

Technical Papers and Peer Review

Strategic Plan 2019–2022

Goals

Since its formation in January 2004, AIST has fulfilled its mission to advance the technical development, production, processing and application of iron and steel by continuously pursuing the following goals:

- Build a strong and relevant technical organization with active membership groups, quality publications and superior events, all with global access and appeal.
- Create stability with a conservative and diversified revenue plan while avoiding duplication of services.
- Achieve sustainable growth with continuous improvement through strategic planning, global outreach and a dominant market position.

Principles

In the pursuit of these goals, AIST adheres to the following guiding principles:

- Create value for members and benefit to industry.
- Provide opportunity and access for all members.
- Seek member-identified, quality programming.
- Recruit informed and involved leadership.
- Provide responsible stewardship of assets.

Strategic Process

To ensure the Association remains relevant to the steel industry, it shall create and evolve strategic initiatives to reflect the changing needs of our members. These efforts should complement the following core programs of the association:

- AISTech and MS&T our major technology forums
- Technical training programs
- Technology Committee activities
- Member and Student Chapter activities
- Iron & Steel Technology our flagship publication
- Awards and recognition programs
- AIST Foundation grant programs

During the AIST Leadership Conference each November (LC), the member leaders from our Technology Divisions and Member Chapters as well as our Board of Directors meet to identify current challenges, best practices and opportunities for AIST strategic planning. The LC attendees identify and prioritize tactics associated with the following strategic initiatives for the current period:

- Globalization of Networks and Programs
- Membership Retention and Growth
- Industry Training and Education
- University and Student Engagement

Technical Papers and Peer Review

Background

During the University-Industry Relations Roundtable (UIRR) at MS&T'19 in Portland, Ore., AIST President, Professor Ronald O'Malley raised the question of how AIST can better serve academia. During the discussion, he assembled an Academic Review Core Team of AIST members involved in academia to review current programs and procedures for faculty, especially related to academic peer review. The committee worked over several months to put forth the following recommendations on how AIST can better serve the academic community.

Mission

To identify ways to fully engage academia into AIST publications, programs and services.

Vision

To position AIST as the forum for academic members to fully engage research and technology within the steel industry.

Priorities

- Priority 1: Increase the Number of Technical Papers Submitted to Iron & Steel Technology "Transactions"
- Priority 2: Improve Administration of the Academic Peer Review Process
- Priority 3: Increase Visibility of Technical Papers

Priority 1: Increase the Number of Technical Papers Submitted to Iron & Steel Technology "Transactions"

- ✓ Create an online portal on AIST's website for academic and industry representatives to submit their papers directly to "Transactions". The online portal will include author guidelines and examples of technical papers that have been accepted.
 - o https://www.aist.org/publications-advertising/iron-steel-technology/aist-transactions
- ✓ Beginning in 2020, the option for publication in "Transactions" will be included on the AISTech abstract submission form. The paper may then be published in both the AISTech conference proceedings, and "Transactions" if selected.

Priority 2: Improve Administration of the Academic Peer Review Process

- ✓ Create a database of AIST members involved in academia, along with industry representatives engaged in research & development. The database will be used by the Editor of "Transactions" in *Iron & Steel Technology* magazine (I&ST), to identify peer reviewers for technical papers. The database will include, name, affiliation, contact information and technology Committee involvement.
- ✓ AIST will enhance internal procedures for processing papers submitted to "Transactions" through the aist.org website.
- AIST will provide an efficient system for reviewers to submit their comments. As the number of submissions increase, AIST will evaluate implementing an abstract management system (such as OpenWater, OpenConf or HUBB). Implementing an abstract management system has been put on hold.
- ✓ AIST will promote the "Transactions" portal (open year-round) to AIST members through email news outlets when a new Transactions Paper is published.

Priority 3: Increase Visibility of Technical Papers

- ✓ Provide a unique DOI number (Digital Object Identifier) for AISTech proceedings papers and other selected conferences.
- ✓ Provide a unique DOI number (Digital Object Identifier) for Transactions Papers.

- ✓ Make the papers more searchable in Google Scholar, SCOPUS (Elsevier's abstract and citation database), and other technical journal search engines.
- ✓ Upload the papers in the AIST Digital Library according to Google Scholar's guidelines to make the papers easier to find.
- Create an "Open Access" option within our submission portal for authors to make their paper ("Transactions" only) available to non-AIST members online. "Open Access" will initially be offered for free and evaluated over time as the number of submissions and overall impact factor increases. Currently on hold.
- ✓ Create a folder for "Transactions" papers in the Digital Library under the Journal Article Archive. http://digital.library.aist.org/
- ✓ Identify "Transactions" papers as peer reviewed.

Implementation Schedule

- ✓ Staff to draft strategic plan based on Academic Review Core Team recommendations (Feb-Mar 2020).
- ✓ Academic Review Core Team to review and finalize strategic plan draft (Apr 2020).
- ✓ University-Industry Relations Roundtable (UIRR) presentation (September 2020).
- Formal adoption of strategic plan (November 2020).
- Strategic Plan to be integrated into the (broader) AIST Strategic Plan (2020).

Benchmarking

A total of 87 papers have been submitted to Transactions for review between 2012 and 2020:

- √ 46 have been published as a Transactions article (including 3 planned or currently in production for 2021)
- ✓ 3 have instead been published as a regular feature article in the I&ST magazine
- ✓ 4 were recommended to not be published or canceled
- ✓ 2 were published elsewhere
- √ 34 have not been published due to approval to publish never being received by AIST.

Related Links

AIST Transactions

What is Scopus

About Google Scholar

What is Impact Factor

Journal of Iron & Steel Research impact factor

Iron & Steel Technology impact factor (via Researchgate)

AISTech Cite Source (Scopus)

2019-2020 Academic Review Core Team Members

AIST President, Professor Ron O'Malley, Missouri University of Science & Technology Professor Chenn Zhou, CIVS, Purdue University Northwest Professor Bryan Webler, Carnegie Mellon University Professor Chris Pistorius, Carnegie Mellon University