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"Where Ideas Become Reality"

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# NIPSCO Endows Professorship at Purdue University Northwest Chenn Zhou named Distinguished Professor of Engineering Simulation

PNW and Northern Indiana Public Service Company (NIPSCO) announced that NIPSCO has created an endowment to establish a professorship in Engineering Simulation. Dr. Chenn Zhou will be the first to serve in the newly endowed position. In recognition of her scholarship and extraordinary contributions to the university, the Purdue University Board of Trustees has named Zhou the NIPSCO Distinguished Professor of Engineering Simulation in the College of Engineering and Sciences. She is the first faculty member at Purdue Northwest to achieve the distinguished professor title. Zhou. PNW Chancellor Thomas L. Keon expressed his deep appreciation for NIPSCO's generous gift to the university. "NIPSCO's partnership will help support continued research, innovation and educational excellence, particularly through CIVS."





"As the energy industry continues to evolve and with rapid advancements in technology, it is essential that we establish a pipeline of talent and a future workforce prepared to solve the challenges of tomorrow," added NIPSCO president, Violet Sistovaris. "This new partnership builds that important bridge and it is an extension of the successful relationship we already have established with Purdue University Northwest and Professor Zhou." "I am deeply appreciative of this recognition of my work that is made possible through collaboration with my fellow faculty members, CIVS staff, industrial partners, and of course our wonderful PNW students. I want to thank all of the people who have supported me," Zhou said. More...

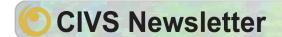
# Congressman Pete Visclosky at CIVS on 2/14/2020

Congressman Visclosky visited CIVS at PNW for the update on CIVS and the Steel Manufacturing Simulation and Visualization Consortium. "My experience today was very positive. What I appreciate is that Purdue Northwest took an investment made over a decade ago and has built on it – Not only to educate people in various fields of technology, but also to help the industry in Northwest Indiana, those in services and other types of professions be as efficient and as productive as they can be. Emphasis also on worker safety...





...I think the center here would have a lot to offer to the domestic steel industry in Northwest Indiana," Congressman Visclosky said. More...



#### **John Luis Estrada Guayta Received PNW & AIST Awards**

Congratulations to CIVS Graduate Research Assistant John Luis Estrada Guayta! John was honored on March 6<sup>th</sup> with the Outstanding Graduate Student Service Award. John was also a winner of the 2020 Association of Iron and Steel Technology (AIST) Real Steel Student Video Contest, with his video entry entitled "Empowering the Steel Industry-Inspiring the Next Generation of Engineers." John joined CIVS in his senior year. In addition to his excellent performance in research projects, he has demonstrated leadership skills. John said, "As a lifetime student at PNW, my passion has been helping the student community. The time I have spent working on projects, organizations, competitions, and as a research leader allowed me to achieve this remarkable goal in my life. I couldn't have achieved this without the support of my mentor, friends, and people that appreciate my work." More...



#### **NIPSCO Representatives Visit CIVS**





Two groups from NIPSCO visited CIVS on February 12<sup>th</sup> to review interactive education and virtual safety training research and to discuss current and potential projects. The first group included Russ Viater (Vice President of Safety and Technology), and Prajwal Deshpande (Director of Enterprise Architecture at NiSource). The second group included Nick Meyer (Director of Communications), Tara McElmurry, and Wendy Lussier. More...

#### **PNW Hosts ASM Trustee Night**

At the American Metal Society (ASM) Calumet Chapter Monthly dinner meeting on February 13<sup>th</sup>, The keynote speaker, Dr. Raymond V. Fryan, spoke on the topic of "How Materials Information and Design Integrates with Manufacturing." PNW Materials Advantage Group students attended the talk. During his visit, CIVS staff and students demonstrated projects and technologies at the CIVS immersive theater and the visualization lab. More...





#### **Seminar by VP of Steel Founders Society**

On February 28th, Mr. Raymond W. Monroe presented at the CIVS Theater on "Strategic Technology Directions for Steel." The seminar was well attended by PNW engineering students. Mr. Monroe served as Executive Vice President of the Steel Founders' Society of America for over 30 years since 1988. His very passionate and educational talk generated an active discussion. More...



#### **Safety Personnel from Arcelor Mittal Visit CIVS**



Safety personnel from ArcelorMittal Indiana Harbor visited CIVS on February 3<sup>rd</sup> to learn about virtual safety training simulators that are being developed through the Steel Manufacturing Simulation and Visualization Consortium. The group reviewed simulators for Fall Protection, Lockout-Tagout, and Confined Space, and discussed how they could be used. More...

# **PNW Students Network at AIST Monthly Dinners**





PNW Materials Advantage Group students are very active, attending monthly AIST Midwest Chapter dinners. These dinners have provided opportunities to learn about the steel industry and gain practical knowledge through networking with over 300 attendees from local and regional steel producers and suppliers. More...

#### **CIVS Participates in Rotary World Affairs Conference**

On Feb 28<sup>th</sup>, approximately 200 High School Students from Northwest Indiana attended the Rotary World Affairs Conference hosted at PNW. CIVS was chosen as one of three locations on campus to present on this year's topic: "Using Technology to Energize the World: The Power of Innovation." More...



#### Oak Forest & Hillcrest High Tour CIVS

CIVS welcomed Oak Forest & Hillcrest High Schools on Friday, February 14<sup>th</sup>. Dr. Tyamo Okosun gave an introduction on CIVS and its impact on industries, while CIVS graduate research assistants John Estrada and John Resa shared their experiences on how their involvements in PNW & CIVS have been able to teach them skills needed for future careers in the real world. CIVS research engineer Kyle Toth introduced the students to virtual reality (VR) and augmented reality (AR) devices such as HoloLens. Students had the opportunity to get first-hand experiences on VR and AR technologies. More...





# CIVS DEMOS for Boy Scouts and Gavit Middle School Students





Boy Scout Troop 276 was excited to learn advanced technologies at CIVS on January 21st. Most of the projects at CIVS are involved with partnering organizations and the Scouts were able to see examples of project outcomes, including cost and energy savings. On Feb 24th, approximately 120 Gavit Middle School Students also had a great time at CIVS. The event was organized by a PNW Outreach Counselor in order to get more students interested in college. More...

#### **CIVS Student Researchers at TMS 2020**

CIVS Graduate Students John Resa and Edwin Mosquera attended TMS 2020 in San Diego in February. John presented his research paper on "Analysis of Solidification and Thermal-Mechanical Behaviors in Primary Cooling." Edwin presented his research paper on "Integrating Fluid Simulation with Virtual Die Casting Machine for Industry 4.0 and Operator Training." John and Edwin also presented two posters on the Electric Arc Furnace and Gas Stirred Ladles. The students networked with professionals such as Prof. Brian Thomas in Colorado School of Mines and Dr. Pavel Lopez from Sweden. More...









# Record Number of Member Companies attend the SMSVC Annual Meeting

The Steel Manufacturing Simulation and Visualization Consortium (SMSVC) held its Annual Meeting at CIVS on November 13-14, 2019. Over 60 attendees from 16 SMSVC member companies joined together over the successful two-day meeting event. This meeting highlighted growth in industry-academia collaborations and activities, membership, and an emphasis on "Industry 4.0/Digital Transformation." Four new SMSVC members were introduced to the group; Gerdau, Charter Steel, NLMK Indiana, EVRAZ North America. CIVS Research students presented 7 SMSVC project topics. Mr. Thomas P. Dakich, from Digital Crossroads delivered a dinner keynote on "Standing on the Shoulders of Giants - the benefits and challenges of revitalizing an old industrial site into a modern data center." More...





# CIVS Presents a 360 Video Workshop at Charter Steel

On January 30<sup>th</sup>, a visit to Charter Steel in Saukville, WI promoted technical exchange between members of Charter's safety team and CIVS staff and provided a tour to PNW senior design students working on project with the company. John Moreland and Kyle Toth hosted a workshop with Charter Steel team members on 360 video and potential use cases. More...

#### **Cleveland Cliffs Visitor**

Cleveland Cliffs' Director of Safety and Loss Control, Bryan Baird CMSP visited CIVS on January 28th. Baird discussed the potential of safety simulators with CIVS researchers.

Baird plans to use the safety simulators in the company's future training. More...



# STEEL MANUFACTURING SIMULATION SWISURLIZATION CONSORTIUM

#### **SMSVC NOTES**

Online Spring 2020 Annual Meeting Scheduled: April 21 - 23, 2020

#### SMSVC Accepting New Members

SMSVC is accepting new members. If interested in becoming a member, please contact Melissa Mollett at mmollett@pnw.edu.

For information on the Consortium, visit steelconsortium.org.

### CIVS Featured on Lakeshore PBS

CIVS was featured in the eleventh episode of the first season of Friends & Neighbors on Lakeshore PBS. Tyamo Okosun described CIVS during the segment interview. More...

# Multiple Visits to Steel Dynamics, Inc. in Butler, IN Facility



CIVS teams visited Steel Dynamics to discuss cuttingedge projects in safety training, EAF simulations, & smart manufacturing on Oct. 29<sup>th</sup>, 2019. More... Steel Dynamics also hosted several plant tours and meetings for the CIVS Smart Ladle Team this year. More...

#### **Facts and Impact (Since 2009)**

- \$40+ million savings for companies
- \$19,300,000+ in external grants and contracts
- 140+ external organizations collaborated with CIVS
- 380+ projects
- 485+ national and local news

- 1,570+ students employed and mentored
- 11,300+ students used CIVS for virtual labs
- 140+ Purdue Northwest faculty and staff collaborators
- 156 student awards and grants (globally, since 2011)
- 34,900+ local and global visitors