



**MEETING MINUTES – FINAL  
UNIVERSITY- INDUSTRY RELATIONS ROUNDTABLE  
8 OCTOBER 2012  
PITTSBURGH, PA**

**Attendees:**

Kelly M. Dallas, ArcelorMittal USA (Chair)	Staci Beiswanger, Steel Dynamics Inc.
Wendell Carter, ArcelorMittal Indiana Harbor	Aimee Cipicchio, Steel Manufacturers Association
Alan Druschitz, Virginia Tech	Bill Emling, SMS Siemag LLC
Kip Findley, Colorado School of Mines	John Gerrard, ArcelorMittal USA
Doreen Gonzalez-Gaboyan, Purdue University Calumet	Steve Hansen, SSAB Americas
Fred Harnack, United States Steel Corporation	Dave Hoydick, United States Steel Corporation
Lee Jackson, Nucor Corp.	Kolin Keller, CMC Americas
Bob Kuhn, Riverside Refractories	BV Lakshminarayana, AISI
William McCabe, United States Steel Corporation	Francesco Memoli, Tenova Core/Tenaris
Ron O'Malley, Nucor Steel Decatur	Kent Peaslee, Missouri S&T
Jeff Rogers, Nucor Corp.	Tom Russo, Trusscon Inc.
Barbara Santella, United States Steel Corporation	Kathleen Sevener, Valparaiso University
John Speer, Colorado School of Mines	Jim Turnquist, Michigan Technological University
Pello Uranga, CEIT	Chenn Zhou, Purdue University Calumet

AIST Staff: Mark Didiano, Lori Wharrey, Chris McKelvey

**1.0 CALL TO ORDER AND INTRODUCTIONS**

Ms. Dallas welcomed the attendees and called the meeting to order. Everyone in attendance introduced themselves.

**2.0 ANTI-TRUST GUIDELINE REVIEW**

Ms. Dallas stated the meeting would be held in compliance with the anti-trust guidelines provided with the agenda.

**3.0 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 (professors and career services representatives) and the steel industry (human resources personnel and operations representatives). The committee objective is 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.

**4.0 “THE REAL STEEL” MARKETING VIDEO CONTEST**

Mr. McKelvey provided a brief overview of the contest history, dating back to 2010. He mentioned that the contest stemmed forth from ideas that were discussed at the UIRR. He discussed the entries received, voting procedures and winning videos. He also identified the contest committee members, including:

- Kelly Dallas - ArcelorMittal Burns Harbor
- Drew Seely - Steel Dynamics Inc.
- Staci Beiswanger - Steel Dynamics Inc.
- Kip Findley - Colorado School of Mines
- Jim Turnquist - Michigan Tech

For 2013, Mr. McKelvey discussed the changes that were implemented following the UIRR's last meeting in May of 2012 at AISTech. The changes include the deadline to enter was extended from 31 December 2012 to 1 February 2013 and this year's contest will focus on spotlighting high-tech careers in the steel industry.

## 5.0 INDUSTRY SURVEY STATUS

- Survey Purpose: *"To gain an understanding of steel industry awareness and appeal, educational experiences among university students, as well and increased insight to industry and academia."*

Ms. Beiswanger reviewed this committee agreed a survey similar to the Japanese survey discussed at the last meeting would be beneficial to both industry and academia. She reported the committee has been working with Universum to create a survey covering four prongs including:

1. Core Companies in Industry – targeting the top 10-15 leading companies to understand the expectations of new hires and projections of future hiring needs
2. Current Employees at Core Companies – targeting a respondent pool of around 500 young engineers to understand how their education plays into their job experience/satisfactions and assess key drivers of employer/industry attractiveness/retention
3. Select Universities – targeting 10-15 key universities to understand enrollment rates and majors offered to assess the future pipeline of talent, as well as ascertain subjects taught in curriculum
4. Students in Targeted Fields of Study – targeting 500 undergraduate and 500 graduate students to understand perception of the iron/steel industry, career goals/preferences, and future employment plans

Universum would provide a summary of the findings, in-depth explanations, recommendations, and qualitative feedback through PowerPoint and web-based reports. They would:

- provide in-depth insights about the preferences of the target talent when selecting an employer/industry
- Provide knowledge about the external image and the overall attractiveness of the iron and steel industry
- Gather insights about the future pipeline of talent and understanding of the expectations of that talent from the company perspective

Universum anticipates completion within a four month period. The cost is very high.

Following discussion, it was agreed a survey would be sent to UIRR attendees to determine what information will be most beneficial to narrow down the survey and decrease the cost. Once completed, the ad hoc committee will contact Universum as well as other companies for quotes.

All agreed on the necessity of using an experienced professional analysis company with the appropriate contacts at the universities, and the ability to complete the project in a current and timely manner.

## 6.0 FILLING THE GAP

Ms. Wharrey and Ms. Cipicchio reported on SMA / AIST Foundation efforts to provide training for identified steel-specific technical skills gap. Through discussions at AISTech's Town Hall Forum and at the direction of the AIST Foundation Board of Trustees, AIST staff was challenged to create a program to assist steel and steel-related companies fill the skills gap. The SMA Human Resources Committee were interested in the same goal and agreed to work on a joint program.

To begin, a survey was sent to both the SMA Human Resources Committee and the human resources representatives who participate on the AIST Foundation's UIRR. The purpose of the survey was to determine the top skills training needed. Responses were received from 18 representatives from 14 companies.

Based on the survey the top technical skills required, but difficult to find qualified candidates are electrical, maintenance mechanics, information technology, welder, machinist, and millwright. The top technical skills required, and are able to fill with little or no difficulty are office, welder/fabricator, mechanical, production, equipment operators.

Suggestions for programs include:

- K-12 Outreach (students and parents, if not attending college introduce manufacturing careers)
- Secondary Education (support curriculums and certification)
- Industry Promotion (advertising, global reach, leading edge, perception)
- Training Materials (guidelines, post job openings, dvd, books, on-line, workbook)
- Training and Certification (workshops, technical, new hires, unemployed, skill building, internal)
- Scholarships, Grants and Internships (for two-year degrees, to industry technical training programs and equipment, to students at technical schools)

Other organizations are working on this issue as well including NAM Manufacturing Institute which is establishing nationally recognized skills certification. The government is working on funding for skills certification through the America Works Act.

Volunteers were requested to serve on a combined task force. The task force will determine the most beneficial program(s) and guide the development of the program(s). The first meeting will be by teleconference at the beginning of November. Those interested should contact Lori Wharrey at AIST.

## 7.0 AISI / AIST FOUNDATION PROGRAM EVALUATION

Ms. Wharrey and Mr. Lakshminarayana requested input from this committee to improve the joint programs of AISI and the AIST Foundation. The current programs have been in existence for eight years and may or may not be successful in reaching the original program goals; to compel more students to choose engineering as their field of study, to recruit more of such graduates into the steel industry, and to increase the number of professors knowledgeable in steel in North American universities.

The following programs were reviewed:

- FeMET Curriculum Development Grants - \$245,000 has been awarded to 14 professors (\$5,000/yr.)
- FeMET Design Grants - \$392,112 has been awarded to 8 universities (\$50,000/yr.)
- FeMET, StEEL and Premier Scholarships - \$1,050,000 has been awarded to 105 students (FeMET-66, StEEL-34, Premier-5)

A total of \$1,687,112 has been awarded since 2005. The scholarships and grants have reached over 35 universities and over 50 steel plants. Of the 105 scholarships awarded 12 are unreachable, 21 are currently

undergraduate students, 21 are currently graduate students, 7 scholarships were discontinued, 21 are employed outside the steel industry, and 23 are employed in the steel industry.

A joint committee of AISI and AIST Foundation representatives oversees these programs as well as evaluates and selects the scholarship recipients. On 7 Aug 2012 this committee met by teleconference and agree it would be necessary to request the input of university professors as well as input from the FeMET Design Grant (AISI) Committee and the FeMET Curriculum Development (AIST Foundation) Committee, before any decisions on possible changes could be made.

A survey was sent to a core group of 46 professors on 17 Sep 2012 with a deadline of 1 Oct 2012. Responses were received from 14 professors. The results conclude most respondents were aware of the programs and about half have submitted proposals or have students who submitted applications. The following suggestions were made through the survey, from the selection committees, and during this meeting. These suggestions will be discussed by the joint committee, then presented to the AISI and AIST Foundation Boards for approval.

#### FeMET Curriculum Development Grant

- Increase the number of proposals submitted
- Direct student contact with industry through mentor
- Presentation at AISTech and MS&T
- Committee discussion following evaluations
- Not limit to professors of metallurgy
- Add graduate students

#### FeMET Design Grant

- Increase the number of proposals submitted
- Direct student contact with industry through mentor
- Award once in two years (alternate years)
- Award amount to be \$100,000
- Initially submit a two-page brief for evaluation
- Selected brief to submit full proposal
- Open solicitation for the briefing one year; detailed proposal. In year two
- Could be a senior design course or summer project
- \$50,000 is too much for undergraduate

#### Scholarships (FeMET, StEEL, Premier)

- Increase number of applications submitted
- Remove internship
- Make internship optional
- Add incentive for industry employment
- Combine both scholarships and add disciplines
- Internship is key
- Open to sophomores (two-year) and juniors (one-year)

#### Ideas were suggested for additional promotion of all programs

- Companies to promote scholarships at job fairs (brochure)
- Foundation to attend job fairs at target universities
- Contact with mechanical and electrical organizations

## **8.0 OTHER BUSINESS**

Ms. Dallas reported the Midwest Chapter will host the 5<sup>th</sup> Annual High School Engineering Seminar on Wednesday November 7, 2012 at Purdue University Calumet. The one-day seminar is directed to high school juniors who have the potential and interest to pursue a college degree in the field of engineering. The program will focus on certain engineering disciplines; Civil, Electrical, Mechanical and Metallurgical/Material Science. A “hands-on” format provides students the opportunity to learn about each discipline in a classroom/lab setting. Each lab will include a speaker from the steel industry and a professor to supervise the labs. There will also be an opportunity in the morning to network with university representatives and industry leaders. Last year’s event was attended by ten (10) local high schools; 150 students and 11 faculty members.

## **9.0 NEXT MEETING**

The next meeting is scheduled for Sunday, 5 May 2013, 3:30 – 5:30 p.m. (EST) at AISTech, Pittsburgh, Pa. The meeting date may be changed due to conflicts with other events. We will let you know as soon as possible.

## **10.0 ADJOURNMENT**

There being no further business, Ms. Dallas thanked everyone for their participation and adjourned the meeting.