

MINUTES OF MEETING – FINAL UNIVERSITY-INDUSTRY RELATIONS ROUNDTABLE COLUMBUS, OHIO, USA

Attendees:

Kelly Dallas (Chair), Cleveland-Cliffs - Inc. Wendy Allison, ArcelorMittal Tubular Products Karim Alshurafa, Vollmer America Inc. Ron Ashburn, AIST Amy Beard, Quaker Houghton Staci Beiswanger, Steel Dynamics Inc. Morgan Benner, Cleveland-Cliffs Inc. Lothar Birkhauser, Vallourec A.B. Bhattacharyya, Arkansas State University Kevin Bort, TMEIC Corporation America Nick Bucci, Nucor Steel Hertford County Mario Buchely, Missouri S&T Colin Campbell, Mt. Union University Lawrence Cho, Colorado School of Mines Shannon Clark, ArcelorMittal Dofasco Jeremy Cronkhite, Steel Dynamics Inc. Emmanuel De Moor, Colorado School of Mines Mark Didiano, AIST Jim Dudek Jennifer Durbin, CMC Joe Dzierzawski, Primetals Technologies LLC Dr. Ekey, Mt. Union University Rita Esposito, Heraeus Electro-Nite Co., LLC Mark Fedor, Morgan Terry Fedor, Cleveland-Cliffs Inc. Clay Ferguson, University of Alabama Drew Fleming, Arkansas State University Traci Forrester, Cleveland-Cliffs Inc. Keri Frank, Midrex Technologies Inc. Carl Garringer, Steel Dynamics Inc. Luis Garza, Cleveland-Cliffs Research & Innovation Center Chuck Greene, AM/NS Calvert LLC Jackson Hollenbaugh, Purdue University Roger Kalinowsky, Sidock Group Inc. Ben Kowing, SSAB Americas Nikhil Kulkarni, Steel Dynamics Inc. -Jeffersonville

Michelle Lamb. ArcelorMittal Tubular Products Karin Lund, G-Power Global Enterprises Paul Lynch, Pennsylvania State University Ted Lvon, Hatch Michela Macchi, TENOVA Inc. Cathy Martin, Primetals Technologies LLC Chris McKelvey, AIST Francesco Memoli, TENOVA Inc. Lee Morgan, The Systems Group Dianna Mullett, Heraeus Electro-Nite Co., LLC Chloe Myers, Steel Dynamics Inc. Dani Odom, AM/NS Calvert LLC Mark Olson, Pacific Steel Group Ron O'Malley, Missouri S&T Glenn Pushis, Steel Dynamics Inc. Jesse Quiroga, EAFab Corporation Steven Roloff, The Systems Group Lauren Russell, Nucor Corp. Paul Sanders, Michigan Technological University Barry Schneider, Steel Dynamics Inc. Mike Schwentor, U. S. Steel Gary Works Sridhar Seetharaman, EPIXC/Arizona State Universitv Sabra Serino, CMC Steel Texas Richard Smith, Carpenter Technology Ron Smolen, H.A. Smolen Company Inc. John Speer, Colorado School of Mines Grant Thomas, Cleveland-Cliffs Research & Innovation Center Robert Tuttle, University of Western Michigan Stacy Varmecky, AIST Eric Welte, Cleveland-Cliffs Research & Innovation Center Jeenetta Williams, Primetals Technologies LLC Courtney Young, AIST Chenn Zhou, Purdue University Northwest CIVS

1.0 LUNCH AND NETWORKING

2.0 CALL TO ORDER AND INTRODUCTIONS

Ms. Dallas called the meeting to order, and introductions were made around the room. Ms. Dallas thanked those attending.

3.0 ANTI-TRUST GUIDELINE REVIEW

Ms. Dallas reviewed the anti-trust guidelines provided with the agenda.

4.0 COMMITTEE PURPOSE AND OBJECTIVE

Ms. Dallas reviewed the purpose of the AIST Foundation University–Industry Relations Roundtable is to foster communication between our university network and the steel industry. The committee objectives are to increase the number of professors teaching a steel-related curriculum, and to increase the number of students interested in a career in the steel industry.

5.0 INDIVIDUAL PANEL REPORTS

- Effects of AIST and AIST Foundation Programs
 - Academic Emmanuel De Moor, Colorado School of Mines (Presentation)

Dr. De Moor introduced himself as a professor at the Colorado School of Mines, having been the recipient of the AIST Foundation Kent D. Peaslee Junior Faculty Award, and a current AIST Foundation Steel Professor. He stated his students at CSM have received Steel Intern Scholarships and are now offered scholarships through the new Southwest Member Chapter - The Systems Group Scholarship. He also mentioned Dr. Cho from CSM received the AIST Foundation's Sustainable Technologies for Steel Manufacturing (STSM) Grant with two students involved.

Dr. De Moor reported the importance of two of their courses at CSM, with 25 students in the Iron and Steel Making at the senior and graduate level and their 50 sophomore-level Metallurgical and Materials Thermodynamics students. He emphasizes hands-on education, industrial relevance, sustainability, and historical perspectives to his students and hopes to increase the number of steel-related courses for that purpose.

Dr. De Moor noted early exposure to the industry is important and one of the best introductions to the industry is through a plant tour and an "Ah-Ha" moment. He thanked Cleveland-Cliffs EVRAZ NA in Pueblo for hosting them on plant tours. Students always remember their first tour!

Students who receive a scholarship through AIST are very proud of their experiences and it is important to capture that feeling and "pay it forward" to encourage other students to apply. The hands-on experience of an internship is vital. Student participation in industry panels and career fairs instills greater interest. The travel grants offered by the AIST Foundation are invaluable and provide access to the industry.

Connection between CSM and the steel industry has been enhanced through the AIST Foundation grants that include participation by many CSM students. These grants get the students into the plants.

- Recruiting, Scholar Internship Preferences and Feedback
 - Human Resources / Talent Acquisition Dani Odom, AM/NS Calvert (Presentation)

Mrs. Odom introduced herself as the Talent Acquisition Team Manager at AM/NS Calvert where she has worked for 6 years. Her specialty is in workforce development. She began by reviewing the AIST introductory meetings offered by AIST. These meetings provide information about AIST and AIST Foundation programs for workforce development with different groups, including university faculty, university career services, company HR teams and of course, university student groups interested in learning about steel. She noted these meetings take between 30 and 45 minutes and AIST's Courtney Young would be happy to get one scheduled for you.

Mrs. Odom reviewed the results from a survey (included in packet) sent to current Steel Intern Scholars after most had confirmed internships for this summer. The purpose was to learn what were the most important factors when deciding what offer to accept. Out of the 40 scholars, 31 (78%) responses were received.

- First, we needed to know how many offers each received. Of the 31 responses, 50% (1) received 1 offer, 23% (7) received 2 offers, 7% (2) received 3 offers, 13% (3) received 4 offers, and 7% (1) received 5.
- Second, we asked what factors influenced their decision regarding where to do your internship? Of the responses received the following were ranked as to importance.
 - The steelmaking process or project involved (4.23%)
 - The wages being offered (3.64%)
 - o Lodging assistance and/or relocation expense reimbursement provided (3.64%)
 - The company's public image / reputation (3.55%)
 - Proximity to home (3.14%)
 - A representative from the company recruited me (2.50)

Additional feedback that impacted their decisions included interview methods, pre-determined projects and tasks planned ahead and the impact on the company, returning to a previous internship location, a diverse environment, and a desire to explore an area outside of their home or college.

For further information, past scholars were asked if they had any suggestions/recommendations on how AIST and the steel industry can encourage more students to get involved in the steel industry. The top responses included having a strong presence at fairs and communicate types of opportunities within the steel industry, partnership planning with other material organizations, emphasizing the decarbonization aspect of working in iron and steel, improved campus presence through professors, plant tours and introductory presentations, share future AIST events and sessions through partnerships with other organizations, and use social media platforms, videos, and engaging posts to share what it's like to work in the field.

Mrs. Odom also shared some tools and ideas used by AM/NS Calvert, and what they have learned from their interns. She reviewed interview formats they use, provided a task/project list and overview of professional skills development, who will be their mentor on what projects with what measure of success. An evaluation rubric is used for their interns and they are required to give a 5-minute presentation to share experiences on-site with their projects and teams. The student feedback indicates they liked culture training, experienced mentorships, hands-on learning projects, project ownership, meaningful work activities, lunch with other interns, and activities just for the interns. They suggested a few items for improvement including more group activities, overlapping projects with other interns, opportunity to explore other mills, better understanding of flexibility to take days off, improved job description and expectations, quicker access to systems, and a breakdown list of site abbreviations.

In addition, Mrs. Odom shared more about types of media projects done by their site interns, such as podcasts, where students share about their internship experience in a group conversation format, and the 30-second videos they record to share "A Day in the Life" during their internship to promote on social media.

- Internships and Student Outreach
 - Student Scholar Clayton Ferguson, The University of Alabama (Presentation)

Mr. Ferguson introduced himself as a mechanical engineering student at the University of Alabama and a two-time recipient of the AIST Foundation Steel Intern Scholarship. He has had two internships, one at Nucor and one at SDI. His father has been in the steel industry for 16 years and was the biggest influence on his interest in steel. Clay provided positive feedback about his great experiences as an intern and co-op. During his internship, he had the opportunity and challenges to work on meaningful projects throughout the internship and noted that mentors and teammates at SDI were always happy to answer any questions and wanted to provide help.

In regard to improving outreach to students, he stated other students feel the industry is antiquated and needs to be educated on the steel industry today. AIST does a great job connecting students to the industry by providing student programs. He added the steel industry is growing in interest at the University of Alabama. Steel companies are present at both career fairs and on "co-op" day. In addition, over 60 steel-related companies participated in the new "Steel & Structures" day in February. Another

program is called "Employer in the Foyer" where potential employers set-up in the engineering building hallways with food and talk about career opportunities. The presence of steel companies is much stronger now than when he first entered the university and hopes these efforts will grow.

- Intern and Supervisor
 - Scholar Jackson Hollenbaugh from Purdue University
 - Supervisor Jeremy Cronkhite, Steel Dynamics Inc. Structural & Rail Division. Columbia City, Ind.

Jackson stated he had not interest or awareness of steel until he attended a seminar and learned about materials science. He discussed the application process for the AIST scholarships and then his intern experience with SDI last summer. He participated in an "Internpalooza" event where he learned about internship opportunities. He is looking forward to another summer at SDI.

Mr. Cronkhite went on to discuss the employer side of things on the internship. He was one of the first interns here at Steel Dynamics in 2003 and at that point obviously these AIST scholarships didn't exist. Mr. Cronkhite went to Purdue University in West Lafayette, Ind. and at that time there was also very little steel involvement on a university level so most of the industry engineering projects were from other industries. It is for these reasons why our internship program at Steel Dynamics is so important to him personally. It is an opportunity for SDI to give these students real world problems to solve and experience that lets them figure out if this is an industry for them. He stated when an intern is on his team they are a full member of our supervision team. They attend all weekly and daily shift meetings and get involved in a lot of different areas of the facility. Jackson joked that he never knows what his project will be until he gets here and that is really due to him working on projects that come up throughout the summer. Last year he helped us with some Charpy Impact studies that we wanted to get done to see if we needed to go down the path of further controlled Rollings to improve impact toughness. He also created a quick reference document for our reheat operators that looked at alternative product sizes based on bloom length and grade. This was something he created directly for the operators.

6.0 OPEN DISCUSSIONS

Ms. Dallas opened the floor for questions to the panel.

- Ms. Oldam stated they absolutely used the 30 second "Day in the Life" videos produced by their interns in AM/NS's company marketing efforts, including on LinkedIn.
- Last year it was stated that engineering enrollment had fallen 15 % on one campus, while data analytics saw a 40% increase. Emanuel DeMoor replied that they had not seen numbers like that theirs has remained steady. Another professor added we need to make things exciting maybe a steel related video game! Another company stated they are seeing a higher number of IT based applicants. Another professor reported that mechanical engineering enrollment went up 10% from last year computer science went up 36%. Another company reported that all applicants for a position were qualified, but they all were seeking fully remote positions.
- Mr. Cronkhite responded that he is also receiving inquiries about remote positions which just aren't feasible.
- Mr. Hollenbaugh was asked about activities that were offered to build their "interns' network". He cited
 various activities that were offered by the company including the "Interns Palooza" where students were
 able to talk about the companies they are interning at. Mr. Ashburn suggested that maybe AIST could
 host a virtual mixer between board members and interns.
- Mr. Cronkhite added that their interns get together once a week for some type of informal activity. SDI added that their local chamber of commerce hosts a one-day activity program for interns from local companies. SDI sends their interns to the chamber's program which includes life skills, moving into a new area, etc. Plans are underway to make this a three-day program by the chamber. She added that interns placed in the talent acquisition department serve as the lead for all intern communications and activities. Mr. Cronkhite added that they have a sectional co-op that they were able to create with one of their vendors in Germany.
- Professor De Moor pointed out that interns returning to campus are excellent spokespersons for promoting the company they worked at. He also pointed out that if their experience was negative then that too is shared among students and impact the host company in a negative way.

- Mr. Ferguson shared that the local companies take the students out to dinner to discuss how things are going. His internship group were housed together and did activities together. Another company established a Teams channel for their interns and scheduled and paid for professional portraits for their profiles.
- Mr. Fedor asked Mr. Ferguson to expand on the "**Employers in Foyers**" program at his school. Mr. Ferguson explained this goes on in the materials science building where there is lots of foot traffic. 2-3 times a week from mid-fall semester to March or April companies come in and set up a display in the hallway for part of the day. They often have food and marketing items. Students can stop and learn about companies. He has friends that secured internships through these events. You don't get students to stop unless you provide food!
- Mr. Ferguson was asked to describe his internship where he was able to move around to other locations. He was able to visit other facilities.
- The students on the panel were asked if they felt that working remotely as part of their internship was a good idea. None of them felt that being remote would have been more effective than their hands-on experiences at the plant.

7.0 REAL STEEL VIDEO CONTEST UPDATE

Ms. Beiswanger reviewed the 2024 contest reporting the 2024 winner is Shivanand Verma from Pranveer Singh Institute of Technology with their video titled "<u>Leading the Way: Steel's Trailblazing Advancements</u>." This video will be played just prior to the start of the President's Award Breakfast on Tuesday.

8.0 NEXT MEETING AND ADJOURNMENT

Ms. Dallas reported the next meeting is scheduled for Monday, 7 October, 10:30 a.m. –1:00 p.m. (ET) at MS&T 2024, Pittsburgh, Pa., USA. There being no further business, Ms. Dallas adjourned the meeting.

Antitrust Compliance

Antitrust law prohibits agreements or understandings between two or more individuals or businesses to regulate prices or quantities of goods and services, to allocate customers or territories, to hinder or limit a competitor or potential competitor's operations, or otherwise unreasonably restrain business activity. Discriminatory pricing or servicing is also prohibited.

Every individual who participates in AIST meetings and activities should follow these guidelines:

- DON'T discuss with other members your own or competitors' prices, pricing procedures, or anything that might affect prices such as costs, discounts, terms of sale, or profit margins, or anticipated wage rates.
- DON'T make announcements or statements about your own prices or those of competitors.
- DON'T talk about what individual companies plan to do in particular markets or with particular customers.
- DON'T disclose to others any competitively sensitive information.
- DON'T propose or agree to any action intended to disadvantage or injure another company.
- DON'T stay at a meeting or activity where any such anti-competitive talk occurs.
- DO have an AIST staff person present at any meetings and insist on the agenda being followed and minutes kept.
- DO confer with AIST staff before making any statement with competitive ramifications.

It is incumbent upon all AIST members to adhere to these guidelines to avoid putting all parties and their respective companies at risk for antitrust law viol

Page 2