
POLISH-AMERICAN ENGINEERS ASSOCIATION

FOUNDED



IN 1934

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

- DATE:** Friday, May 16th 2014
- TIME:** 7:30 p.m.
- PLACE:** Copernicus Center
Kings Hall
5216 W. Lawrence Avenue
Chicago, Illinois
- SPEAKERS:** Prof. Martin Ostoja Starzewski
Department of Mechanical Science and Engineering
University of Illinois at Urbana-Champaign
- TOPIC:** FRACTALS ... NATURE ... CONCUSSION
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Prof. Martin Ostoja Starzewski

Martin Ostoja-Starzewski did his undergraduate studies (1977) at the Cracow University of Technology, Poland, followed by Master's (1980) and Ph.D. (1983) degrees at McGill University, Canada, all in mechanical engineering. His research interests are primarily in (thermo)mechanics of random and fractal media, advanced continuum theories, as well as aerospace, bio- and geo-physical applications. He (co-) authored 160 journal papers as well as two books: 1. *Microstructural Randomness and Scaling in Mechanics of Materials*, CRC Press (2007); 2. *Thermoelasticity with Finite Wave Speeds*, Oxford University Press (2009). He also (co-)edited 13 books/journal special issues and co-organized various meetings. He is/was on editorial boards of *Journal of Thermal Stresses*, *Probabilistic Engineering Mechanics*, *ASME Journal of Applied Mechanics*, *Actual Problems of Aviation and Aerospace Systems*, *International Journal of Damage Mechanics*, *Archive of Applied Mechanics*, *Acta Mechanica*, *International*

Journal of Aeronautical and Space Sciences, and *Journal of Applied Mathematics (Hindawi)*. Also, he is Chair Managing Editor of *Mathematics and Mechanics of Complex Systems (MEMOCS)* and co-Editor of the *CRC Modern Mechanics and Mathematics Series*. He was elected Fellow of ASME, AAM, WIF, as well as Associate Fellow of AIAA. In the winter of 2012 he was Timoshenko Distinguished Visitor at Stanford University.

ABSTRACT

What is more enchanting than fractals, those self-similar things? Perhaps only some masterpieces of art. But fractal geometry is the geometry of the natural world. It mirrors the uneven but real shapes of nature, the world as we actually experience it. This talk will take you on an introductory tour of fractals and applications where

they have found enthusiastic responses from the very beginning: geography, meteorology, turbulence, biology, medicine, structures, materials, cracks, art, music, stock market. Perhaps, we will even have time to look at wave motions in the human brain during concussion.

Administration Updates

We are happy to introduce an **upgrade to our web page**. Effective now we have a “Members Only” tab / section on our page. Access to this area is password controlled. Per the policy put forth by the Administration *login name* and *password* will be provided to members who paid their dues. Under this tab you will be able to find non-public materials such as meeting minutes, etc... Please note that under no circumstances, and in concert with current practice, personal data of our members, managed by the Financial Secretary, is NOT and will NOT be stored on the web page anywhere. **Please let us know if you have any questions.**

One of our members, Mr. Janusz Kulczuga organized a **field trip to Caterpillar** facility in Aurora. Trip took place on Friday May 9th 2014. Over twenty members met at the Caterpillar facility at 11 AM for a comprehensive tour of this heavy equipment producer. Additionally we had a chance to visit Ultimate Machining, a modern CNC machining facility which is a primary supplier of finished components to Caterpillar.





PAEA participated in the **May 3rd parade**. We want to extend special THANK YOU to Ms. Danuta Szymulanski. She prepared a beautiful banner commemorating our 80th anniversary. It is unfortunate that only eight members chose to support this event. Following members proudly represented our organization. Edward and Jadwiga Staruk, Elizabeth Berak, Diane Rink, Jerzy Pietrowski, Mitch Urban, Richard Kaczmarek and Mirosław Niedziński.



We have narrowed down **our picnic dates** to following Saturdays: June 21st and July 12th. Unless we hear a strong opposition we would like to go back to Fourth Lake Resort.

80th Anniversary preparations have started. We received very favorable proposal from European Crystal and will be finalizing banquet arrangements in May. Two possible dates are November 15th and 16th. At this point Diane Rink volunteered to be a member of the organizing committee. Additional volunteers are needed.

We have an **invitation to visit Fermi Laboratory** in Batavia in the Fall of 2014. Will advise about more details as they become available.

As of March 1st PAEA started accepting applications for 2014 **Ralph Modjeski Scholarship**. Two scholarships in the amount of \$800 each will be awarded during September 2014 meeting.

Regretfully we would like to advise membership of the passing of a long term member **Mr. Tad Dzierozynski** who was a member for almost 40 years. He held several positions in the PAEA over the years. Our condolences to entire Dzierozynski family.



2014 MEMBERSHIP DUES. Please note that the dues schedule for 2014 did not change. **Dues are \$50 per year, senior citizens and students \$25 per year.** We strongly encourage you to pay your dues in January or, if not possible, in February. 2014 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:

Mr. Richard Kaczmarek
1725 S. Crescent
Park Ridge, IL 60068

General Interest

A good friend of our organization **Prof. Andrzej Nowak** was awarded a Polonia Restituta order by President Komorowski.

2014 Excellence in Structural Engineering Awards. The 2014 Excellence in Structural Engineering Awards will be presented at the Annual Awards Dinner on Saturday, June 7, 2014 and will be held at the Civic Opera House, 20 N. Wacker Drive, Chicago, IL. The finalists presented their entries at the May Dinner Meeting. The winners will be chosen by a group of distinguished judges.

This design competition takes place each year to recognize excellence in structural engineering. Winners are named in the following categories:

- Jurors' Favorite/Most Innovative Structure
- Best Project - > \$150 Million (International)
- Best Project - > \$150 Million (US)
- Best Project - \$50 Million to \$150 Million
- Best Project - \$5 Million to \$50 Million
- Best Project - < \$5 Million

- Best Bridge/Transportation Project
- Best Renovation/Retrofit Project
- Awards of Merit

For more information see: http://www.seaoi.org/2014_Awards_Dinner.html

Zapraszamy Szanownych Państwa na

Bal letni
Muzeum Polskiego w Ameryce



*Prosimy, aby Państwo
zarezerwowali w swoim kalendarzu*

piątek, 6 czerwca 2014 roku.

Miejsce spotkania:

Galleria Marchetti

825 West Erie St.
Chicago, Illinois 60642

Koktajle, uroczysta kolacja i zabawa taneczna

Informacje i bilety:

Virginia Cudecki i Maria Cieśla (773) 384-3352 wew. 104

Doroczny Bal letni, główna impreza dochodowa placówki jest kontynuacją tradycji zapoczątkowanej w roku 1979 przez Sabinę F. Logisz i Waltera L. Sojkę.

**A warm invitation to The Polish Museum of
America's Summer Ball**

The Polish Museum of America (PMA), 984 N. Milwaukee Ave., Chicago, IL 60642, extends a warm invitation to our valued friends and patrons to the 34th Annual Summer Ball, on Friday, June 6, 2014.

The ball will be held at the Galleria Marchetti, 825 West Erie St., Chicago, IL 60642. The black-tie event begins with cocktails at 7:00 p.m., and dinner served at 8:00 p.m. Music will be provided by the renowned *Anthony Kawalkowski Orchestra*.

Individual tickets are \$200 each. A portion of the ticket price and any donations to The Polish Museum of America are tax deductible.



The **AREMA 2014 Annual Conference & Exposition** will be held at the Hilton Chicago in Chicago, IL September 28 – October 1, 2014. This year's program will again provide an excellent opportunity for members of the railway industry to increase their railway knowledge and experience.

The Program Committee has assembled a great slate of 67 technical presentations. In addition to the technical presentations, there are also a number of seminars and technical committee meetings either in advance of or following the Conference.

The Exposition will officially begin on Sunday, September 28, at noon and will be open until Tuesday, September 30, until 4:00 p.m. The AREMA Exposition will be representing various contractors, suppliers and consulting firms that will provide you the opportunity to see first-hand some of their products and services and to learn how they can benefit you and your company.

Please note that Professional Development Hours are earned for participating in the Conference, subject to the individual state board's final authority.

About AREMA.

The American Railway Engineering and Maintenance-of-Way Association (AREMA) was formed on October 1, 1997, as the result of a merger of three engineering support associations, namely the American Railway Bridge and Building Association, the American Railway Engineering Association and the Roadmaster's and Maintenance of Way Association, along with functions of the Communications and Signals Division of the Association of American Railroads. The rich history of the predecessor organizations, each having over 100 years of service to the rail industry, is the legacy of AREMA.

For more information see: <https://www.arema.org/meetings/2014/>