirety as it contains important information on your upcoming visit. We will be requesting an Argonne bus for transportation on-site as you will be arriving via personal vehicles. Note required tour attire: long pants and flat, closed-toed shoes; no sleeveless shirts.

We already have a group of 20 participants registered. For everyone else we'll see you in July.

- All visitors, 18 and older, must present a REAL ID compliant driver's license or passport to be issued a gate pass. For acceptable identification please click https://www.anl.gov/site-entry-requirements
- 2. Visitors should have registered their name as it appears on their photo I.D.
- 3. There is an approval process for non-U.S. citizens, including legal permanent residents, that can take up to seven to ten business days. Copies of INS documents, such as permanent resident card or passport, visa, and any supporting documents, if applicable, can be uploaded directly in the visitor registration form.

Everyone must prominently display their pass while on-site and all vehicles entering the site

are subject to search.

Argonne's Code of Conduct sets expectations for everyone in the Argonne community. Please click here to review Argonne's Code of Conduct before your visit.

DIRECTIONS

The tour guide will meet our group at 9:00 a.m. at the Argonne Information Center which is located off Northgate Road. We will start promptly at 9:00 a.m. so please provide ample time when arriving at the Lab as we cannot guarantee a tour outside of the confirmed time.

The Laboratory is located at South Cass Avenue & Northgate Road, Lemont, Illinois - from I-55 take exit 273A (South Cass Avenue) to Northgate Road (main entrance); follow Northgate Road to the Argonne Information Center. Note: Northgate Road is approximately ¼ mile from I-55.

>>Use the Visitor center address 9700 S. Cass Avenue, Lemont, IL



Gibson's Garage Simon Gibson

This month I took a mini vacation in Cincinnati. While we were there we visited the Behringer-Crawford Museum, https://bcmuseum.org One of the exhibits of particular interest was a display of advertising material for electric cars and a small overview of the history of the electric car:

Electric Vehicles

Today's modern electric vehicles, or EVs, are not the first attempts to create viable electric cars for the general public. Prior to innovations made by companies like Tesla, electric cars were among the very first automobiles produced during the late 1800s. During that period, electric vehicles possessed several advantages over their gas or steam counterparts. The electric motor was silent, easy to start up, and did not emit any exhaust. In comparison, early gas vehicles were loud, had long wind-up times, emitted heavy exhaust clouds, and required grimy motor maintenance. Electric cars could not operate long distances without replacing their batteries. They were very useful for short trips in urban environments where roads were the most developed. Electric vehicles

were commonly advertised for women or occupations that required frequent stops, like doctors. And, as electricity spread to more Americans, it became much easier to charge your vehicle. By 1900, electric vehicles accounted for one third of all vehicles operating in the United States.

The decline of electric vehicles came from several different factors. Gasoline cars gradually solved their problems with new inventions: in 1897, the muffler to solve the loud engine; and in 1912, the electric starter to easily start the vehicle. Henry Ford's introduction of the Model T and mass-produced vehicles made gasoline cars much cheaper. Oil discoveries also made gasoline a cheaper option. The expansion of infrastructure in the United States incentivized Americans to purchase gasoline cars that could travel long distances instead of electric. Similar to steam vehicles, electric vehicles steadily declined and disappeared by the end of the 1920s. However, recent environmental concerns, oil shortages, and the development of proper industries for electric vehicles in the twenty-first century have caused a resurgence in electric vehicle manufacturing.

My photos can be viewed here:

https://photos.app.goo.gl/ftm6KPBuRXV9DCUk8

Upcoming EVents - Spring 2023

Rich Hirschberg

EVENT 1:

The 6th Annual Summer Celebration Car, Truck & Cycle Show

A fund-raising event for the local VFW Post 5151 and the Schaumburg Township Food Pantry

The Schaumburg Home Depot

Sat., July 22nd, 10:30 am to 3: 30 pm

100 Barrington Rd., Schaumburg, IL

Bigger & better than last year (weather dependent)

5 food vendors, custom trophies, door prizes, silent auction, music, Home Depot vendors, contractors and charity partners

RAIN DATE: Sat., July 29th

Website: www.HomeDepotVehicleShow.weebly.com

EVENT 2:

Cary United Methodist Church Annual Car Show

Sat., July 29th, 9:30 am to 1:30 pm

500 First St., Cary, IL 60013

Local food vendors, games, family fun, judging, and awards

For more info, contact Bob Baker - 847.525.5348

Take care,

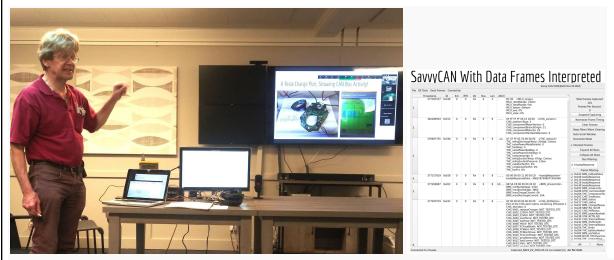
Rich Hirschberg - FVEAA Outreach Director

EVENT 3

National Drive Electric Week Northern Event Sat. Sept. 23 - Rich Hirschberg Stay tuned for location and times

EVENT 4

National Drive Electric Week Southern Event Sat. Sept. 30 Fox Valley Mall - Marty Belovicz and Bruce Jones. Stay tuned for location and times



Simon Gibson presents - a Trip on the CAN BUS.

SavvyCAN with Data Frames Interpreted



Ray describes his (wife's) beautiful Rivian SUV.

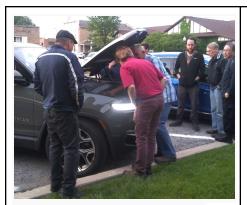


Simon Gibson's Toyota RAV4 Electric





Dr. William McDaniel describes the many components he makes and sells for the BMW drop in drive train.



The group checking out Ray's wife's Rivian SUV



Chris Sharp and his Chevy BOLT - being interviewed by Board Member Rich Hirschberg

FVEAA business cards available!

Ted Lowe

See one of the officers to get some cards to hand out to people at various EVents and daily life to promote EVs and our organization!

Fox Valley Electric Auto Association

PO Box 214 Wheaton, IL 60187-0214 630-260-0424 contactfveaa@fveaa.org

Free Yourself From The Pump



Join Us and Discover How!

Check <u>fveaa.org</u> for details about our **monthly meetings!**



Login to our FVEAA website for access to lots of member-only tools!

Ted Lowe

Hi Folks, If you haven't logged in to our website already, please check your email for instructions and login to check it out! Please let me know if you have any questions. Thanks!



Website Registered User Statistics

Statistic	Value
Total Users	103
Users Never Logged In	36
% Active Users	65.0%
Ave. Days Since Last Visit	581.9 days

FVEAA On Facebook - Join Us! Like Us!

Ted Lowe

The **FVEAA Facebook group** has 119 members as of 1/17/22! If you're on Facebook but not in the group yet, please join us! If you're not on Facebook yet, please consider joining so you can join our group there. This group supplements our forums because it is much easier to use, read, post pictures and videos and get notifications. Please let me know if you have any questions/comments/suggestions. Hope to see you there! https://www.facebook.com/groups/889497691136309/

Here is the FVEAA's Facebook Page. Like Us!

https://www.facebook.com/FoxValleyElectricAutoAssociation

FVEAA On YouTube - Check out our videos!

Ted Lowe

The **Fox Valley Electric Auto Association** has a YouTube channel! Subscribe to us and check out our videos! We've had this channel for many years but we're going to start using it more to attract new members and promote EVs. Please let me know if you have some FVEAA-related videos to post.

https://www.youtube.com/channel/UCg Pgp6q-HEuMICWMO2akPw

We currently have **68 active paid-up** members. Many members have taken advantage of the multi-year renewals offered by the new website! **Please renew** & recruit new folks!!!



FVEAA Membership Report

as of 2023-06-14 04:58:09

Count of Members by Type

Membership Type	Count	Paid Up
Business	1	
Charter Business	1	1
Family	4	4
Individual	64	61
Lifetime	2	2
Totals	72	68

Other Statistics

Statistic	Value
% Paid Up	94.4%
Avg. Paid Up Days	372.3 days
% With Email	97.2%

Encouraging Our Membership To Grow and Some History

Ted Lowe

We are growing! We live in a large metro area with 8 million people and EVs are the latest buzz so we should be able to grow the FVEAA! Please invite your friends, neighbors, family, colleagues, etc. to FVEAA meetings and EVents. Volunteer to attend EVents on behalf of the FVEAA (with or without an EV)! Your ideas on how to help grow the FVEAA are welcomed at any time, thanks! Howard Hansen had a great idea... giving an FVEAA membership as a gift!

Here is a time-varying graph of our membership size from 2007 to now. Note that we peaked at 255 members in October 2008 when gas was nearing \$5 per gallon. We were also attending lots more invitational EVents with our converted EVs. The first Tesla Roadster was just coming into being. **Let's get out there and grow the FVEAA!!!**

FVEAA Paid Up Members as of June 14, 2023 1:07pm



Members: Minimum: 46 on 2019-11-12, Maximum: 255 on 2008-10-28, Latest: 72 on 2023-06-14

Monthly Treasurer Reports

Ted Lowe

As Treasurer, I am publishing a brief Treasurer's Report to our forums around the time our monthly newsletter is published.

I am publishing our various cash balances (Money Market, Checking, PayPal) to this location: FVEAA Committees > Finance > Treasurer Reports

This area of the forums can only be seen by FVEAA members. As an IL Non-Profit corporation, we have no requirement to publish our assets or financial statements publicly.

Feel free to contact me if you have any FVEAA financial matters to discuss.

Membership Renewals

Ted Lowe

Our membership system sends out "renewal reminder emails," before your membership is due. You will receive up to 3 before being marked "not renewed" (inactive). The sooner you renew, the fewer emails you will receive:) So please pay attention to your email from the FVEAA and renew online using this link (for the easiest approach for all of us):

https://www.fveaa.org/renew

THANK YOU for your continued support of the FVEAA!

Meeting Minutes - May, 19 2023

Bruce Jones

- The FVEAA meeting started at 7:09 p.m.
- Secretary Bruce Jones and Board Member Rich Hirschberg hosted the meeting this month as President Jeff and Vice President Tracey were out of town.
- Bruce gave an overview of the adjusted meeting agenda

- Simon Gibson presented A TRIP ON THE CAN BUS Controller Area Network
 - Simon reviewed the CAN BUS communication system and how it works
 - He demonstrated how to communicate with the CAN Bus in his own EV
 - Including how to connect with a computer and the software needed to decode the CAN Bus signals
 - There are two pieces of software needed, available in the open source community on Github from a contributor, Collin Kidder (collin80)
 - GVRET Generalized Vehicle Reverse Engineering Tool firmware for Arduino Due based boards.
 - SavvyCAN a QT based cross platform CAN Bus tool that Collin developed in conjunction with EVTV.
 - Wow thanks Simon for the basics and technical presentation!
- Rich Hirschberg Upcoming Events
 - Rich gave an overview of the upcoming events this summer, plus indicated we are still going to sign up for the usual two National Drive Electric events
 - North Event Sat. Sept. 23rd (location to be determined)
 - and South Event Sat. Sept. 30th (Fox Valley Mall)

BREAK - Tour of the EVs in the parking area

- This included a tour of a Rivian by Ray, a new visitor
- Dr. William McDaniel BMW Electric Drivetrain Components
 - William used to be a dentist in Chicago and he also had a specialty chemical company on the side.
 - He left dentistry and decided to focus on the specialty chemicals business
 - This includes providing Fluorine based chemicals that are used at Argonne National Labs to enhance the performance of EV batteries.
 - William showed us his Drop-in EV Drive Train components that he's been working on for several years - used to electrify BMWs.
 - The parts are used with NetGain Hyperdrive AC motors
 - William thanks for the excellent presentation!
 - Check out his post at https://evbimmer325i.blogspot.com/

The meeting ended at 9:00 p.m.

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Membership Form Ted Lowe

FVEAA Membership Application Form - Version 2014-01-01

Name:	
Address:	
City, State Zipcode:_	
Phone:	Phone Type: Home Work Cell
Email:	
Please check one:	New Member Renewal
How did you hear ah	out the FVFAA ?

Membership Types and Annual Dues (please circle one):

Individual	\$20
Business	\$100
Premier Business	\$250
Charter Business	\$500

Newsletter Delivery Type (please circle one): No Newsletter Electronic

Please make checks payable to "FVEAA" and postal mail it with this membership application form to:

FVEAA PO Box 214

Wheaton, IL 60187-0214

Attn: Membership

FVEAA Charter Business Members

Chicago Area Clean Cities

Samantha Bingham 2 N LaSalle St #950 Chicago, IL 60602

Email: <u>info@chicagocleancities.org</u>
Web: https://chicagocleancities.org



Chicago Area Clean Cities (CACC) is a 501(c)(3) not-for-profit working to promote the use of clean fuels for clean air in the Chicago area and throughout Illinois. Our coalition includes people from private business, academia, government, scientific research and energy and environmental services. Our main goal is to help with the adoption of cleaner transportation options.

FVEAA Business Members

EV Converters LLC

Rolly Waller 130 Windsor Park Dr, C121 Carol Stream, IL 60188 Cell: 630-865-5744

Email: rollywaller@gmail.com



EVC will become a Franchisor (when the US government approves the conversion rebate) to appoint Franchisees (eg, service stations, oil change shops, transmission shops, independent mechanics, etc.) to convert Internal Combustion Engine (ICE) vehicles to electric vehicles (EV).