# POLISH-AMERICAN ENGINEERS ASSOCIATION

FOUNDED



IN 1934

P.O. Box 241, Northbrook, IL 60065-241, USA • www.polishengineers.org

All members and friends of Polish-American Engineers Association are cordially invited to attend our meeting.

DATE:	Friday, February 19 <sup>th</sup> , 2021
TIME:	Business Meeting begins 8:00 p.m.; Presentation immediately following
PLACE:	virtual meeting via Zoom: <u>https://auburn.zoom.us/j/89740457576</u> Or Telephone: Meeting ID: 897 4045 7576 Dial: +1 312 626 6799 (US Toll) or +1 646 876 9923 (US Toll)
SPEAKER:	Mr. Michael Niedzinski
TOPIC:	Metallic Solutions for Aerospace and Space Applications



# Mr. Michael Niedzinski

In his role as Director of Standardization and Product Development Mgr. Defense Michael is responsible for the introduction of aerospace and defense related products and technologies, developed by Constellium Group to industry and government agencies such as MMPDS, SAE, AA and Air Force. These range from the latest aluminum structural components, the latest generation of aluminum alloys and manufacturing technologies, which optimize and facilitate assembly techniques. Ultimately, these products become visible to Boeing, Lockheed Martin, Bombardier etc. Michael is involved with Space programs such as the Space Shuttle, Space Launch System, SpaceX, Blue Origin, ULA, Ariane 6 and Orion since 1994. Michael developed and

commercialized AIRWARE alloys 2195, 2098, 2050 and 2297 for Space launch and defense initiatives over the past twenty years.

Prior to his current assignment, Michael Niedzinski held the position of Vice president of Technology and Quality Assurance at McCook Metals, a manufacturer of plate and sheet products for the Aerospace and Defense industries. Prior to his engagement at McCook Metals, Michael held the position of Director of Metallurgy for Reynolds Metals. As such, he was responsible for the program management of Aluminum-Lithium (Airware) manufacturing technology needed to produce the Super Light Weight External Tank needed for the Space Shuttle missions, which delivered components of the International Space Station to its high altitude orbit. In 1996 he received the prestigious Sustained Effort Award from NASA's Colonel Mark Lee. Concurrently, he managed product and technology development related to the F-16, C-17, and F-22 and F-35 military aircraft. In 2017 he received an award from the US Army for his role in the development of an IED blast-resistant armor solution for the undercarriage of armored personnel carriers. Michael received his BS and MS (thesis "Thermodynamics of argon-oxygen Decarburization of Stainless Steels") from the University of Illinois. Later he obtained an MBA from the Illinois Institute of Technology.

He holds three patents related to the development of Aluminum-Lithium alloys used for the new generation of F-16 Interceptor and Armor plate for Armored Personnel Carriers. In 1999, as a member of a three-person team, he received the R&D 100 Award for the development and industrialization of Alloy 2098, considered one of the 100 most technologically-significant products introduced during the previous year.

He has about ten publications in Transactions of Metallurgical Society, Advanced Materials and Processes, Aerospace Engineering and Light Metals Age. Papers range in scope from grain refining and filtration of molten aluminum, to the development of products successfully used for aerospace and armor applications.

He is a member of ASM since about 1973, and was appointed a Technical Fellow of that organization. Mr. Niedzinski chaired AEROMAT 2015 and chaired AEROMAT's Light Metals sessions for the past fourteen years. He also presented during multiple AEROMAT sessions. Beyond AEROMAT, he presented space-themed papers at NASA and ESA sponsored conferences. He was a guest speaker at the Illinois Institute of Technology in 2007, and the University of Utah in 2012. In 1996, he received NASA's "Sustained Effort" award for his work on the Space Shuttle; while in 2017. the Department of Defense honored him with a distinguished award for his work on Metallic Armor solutions which provide extra security for soldiers riding into battle in Armored Personnel Carriers.

He is a past Chair of the ISG section of MMPDS (two separate tenures 2005-2006 and 2013-2014) which is an FAA and Air Force sponsored Industrial Think Tank, In 2019, he was elected Chair of ASTM B-07 Light Metals section of ASTM. During the 2008-2016 time frame he chaired an ASTM-sponsored study of environmentally-induced cracking of marine 5XXX alloys, which provided information that became a very significant component of the ASTM B928 specification, which is a primary resource for designers of aluminum ships and naval vessels. He was instrumental in the inclusion of a highly-weldable marine alloy 5383-H116 in the Rules of the American Bureau of Shipping. He introduced and successfully championed AMS specifications covering alloys such as 2195, 2050, 2098, 2056, 2139, 2297 and 7056. All of these alloys were analyzed and validated statistically and included in MMPDS which is the primary reference guide for designers of aerospace components.

In 2017 Michael was elected to a position of the President of the Polish American Congress, Illinois Division; an umbrella entity which coordinates the activity of forty-plus member organizations, each with hundreds of members. He was reelected in 2019 for a second two-year term. Prior to that, he was, for a number of years, President of the Polish American Engineers Association, a professional Engineering and Architectural group promoting Polish professionals.

# **PAEA Announcements**

#### **MEETING LOCATION**

Due to the current situation with COVID-19, our February meeting will be held virtually, via Zoom:

https://auburn.zoom.us/j/89740457576

Connect using Computer/Device audio if possible. Or Telephone: Meeting ID: 897 4045 7576 Dial: +1 312 626 6799 (US Toll) or +1 646 876 9923 (US Toll)

We are back to Zoom, after some people had issues with Skype. But this time we will not have a 40-minute time limit (thanks to Dr. Nowak).

The meeting can either be accessed via:

- a <u>browser</u>, by clicking on the link and choosing 'download & run Zoom.' You should then get an option to 'join from your browser.' Note: using Zoom through a browser has limited capabilities- it is recommended to download the Zoom application for the best experience. Also note: if you already have the Zoom application on your computer, you will not get the option to 'join from your browser;' but the link will launch the Zoom application.
- 2. the <u>Zoom application</u>- needs to be installed on the computer (<u>https://zoom.us/support/download</u> or the meeting link above to download ; <u>https://zoom.us/download#client\_4meeting</u> for download options for platforms in addition to PC). More instructions are available at: <u>https://support.zoom.us/hc/en-us/articles/201362193</u>. Note: you do not need to sign up for a (free) account to join via the Zoom application.

### **2021** Membership Dues

There is no change in dues for 2021: \$70 per year, senior citizens and students \$35 per year.

We ask that everyone pay their dues as soon as possible, as this is our source of operating funds. Membership Cards will be provided to all those who paid their dues; and will have to be mailed due to the COVID-19 Pandemic.

Questions? You may inquire at the meeting or send an email to: administration@polishengineers.org You may send your dues (checks payable to the Polish American Engineers Association) to:

Mr. Andrew Pawlowski P.O. Box 241 Northbrook, IL 60065-241

You may also pay your dues at our meetings (once we re-start face-to-face meetings), and receive your Membership Card immediately.

Again, dues are critical in supporting the work of the PAEA- thank you for your support. And thanks to those who have already mailed in their dues!

### Member News/Update

We would like to remind everyone that we are looking for achievements of as well as other noteworthy news about our Members (that's you!). Please send us information about yourself or another Member (please ensure they agree to have this information publicized) to <u>contact@polishengineers.org</u>. We will publish in the next Bulletin available.

### Job Postings – Please Send

As part of our mission of mutual support, we would like to offer job openings to our Members. Please send any openings you know about to <u>contact@polishengineers.org</u>. Please let us know where it is OK to post (our website in Members Only, our public page; Facebook, LinkedIn pages, etc.

We would also like to post on our website (in the Members Only section) links to job listings of companies in our network. So please send those as well. We would like to list your name next to the link, so those applying through those links can have a reference person to cite. Please let us know if you would rather not be listed.

Thank you in advance to taking time now to send us this information, which supports our common mission!

#### **Reminder- Polish American Engineers Association on LinkedIn!**

We would like to remind our Members & Supporters that the PAEA is on LinkedIn:

#### www.linkedin.com/groups/12032140

Check out our Group, become a member, and post interesting and relevant content. The more active we are, and the more interesting information we post, the more likely we are to attract others to our Group, in addition of course to the benefits of inter-Group communication.

#### **Reminder- the Polish American Engineers Association on Facebook**

We would also like to remind our Members & Supporters that the PAEA is on Facebook:

https://www.facebook.com/Polish-American-Engineers-Association-PAEA-1153830014674800/

Please check it out, and help us keep it active by 'like'-ing and posting interesting material.

### **Next Meeting Date**

19 March, 2021

# **Special Interest**

If anyone has an item of Special Interest to the PAEA Membership and sympathizers, please sent the details to <u>contact@polishengineers.org</u> for inclusion in the next (monthly except for June-August & December) published Bulletin.

### Polish American Congress of Illinois Events Calendar

For a comprehensive and up-to-date listing of events in Polonia, please see the PAC-IL Polonia Calendar (many thanks to Mirek Niedzinski, Roman Korczak and the PAC-IL team for leading!):

https://www.pacillinois.org/calendar/

### PACIL: 2021 Pulaski Day Observance

February 28th, 2021 at 1pm; Our Lady Mother of the Church (8747 W. Lawrence Ave, Chicago, IL 60656)

PAEA Members and Sympathizers are cordially invited by the Polish American Foundation, IL Division and the Polish American Congress, IL Division to their Pulaski Day Observance Mass. The Mass will be Sunday, February 28<sup>th</sup>, 2021, at 1:00pm, at Our Lady Mother of the Church (8747 W. Lawrence Ave, Chicago, IL 60656).

Due to COVID-19 restrictions, registration is required. And wearing of masks, as well as social distancing is mandatory.

The Mass will be in Polish and English.

To register, please see the Our Lady Mother of the Church website:

https://www.ourladymotherchurch.com

More information is also available on the PACIL website and Facebook:

https://pacillinois.org/2021-pulaski-day-observance/

https://www.facebook.com/polishamericancongressil/

### **COVID-19** Vaccination Information (thanks to the PACIL)

The Polish American Congress, IL Division published the following information on January 26<sup>th</sup>, also to the PAEA (as a member of the PACIL). We are grateful to the PACIL for this information, especially as we try to move past this pandemic.

Links to information related to Covid 19 vaccinations and registration.

PLEASE NOTE; THE SITUATION IS DYNAMIC, AND INFORMATION CAN CHANGE DAILY. PLEASE CHECK THE WEBSITES SHOWN BELOW FREQUENTLY.

COOK COUNTY, IL. RESIDENTS (Except for Chicago, Evanston, and Skokie): <u>https://vaccine.cookcountyil.gov/</u>

CHICAGO RESIDENTS IN 1B CATEGORY (65 or Older, or Frontline Workers): https://www.chicago.gov/city/en/sites/covid19-vaccine/home/ways-toregister.html?fbclid=IwAR23xX6LiVIZwaqjdobb8yqxfzJAfRuvbFflGVYQBUTIc\_PGGVAPScF\_BTg

LAKE COUNTY, IL RESIDENTS https://allvax.lakecohealth.org/s/?language=en\_US

KANE COUNTY AND DUPAGE COUNTY - As of today, do not provide registration website or information.

# Polish American Medical Society - "We Vaccinate" Live Broadcast Documentary

We are grateful that the Polish American Medical Society shared with the PAEA the following information on a program about COVID-19 vaccination:

Dear Members and Friends

We are proud to share with you a link to the Expert Panel Discussion about SARS-CoV-2 vaccination that took place Sunday, January 24, 2021. Many of us who watched the extraordinary event had a feeling of time well spent in gaining knowledge and perspective on this very controversial topic. The Polish American Medical Society has been a proud supporter of the meeting and we are happy to be a part of such a wonderful experience.

http://www.zlpchicago.org/2021/01/27/we-vaccinate-live-broadcast-documentary/

# New Book (in Polish) about Tadeusz Kosciuszko on the 275<sup>th</sup> Anniversary of His Birth

Our sister organization in Canada, the Association of Polish Engineers in Canada, has informed us about a new book about Tadeusz Kosciuszko, published this year- the 275<sup>th</sup> Anniversary of his birth. The book (in Polish), by Andrzej Wawryniuk entitled, "Droga do chwały. Młodość i krąg rodzinny Tadeusza Kościuszki," is hailed both for the completeness of its coverage of Kosciuszko's life before leaving for the United States, as well as the huge number of original documents which the author was able to find and include.

The book can be browsed, and even downloaded (with permission of the Author) from, the SIP Canada website:

### http://www.polisheng.ca/k/tadeusz-kosciuszko/

We are grateful to our fellow Polish Engineers in Canada for this information, and access to such an interesting and timely book.

# Presentation (in Polish) on Climate Change - "Procesy Wewnątrz Ziemi a Klimat"

Thursday, February 25, 2021 at 12:00pm CST via Zoom

Thanks to the Council of Polish Engineers in North America, PAEA Members and Sympathizers are invited to participate in a presentation and discussion (in Polish) by Prof. Piotr Tucholke, long-time Professor of

Geophysics and currently Professor Emeritus at Paris-Saclay University, entitled "Procesy Wewnątrz Ziemi a Klimat." The presentation will take place Thursday, February 25, 2021 at 12:00pm CST via Zoom.

Below is the original invitation, from Janusz Ptak, General Secretary of the Association of Polish Engineers and Technologists in France (EFPSNT), with the details. Please note, Mr. Ptak requests RSVP via email (see below).

Moi Drodzy,

Pozwalam sobie przeslac na Wasze rece zaproszenie na video-konferencje Stowarzyszenia Inżynierów i Techników Polskich we Francji i zwracam sie z uprzejma prosba o przekazanie tej informacji Waszym Kolezankom i Kolegom z Rady Inzynierow AP, Polonii Technica a takze ze Stowarzyszenia Inzynierow Polskich w Kanadzie.

Konferencja bedzie wygloszona przez prof. Piotra Tucholke i zatytułowana: Procesy wewnątrz Ziemi a klimat, we czwartek 25 lutego 2021 roku, o godzinie 19:00 czasu srodkowo-europejskiego.

Prof. Piotr Tuchołka to dlugoletni Profesor Geofizyki, obecnie Profesor Emeritus, na Uniwersytecie Paris-Saclay, prowadził miedzy innymi badania zapisu zmian klimatu i środowiska w osadach morskich i jeziornych, metody geofizyczne w geotechnice, hydrogeologii, poszukiwaniach archeologicznych. Jego prace badawcze miały miejsce w wielu krajach Europy, Azji, Afryki, na Morzu Śródziemnym, Oceanie Indyjskim, Morzu Kaspijskim, Morzu Czarnym.

A temat zmian klimatycznych jest tematem dosc kontrowersyjnym i szeroko dyskutowanym. Bedzie zatem okazja do dyskusji. Wyrazam wiec nadzieje, ze zainteresuje on wielu sposrod inzynierow i naukowcow polskich i polonijnych z drugiej strony Atlantyku.

Konferencja odbedzie sie na aplikacji ZOOM. Aby wziąć udział w video-konferencji, prosimy o użycie linku : <u>https://us02web.zoom.us/j/84609424698?pwd=RmF6VWlramt5UTAvdFFtNGVnNVRKUT09</u>

Pragne podkreslic, ze z mysla o szerokiej rzeszy publiki polsko-jezycznej, referat bedzie wygloszony w jezyku polskim.

Celem zorientowania sie co do liczby uczestnikow, bylibysmy wdzieczni za potwierdzenie udzialu emailem na adres : sitpf95@gmail.com

Lacze serdeczne pozdrowienia, Janusz Ptak Sekretarz Generalny EFPSNT



Zmiany klimatu i perspektywy jego ewolucji są przedmiotem gorących dyskusji i sporów cywilizacyjnych i ideologicznych. Problem ten jest jednak dużo bardziej skomplikowany, niż często stosowane uproszczenia. Dlatego warto zobaczyć jak klimat ewoluował w przeszłości geologicznej, w skali czasowej kilkuset milionów lat.

Okazuje się, ze dominująca była sytuacja, kiedy średnie temperatury były znacząco wyższe, niż te, które trwają w ciągu ostatnich kilku milionów lat, to jest w czasie okresu zlodowacenia. Takie okresy zimne charakteryzujące się istnieniem pokryw lodowych w strefach podbiegunowych powtarzają się w historii Ziemi kilkakrotnie acz nieregularnie.

Przyczyn takich zmian szukać należy w długoterminowych procesach związanych z ewolucją konfiguracji kontynentów na powierzchni Ziemi i w konsekwencji ze zmianami intensywności

wietrzenia skał krzemianowych. Tak więc wędrówka kontynentów, bezpośredni efekt działania potężnych sił wewnątrz Ziemi wpływa niewątpliwie na klimat w okresach czasu rzędu milionów lat. Jednocześnie wewnętrzne procesy a m.in. wybuchy wulkanów wywołują też zmiany klimatyczne, często bardzo gwałtowne, w przedziałach czasowych od dni do miesięcy i kilku do kilkuset lat.

W chwili obecnej skupiamy się, niewątpliwie słusznie, na wpływie działalności człowieka na klimat ale chyba warto zdać sobie sprawę, że siły natury też w ewolucji klimatu mają coś do powiedzenia

Piotr Tucholka - geofizyk, absolwent Uniwersytetu Warszawskiego (1970), doctor nauk fizycznych w Instytucie Geofizyki PAN w Warszawie (1977), adiunkt w tym Instytucie do roku 1979. Pracowal na Uniwersytecie w Edynburgu, w Laboratoire de Géologie Quaternaire CNRS w Marsylii i w CFR CNRS/CEA w Gif sur Yvette. Profesor Geofizyki w Uniwersytecie Paris XI Paris-Saclay 1985-2017, Profesor Emeritus Uniwersytu Paris Saclay. Glówne kierunki badań to paleomagnetyzm i stratygrafia magnetyczna, zmiany wiekowe kierunku i natężenia, inwersje pola magnetycznego Ziemi, zapis zmian klimatu i środowiska w osadach morskich i jeziornych, metody geofizyczne w geotechnice, hydrogeologii, poszukiwaniach archeologicznych. Prace badawcze w wielu krajach Europy, Azji, Afryki, na Morzu Śródziemnym, Oceanie Indyjskim, Morzu Kaspijskim, Morzu Czarnym

### www.sitpf.fr Facebook : Association des Ingénieurs et Techniciens Polonais en France

### Kosciuszko Foundation Accepting Applications for Scholarship

Applications accepted through January 28, 2021

The Kosciuszko Foundation has made us aware that they are now accepting applications for the Drs. James and Wanda Trefil Science Scholarship from citizens and permanent residents (green card holders) of the United States who are of Polish descent. Eligible candidates include current college freshmen, sophomores and juniors who are majoring in the Natural Sciences (physics, chemistry, biology, astronomy, earth science, etc.) and who have a minimum GPA of 3.5. Applications and supporting materials will be accepted through Thursday, January 28, 2021.

One \$5,000 scholarship will be awarded for full-time studies in the United States for the Fall 2021/Spring 2022 academic year. For more information and to apply, please see:

https://www.thekf.org/kf/scholarships/tuition/science/

### Polish Museum of America Pulaski Day Celebration

Monday, March 1st, 2021 at 10:00am; virtually

The Polish Museum of America cordially in invites all PAEA Members and Sympathizers to participate (virtually) in this year's official Illinois Pulaski Day celebration, Monday, March 1<sup>st</sup>, beginning at 10:00am. The event will be live streamed via the PMA website. For more information:

https://www.polishmuseumofamerica.org/event/virtual-pulaski-day/?event\_date=2021-03-01

### **Chopin Theater GoFundMe**

As sent in a separate email, the PAEA received a GoFundMe appeal from our friends at the Chopin Theater. We have been guests at the Chopin Theater for several excellent plays; and have been invited for many more, which we were not able to make as a group. Lela and Zygmunt have always made us feel at home, and have supported us as they could.

It would be a true shame and loss to Polonia (and all of Chicago) if they had to close their doors permanently due to this terrible pandemic. Please consider supporting as you can; and let your family and friends who might be interested/able to support them know.

For more information, and to make a donation, please see:

https://charity.gofundme.com/o/en/campaign/chopin-theatre-humble-request-for-30th-anniversary

### **Copernicus Foundation Request for Support**

The Copernicus Foundation is requesting Polonia support for their bid to purchase a property adjacent to theirs, from the City of Chicago. Below is the content of an email we recently received, with more details about what each of us can do to help (by signing their petition).

Please consider supporting them (in the spirit of mutual support, as is part of our mission); as they support many Polonia organizations; and hosted our meetings for many years.

Dear Polish Engineers,

As you might know, the Copernicus Foundation is trying to buy the abandoned firehouse at 4841 N. Lipps from the City of Chicago in a negotiated sale. The Foundation would renovate the property keeping its historic façade and having it be part of our campus. The Copernicus Foundation is willing to pay \$300,000 for the property which the city appraised at \$208,000.

Sadly, the city appears to be accepting an offer from an outside developer, 4841 N. Lipps LLC (Ambrosia Homes) who will only be paying \$1 for the property. There are a number of steps that have to be taken before that sale is final, so we are asking for your support in trying to stop the sale.

Please sign our petition at <u>www.FightForTheFirehouse.com</u> and express your support of the Copernicus Foundation. The site will also allow you to send an e-mail directly to your Alderman asking him not to vote for the negotiated sale of the firehouse to 4841 N. Lipps LLC.

<u>Please pass this information along to any of your friends and colleagues and share it on your social</u> <u>media!</u> This will show Mayor Lightfoot and the Aldermen that our community supports the Copernicus Foundation in its endeavor to develop this property in the best interests of the many communities we serve.

Thank you,

Alina Bosak Event Coordinator Copernicus Foundation 773-313-3893



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