
POLISH-AMERICAN ENGINEERS ASSOCIATION

FOUNDED



IN 1934

1 Watergate Drive South Barrington Illinois 60010, USA • www.polishengineers.org

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

- DATE:** Friday, September 18th 2015
- TIME:** 7:30 p.m.
- PLACE:** Copernicus Center
Kings Hall
5216 W. Lawrence Avenue
Chicago, Illinois
- SPEAKERS:** Andrew Nowak, PhD
Professor and Chair
Elton & Lois G. Huff Eminent Scholar Chair
Department of Civil Engineering
Auburn University 238 Harbert Engineering Center, Auburn, AL
- TOPIC:** Are Our Bridges Safe?
-



Professor Andrew Nowak, PhD

Dr. Nowak is Professor and Department Chair of Civil Engineering at Auburn University, after 25 years at the University of Michigan and 8 years at the University of Nebraska. He received his MS and Ph.D. from the Warsaw University of Technology in Poland. His area of expertise is structural reliability and bridge engineering, and major research accomplishments include the development of a reliability-based calibration procedure for calculate ion of load and resistance factors. The procedure was successfully applied on calibration of AASHTO LRFD design code for bridges, ACI 318 Code for Concrete Buildings, Canadian Highway Bridge Design Code, and British Standard BS-5400. He made important contributions in the area of bridge diagnostics and evaluation, including analytical load models used for prediction of extreme load events for bridges and buildings and the development of efficient experimental procedures for weigh-in-motion measurement of truck loads, dynamic loads on bridges and fatigue load spectra. In the area of materials, Dr. Nowak has developed a design guide for self-consolidating concrete (SCC), including field applications. Dr. Nowak has authored over 450 technical publications, and chaired a number of committees associated with professional organizations such as: ASCE, ACI, TRB IABSE and IABMAS. He is an Honorary Professor of Politechnika Warszawska and Politechnika Krakowska, and a Fellow of ASCE, ACI and IABSE. Prof. Nowak received the ASCE Moisseiff Award, IFIP WG 7.5 Award, Bene Merentibus Medal, Kasimir Gzowski Medal from the Canadian Society of Civil Engineers, and Officer's Order of Polonia Restituta from the President of Poland.

ABSTRACT

Bridges are expected to last for long periods of time and their economic life span is 75 or 100 years. Some Roman bridges have been in continuous service for 2000 years. However, how safe are bridges that we have today? The results of survey of structural condition indicate that over 30% of US bridges are either deficient or functionally obsolete. The repair, rehabilitation or replacement require funds that are not available. Therefore, there is a need to realistically assess the problem and develop a strategy to make the best use of the limited resources. The major causes of bridge problems include deterioration due to aging, poor maintenance, corrosion, scour, fatigue, illegally overloaded vehicles, collision with vehicles and vessels. There is a need for a rational measure for safety, selection of the optimum safety level and then implementation of that in practice. The objective of this presentation is to review the causes and possible solutions. The information about the actual condition of bridges is provided by site-inspections, weigh-in-motion (WIM) measurement of trucks, and verification of technical documentation using non-destructive techniques. The truck traffic can be considered using the available WIM data that includes close to 100 million trucks. Corrosion can result in reduced moment and shear load carrying capacity, and extreme cases can lead to structural failure. Safety of bridges can be assured by inspections, proper maintenance, preventive repairs, and use of advance materials and technologies.

PAEA Announcements

Close to 80 members and sympathizers participated in the **PAEA's Annual Picnic** which took place at the Fourth Lake Resort on June 27th. Weather cooperated. Beyond good attendance Picnic was a success financially. We are very grateful to BIR Training center for sponsoring beverages during the event.



We are extremely grateful Legion of Young Polish Women for a **\$1000 donation to our Ralph Modjeski** scholarship fund. Check was received during the summer break.

Nominating Committee consisting of Roman Poplawski, Janusz Kulczuga and Powel Pacocha developed slate of candidates for the 2015-2017 administrative year. **Election results are provided below.** New administration will assume their responsibilities in September 2015.

Administration

President	--	ANDRZEJ PAWLOWSKI
1st Vice President	--	JERZY PIETROWSKI
2nd Vice President	--	EWA MROCZEK
Recording Secretary	--	KRZYSZTOF KOMPIEL
Financial Secretary	--	MALGORZATA GROCHAL
Treasurer	--	DIANA KUKAWSKI

Nominating Committee

KRZYSZTOF CHELMINSKI
BARTLOMIEJ BOBEK
RENE' T PIETRZYK

Auditing Committee

ADAM CZYSZCZON
RAFAL KOPACKI
PAWEL PACOCHA

Board of Directors

Newly Elected

MICHAEL NIEDZINSKI
EDWARD STARUK
GRAZYNA CZYSZCZON
RICHARD KACZMAREK

Carried over from prior election

ANDRZEJ CZYSZCZON
ROMAN KORCZAK
DANUTA M.T. SZYMULANSKI

The **Auditing Committee** consisting of Stanley Witczak, Ewa Mroczek and Ed Staruk convened and reviewed the financial statements for the past two years.

Total of twelve applications were received for the annual **Ralph Modjeski Scholarship** prior to May 31st deadline. Based on our criteria of academic credentials/scholastic achievements in the field of engineering, GPA, letters of recommendation, etc. **four individuals were identified as the recipients of the \$750 stipends.** They are listed below;

Madeline Molnor	- Milwaukee School of Engineering -- Civil Engineering; Junior
Piotr Wozny	- Iowa State University of Science and Technology – Mechanical Engineering; Senior
Szymon Krzeptowski Mucha	- Illinois Institute of Technology -- Computer Science; Junior
Kinga Pabjan	- University of Florida – Architecture; Senior

Recipients are being notified.

2015 MEMBERSHIP DUES. Please note that the dues schedule for 2015 have not changed. **Dues are \$50 per year, senior citizens and students \$25 per year.** We strongly encourage you to pay your dues as soon as possible. Membership cards will be provided to all those who paid their dues. Questions? You may inquire at the meeting or send an email to: paea.members@gmail.com

You may send your dues directly to our Treasurer:

Mrs. Diana Kukawski
940 Beau Drive
Des Plaines, IL 60016

Special Interest

You Are Invited to a Spectacular Evening of Art!

Hosted by The Polish Museum of America to Benefit
Gift From The Heart Foundation and The Polish Museum of America



*Fifth Anniversary
Fundraising Art Exhibit*

SEPTEMBER 19-25, 2015



www.darserca.org



www.polishmuseumofamerica.org

Kick off the show!

Opening Night Gala

Saturday, September 19th, 7:00 p.m. to 11:00 p.m.

Celebrate our 5th Anniversary with
beautiful art and artists, DJ entertainment,
passed hors d'oeuvres, a cash bar,
and a complimentary champagne toast at 9 p.m.!

Admission \$20. Free parking!

Polish Museum of America

984 N. Milwaukee Avenue, Chicago, IL 60642

www.artforheartchicago.org

The Polish Museum of America

cordially invites you to its **Autumn Dance**
on Saturday, October 10, 2015

Muzeum Polskie w Ameryce

ma zaszczyt zaprosić Szanownych Państwa na **Zabawę jesienną**
w sobotę, 10 października 2015 r.

Glendora Banquets

10225 South Harlem Avenue, Chicago Ridge, Illinois

Entrance | Rozpoczęcie 6:30 p.m. Dinner | Kolacja 7:30 p.m.

Donation | dotacja: Adult | dorosły \$75
Child 12 and under | dzieci poniżej 12 roku życia \$30

Open Bar | Otwarty bar

Special Performance by | Wystąpi:

Wesoły Lud Polish Folk Dance Company
of the Polish Roman Catholic Union of America

Zespół Polskich Tańców Ludowych „Wesoły Lud”
Zjednoczenia Polskiego Rzymsko-Katolickiego w Ameryce

Music by | Do tańca zagra: The Kings
& Mira Sojka-Topór

The Polish Museum of America is a
501(c)(3) non-profit organization under IRS Code.
Donations are tax-deductible to the extent allowed by law.
Muzeum Polskie w Ameryce jest organizacją
nie przynoszącą dochodu o statucie 501(c)(3).
Dotacje mogą zostać odliczone od podatku.

PMA Autumn Dance – Reservations | Zabawa jesienna MPA – Rezerwacje

Enclosed please find my check in the amount of | W załączeniu czek opiewający na sumę:

\$ _____ for | za:

_____ Adult(s) at \$75 each | dorosłych w cenie 75 \$ od osoby

_____ Child(ren) 12 and under at \$30 each | dzieci poniżej 12 roku życia w cenie 30 \$ od osoby

Tables of ten. Tickets will be held at the door.

Stoły dziesięcioosobowe. Bilety będzie można odebrać przy wejściu.

Please make checks payable to | Prosimy wystawiać czeki na: **The Polish Museum of America**

R.S.V.P. by October 1, 2015 | do 1 października 2015

For more information, please call | Dodatkowe informacje: (773) 782-2601