

**2022 ANNUAL REPORT** 



MATERIAL ADVANTAGE AIST-ITM STUDENT CHAPTER



EXECUTIVE BOARD OF DIRECTORS	2
CHAPTERS OUERUIEW	3
CALENDAR OF EVENTS	5
CHAPTER MANAGEMENT	6
TECHNICAL PROGRAMMING	9
CAREER DEVELOPMENT	12
SERVICE	[4
SOCIAL ACTIVITIES	
FACULTY ADVISOR LETTER	



# **EXECUTIVE BOARD OF DIRECTORS**





# CHAPTER'S OUERUIEW

AIST-ITM Student Chapter was recognized for Material Advantage Student Program in 2018, established to promote activities related to Material Sciences and Engineering at Instituto Tecnológico de Morelia (ITM).

Since 2019, AIST-ITM Student Chapter is the student chapter with the highest number of members in Mexico, adding up to 95 members by 2022.

# MISSION

Carry out activities that promote the development of the skills and aptitudes of the members, related to materials engineering and focused on the steel and metallurgy. As well as contributing to improve the educational level within the institution and create an environment of trust among those who are part of the chapter.

#### UISION

We are aiming to become the bridge between the members and the industrial sector in the country, providing them a full view of the possibilities within a professional career in Material Science and Engineering

#### TOP RECORDS

- AISTech 2021 Attendance Challenge winners with 52 students registered.
- 2th consecutive year of being awarded as Chapter of Excellence by Material Advantage Student Program (2020 and 2021).
- First place in the HTS Strong Bar International competition, organized by ASM International at Heat Treat 2021.
- More than 40 students have received Steel to Students scholarship, sponsored by AIST to attend The Making, Shaping and Treating of Steel 101 seminar organized at Fort Worth, Texas and CONAC 2021 at Monterrey, N.L.
- 4 Steel Intern Scholarships sponsored by AIST were granted to AIST-ITM members at 2022. This is the third year in a row that students from our Institute obtain this scholarship and the only university in Mexico in 2022 being awarded.
- Gladys Duran, former AIST ITM president was awarded with "Acta Materialia Inc. Undergraduate Scholarship 2022, sponsored by TMS.
- We held from March 23-25, the 5<sup>th</sup> Iron and Steel Colloquium, gathering more than 100 attendees per day in a 3-day event.
- The Student Chapter President, Fatima Soto, won the Recruit a Member Challenge 2022, sponsored by Material Advantage.



- Two teams from Instituto Tecnológico de Morelia won the 2<sup>nd</sup> and 3<sup>rd</sup> place in the Real Steel Video Contest sponsored by AIST.
- Our President Fatima Soto was selected to be part of International Metallographic Society (IMS) Student Board 2022.
- 89 students are registered to attend AISTech 2022 in virtual modality, therefore winning the AISTech 2022 Attendance Challenge for 2<sup>nd</sup> consecutive year.

# STATISTICS

Aiming to provide our members with the best experiences from where they can learn and grow, AIST-ITM Student Chapter developed multiple activities. The resume is listed below.

- Membership continues with +90 active members
- +20 executive board meetings were held
- 13 informative meetings/outreach events with students took place
- 9 professional development events were held
- 9 technical/educational events were organized
- 7 social events were organized









# CALENDAR OF EVENTS

# **JUNE 2021**

- Nitrex Plant tour
- Board of Directors Swearing-in

#### **JULY 2021**

- AISTech 2021 virtual attendance
- CV Workshop
- 'Casa que Maulla' Campaing

#### **AUGUST 2021**

• IMAT a IMAT: Steel Intern

# SEPTEMBER 2021

- Materials Engineering 101 course
- Strong Bar competition
- Members recruitment activities
- IMAT to IMAT talks

## OCTOBER 2021

- AIST-ITM Fall meeting
- Mining and reduction of iron ores technical course
- Fusion processes technical course
- Secondary metallurgy technical course
- IMAT to IMAT talk

# **NOUEMBER 2021**

- Costume contest
- The Making Shaping and Treating of Steel 101 attendance.
- CONAC 2021 attendance at Mty, Nuevo León.
- ALACERO 2021 virtual attendance.
- SteelChallenge-16 participation with 12 students.
- Research with AIST-ITM talk.

# DECEMBER 2021

- Posada
- Board members recruitment process
- Membership renewal campaign

#### JANUARY 2022

How to? SAT talk

# FEBRUARY 2022

- How to? Delfin talk
- Board of Directors Swearing in
- 3D printing seminar
- AIST-ITM meeting

#### **MARCH 2022**

- Heat treatment course
- Ladle metallurgy Course
- COHIAC 2022
- Metallurgic Rally 2.0
- IMAT tour
- Do it like a girl program
- Industry-University roundtable
- ACerS Meeting
- PonyOrienta Career Fair

# APRIL 2022

Toy drive

#### MAY 2022

- 23<sup>nd</sup> International Materials Engineering Congress.
- AISTech 2022 virtual attendance.



# CHAPTER MANAGEMENT

# MANAGEMENT PROCEDURES

General structure of the executive board is guided by the following hierarchy:

- President: leads executive and general meetings, manages activities along with Vicepresident, supervises the MA annual report, propose and create committees, handles problems between board members or members, signs documents with the adviser, attends weekly meetings.
- Vice-president: assumes all president's responsibilities in case of absence, leads executive and general meetings, manages activities along with president, supervises the MA annual report, propose and create committees, maintains relationships with faculties, sponsors, and important personnel, Assists and coordinates member recruitment and retention activities, looks for sponsorships as well as networking opportunities, attends weekly meetings
- Treasurer: Creates and leads fundraising activities for the chapter, gives weekly follow-up to the scholarships offered by MA associations and informs the board of directors of delivery times and required documentation, collects membership payments and fill out the necessary registration forms, follows up payments to the chapter related to prizes or payments and fill out the forms for reimbursements, tracks renewals, keeps the list of active members updated, attends weekly meetings.
- Secretary: Documents all meetings, takes the assistance of the members of the board of
  directors in meetings, gathers and edits information for the annual report, takes evidence
  of all the events organized by the chapter, creates and leads social and volunteer
  activities. prepares diplomas for the different events, delivers paperwork and processes
  required permits with the institution, attends all board meetings.
- Programs coordinator: recruits members for the activities carried out by the chapter, monitors the participation of the chapter members in the activities that take place throughout the year together with marketing and reports on the meetings of the board of directors, collects and update contact information for active members as well as recent graduates, weekly reviews the programs and events offered by the different ma associations and communicates them to the board of directors, attends all board meetings.
- Public relations: Contacts instructors for courses or speakers for short talks, sends
  information to members via the official Whatsapp group, takes evidence of all the events
  organized by the chapter, collaborates with the secretary in social and volunteer activities.
  attends all board meetings.
- Marketing: Creates flyers and advertising for events, conducts a satisfaction survey after each event and presents it at the board meeting, conducts surveys to find out about



- activities proposed by members of the chapter, collaborates with webmaster to design dissemination strategies, attends all board meetings.
- Webmaster: Publishes chapter announcements on social media, receives the messages from the different platforms and channels them to the corresponding department, periodically reports the performance, scope and impact of the chapter's social networks, collaborates with Marketing to design dissemination strategies, attends all board meetings.
- Jr. Class Rep: Develops induction and orientation activities for the first semesters, proposes recruitment strategies for the first semesters, It's in constant attention to the doubts and/or needs of youngest members, attends all board meetings

#### **BOARD MEMBERS RECRUITMENT**



Board members are recruited carefully among the members through a multiple step process. All candidates must fill out a google forms with their personal data; a motive essay must be delivered, as well as a work plan containing welldetailed strategies to accomplish it.

The provided documents and the interview performance are graded by the board members in company with the advisers. Two interviews are conducted, one by the Board members, second one by the advisers. Total scores are added, and the best candidates are selected. Once the board members recruitment is over, a brief training is given to the new members where general procedures are explained, what's expected of them and how their performance will be rated.

#### BOARD OF DIRECTORS SWEARING-IN

In order to make official the change between boards a virtual meeting is been conducted with AIST Mexico Chapter's Operative Director, where the executive board is presented, along with their responsibilities, and goals to achieve during the semester. Following the University's protocol, a swearing-in ceremony is made, where the board is presented to University's directors





# STUDENT RECRUITMENT



Massive student member recruitment are conducted twice a year, along with the Material Advantage Recruitment challenges. The first one begins on September, aiming to participate at the MA Fall Membership Challenge; advertising a membership discount if the student, brings along a friend to join as well. This strategy has proven to be effective, being October 2021, the second year done recruiting 12 new members.

Second recruitment campaign it's done on January aiming to participate in the MA February Recruitment Challenge, limited discounts were advertised and 9 new members were recruited. Nevertheless, recruiting strategies are carried out through the year, such as: member benefit talks, university events, social media advertisement, flyers, etc.

# **ORCANIZATION**

- Meetings: Executive meetings were held weekly, led by the president and vice-president. The executive board discussed upcoming events, decisions were made, tasked were assigned. A draft of agreements was made after every meeting, by secretary.
- Record keeping: All official documents are uploaded to google drive, such as Chapter's Roster, important documents, photos, etc.
- Banking: Bank account is managed by the treasurer, every purchase must be approved by the faculty advisor, president and treasurer.
- Communication with members: Chapter's Official social media is always open to interaction. Executive board's main communication with members is through a Whats App group by the Chapter's official Whats App Business account.



MINUTA DE REUNIÓN		
FECHA DE REUNION: 13 MAYO 2022	HORA INICIO: 19:00HRS	HORA FINALIZACIÓN: 19:44HRS
OB. AGENDA Y TEMAS A TRATAR:	JETIVO: TEMAS PENDIENTES	
Actividades finales de semestre     Activitades finales de semestre     Activita de jugustes     ASTACA 2022     Elecciones     INAT a INAT     Newtor     Vista industrial     Activita finales     Actività de la finale de la finale     Actività della finale     Actività de la finale     Actività della finale	PRESCRIPTION TO SHARE SH	
	REUNIÓN: Microsoft Teams	
ACUERDOS DE REUNIÓN		
ACUERDOS:	RESPONSABLE:	FECHA DE ENTREGA:
RECONOCIMIENTOS COHIAC • REVISIÓN • FIRMA	FÁTINA, MAURICIO MONSE	PENDIENTE
MAT A MAT	CONTACTO MAFER	MIFROOLES 25 MAYO, 17 00HRS
COBERTURA DEL EVENTO	DIFUSIÓN	16-18 MAYO
HOW TO? PROPUESTAS DE ACTIVIDAD	TODOG	21 MAYO
PUBLICACIÓN DE CONVOCATORIA     RETO A RESOLVER POR PUESTO	DIFUSIÓN TODOS	MERCOLES 18 MAYO 31 DE MAYO
VISITA INDUSTRIAL  DIFUSIÓN DE FORMULARIO  OERRE DE FORMS	JULIO	17 Y 18 JUNIO 14 MAYO 18 MAYO
ENTREGA DE JUQUETES	FÁTINA, MAURICIO	JUEVES 19 MAYO, 11:00HRS

# SOCIAL MEDIA

- Facebook: https://www.facebook.com/aistitm
- Instagram: https://instagram.com/aist.itm?igshid =YmMyMTA2M2Y=
- Youtube: https://www.youtube.com/channel/U CB6mcA3NUy4rC7hxjEvWHIQ
- LinkedIn: https://www.linkedin.com/in/aist-itmcapitulo-estudiantil

Whats App: +52 443 722 1979Email: aist.mex.itm@gmail.com

# PARTICIPATION IN MEETINGS AND EVENTS

Participation and presence in:

- AISTech 2021
- IMAT 2021
- MS&T 2021
- CONAC 2021
- TMS 2022
- ACerS informative meeting 2022



# **TECHNICAL PROGRAMMING**



#### NITREX PLANT TOUR

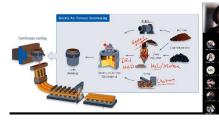
The Student Chapter AIST-ITM attended a plant tour to the NITREX QUERETARO Corporation on June 18th of 2021. Company's history was shared along with all of the processes that take place at their facilities, explaining the nitriding of pieces and processes involved in order to begin the second tour that took place in the production and manufacturing area.

# MINING AND REDUCTION OF IRON ORES COURSE

Mining and reduction of iron ores course was instructed by the Chapter's Advisor PhD. Monserrat López, having the goal of complementing Materials Engineering subject of Mineralogy. It was a two hours course with a total attendance of 26 students, the revised topics were Steel production around the globe, primary processes of reduction, exploratory, crushing and milling ores.



# **FUSION PROCESSES COURSE**



Fusion processes online course was a 2-hour talk, given by Chapter's Advisor PhD. Monserrat López. It started with a brief historical introduction, the changes in different fusion technics through time, different furnaces such as BOF and EAF, their fundamentals, their costs. As digital resource, SteelUniversity simulator was used, therefore some exercises were made, aiding

to obtain a better understanding of the processes reviewed.

# SECONDARY METALLURGY COURSE

Secondary metallurgy online course was 4 hours course, imparted by Chapter's Advisor PhD. Monserrat López, aiming to complement and review secondary metallurgy processes. Reviewed topics included: slag, mixing and homogenizing, vacuum treatment, inclusion control. Thermodynamical and kinetics theoretical fundamentals were explained.





# LADLE METALLURGY COURSE

Dr. Michael Lowry, from Lule & Lowry Steel Process Consultants and former engineer from Arcelor Mittal East Chicago, shared with us all about the theoretical

explanation of the secondary metallurgy processes.

We learned the importance of secondary metallurgy process, with an insight into the part of the process where the grade of steel is made. Thermodynamical, mass transfer and kinetic principles were reviewed. We had a total attendance of 26 students in a 4-hour seminar.



# HEAT TREATING COURSE



Dr. Julio Villalobos, Assistant Professor at Instituto Tecnologico de Morelia shared with us the theoretical and practical explanation of heat treatments used in metals such as iron and steel with theory and practices in an 8 hours seminar.

The first part of the course was destined to introductory theoretical content, necessary for the comprehension of the heat treatments. Heat treatments were carried out in carbon steel test pieces, specifically 1045 and 1018. This course had a total attendance of 25 students.

#### 3D PRINTING COURSE

This course had the purpose of making a collaboration with AMM ITM Student Chapter, chapter specialized to the Mechatronic Engineering; in order to learn more about the additive manufacture.

Being imparted by the vice-president from the AMM ITM Student Chapter, Iván Alejandro Araujo Loyde, an experienced student in the 3D printing field. We had an introductory explanation of 3D printers and how they had evolved through time, how can they be used on the industry and the future of 3D printing. They taught us the sequence to begin the printing of a piece, including the calibration of the printer, the filament election, the piece selection, the programming of the printer and the chosen piece specifications.





# COHIAC 2022

The 5th Iron and Steel Colloquium took place from March 23th to 25<sup>th</sup> 2022. AIST ITM has held this event since 2018 and had the particularity of being the greatest event organized our Student Chapter. For this edition, we had representatives from Ternium, Tenaris Tamsa, DeAcero, Crio, Lule&Lowry Consultants, GTS and AIST Mexico sharing their experiences in the steelmaking, galvanizing and heat treatment processes. Robert Freites, Galvanizing Director and AIST México President and Myrna Molina, Executive Director from AIST México were part of this event.

This year, we hosted 100 assistants in person from our faculty and other 2 faculties, graduate students, professors, and professionals. The COHIAC gathered attendants from Materials, Mechatronic and Mechanic Engineering.



# 23TH INTERNATIONAL MATERIALS ENGINEERING CONCRESS



From from May 2<sup>nd</sup> to May 4<sup>th</sup>, AIST ITM was part of the team that organized the 23<sup>th</sup> International Materials Engineering Congress. In this 3 day event, multiple topics were discussed, including problem solving in industry, material science and engineering importance, heat treatments, welding, biomaterials, steelmaking processes, process and technology involved in prostheses, nanomaterials, among others. Gathering more than 180 attendees per day from Materials, Mechatronic and Mechanic Engineering.



# CAREER DEUELOPMENT



# CU WORKSHOP

This workshop was instructed by Luis Rodrigo Palomera Rodríguez from Tata Steel Europe and had the purpose to help our members to learn about to create a successful curriculum vitae (CV), how to present our academic background, soft and hard skills and how to avoid common errors. This is necessary training for a successful job searching. We launched a virtual training on Microsoft Teams platform with 25 attendees.

#### STRONG BAR COMPETITION

AIST-ITM Student Chapter achieved first place in the HTS Strong Bar International competition, organized by ASM International at Heat Treat 2021, with it's representative team TeaMat, composed by Narciso Calderón, Gladys Duran, Rodolfo Canales, Fátima Soto, Vladimir Rodríguez, led by the Faculty Advisor, PhD. Monserrat López



#### IMAT TO IMAT



An hour talk offered by Materials Engineering graduate students. They are informative talks, where speakers give attendees some pieces of advice, tips on how to face the world after graduation comes, they are encouraged to speak from experience in working life, aiming to motivate students not to be afraid when facing a new stage of life. The talks were given virtually having a Q&A format. Throughout the year we had 4 sessions, these being:

- Claudia Gonzales: Student Chapters and Volunteering
- Daniel Vázquez: How to succeed after graduation, tips and tricks
- Marco Ezequiel: Experience as material Science and Engineering grad student
- Gladys Duran: Experience being a Steel Intern Scholar





# HOW TO?

were:

**EL DELFÍN 2022** 

This series of dialogs contains all the tips and trick needed to succeed in life, beyond the technical knowledge acquired during university. This year two were held having the next describes topics:

- SAT: Was imparted by the accountant Esmeralda Aparicio, with the new changes made to Mexican Tax Administration Service and what does a recently grad student needs to know.
- Delfín Program: was given by an Executive board member, Danna Paniagua, guiding members through the process of applying to a Research Program offered by the university, she talked about what to do, what to expect, general processes which should be followed, and her personal experience.



COLOQUIO DEL HIERRO Y DEL ACERO

CAPITULO ESTUDIANTIL AIST - ITM

#### UNIVERSITY - INDUSTRY PANEL DISCUSSION

The University-Industry panel of discussion was held during the 5<sup>th</sup> Iron and Steel Colloquium, having as goal to share different perspectives on the importance of Material Science and Engineering students on shaping the tomorrow of the steel industry. The participants representing the University

- Eng. Myrna Molina: AIST Mexico operative director
- PhD. Omar Aguilar: University's board representative
- PhD. Pedro Garnica: University's head of department
- PhD. Nicolas Herrera: University's head of department

On the other hand, the participants representing the industry were:

- Eng. Ricardo Ontiveros: Heat treatment specialist
- MSc. Narciso Calderon: Nissan specialist
- PhD. Ruben Lúle: Metallurgist with more than 40 years on the industry



# **SERUICE**

# MATERIALS ENGINEERING IOI COURSE

This course had the objective of introducing to freshmen the activities developed by our chapter, the subjects related to Materials Engineering career, and the job opportunities and professional development. We launched this course in virtual mode for 15 students in a three week event.



#### AIST-ITM TALKS



Amongst the planned activities by the general committee from the AIST-ITM Student Chapter, our talks represented the direct approach with freshmen and sophomore students as an introduction to the engineering, the need of knowledge completely related with the iron and steel industry is remarkable. Talks were given by members from the general committee on which they showed all of the benefits of being a member; also, the mentioning

of the achievements from the Student Chapter and The AIST through time.

# IMAT TOUR

Acknowledging the industry's deficit on well-prepared Metallurgists, AIST-ITM Student Chapter conducted some virtual conferences and some visits to high school students, in order to share on what's material science and engineering career about, benefits of studying a metallurgy related engineer, importance and impact a materials engineering could make on the industry. We launched 4 virtual visits and 3 in person tours from December 2021 to March 2022.



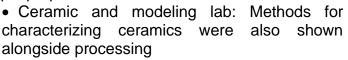
#### PONY ORIENTA CAREER FAIR

Career Fair 'Pony Orienta' is aimed to High School students at their senior year to share the opportunities that our Institute offers in all the professional careers. Our executive board participated in the next activities.

 Mineralogy lab: brief explanation of lab rules, demonstration with equipment needed



 Metallography: Explanations of different equipment were given, such as metallographic microscopes, cutters, polishers, grinding belts, and assemblers. Everything you need to perform metallographic sample preparation



 Mechanical testing: Advanced laboratory equipment available at the university was showed, including Rockwell hardness testing, Charpy test, Tensile test.

 Fusion and welding lab: furnaces were showed such as EAF, induction furnace. A demonstration of aluminum fusion was made, and welding procedures performed.

The attendance for this career fair was about 1000 participants from high school located at our state. The event was held on March 2022.



#### DO IT LIKE A CIRL PROGRAM

To commemorate the International Women's Day, we held two sets of conferences along with IEEE and Women in Engineering Student Chapters, first one on March 8<sup>th</sup>, second one on Mach 9<sup>th</sup> 2022. Pursuing the objective of empowering young women through the experiences of female engineers who teach at the Institute.

Topics covered the experiences throughout their professional career, some advice, the active role of women shaping the tomorrow's world for more than 40 attendees I the 2 days event. Embracing the positive impact a female role has in everybody's life, attendees were invited to bring pictures of a woman who they admire or had an impact in their lives; a mural was made with the provided pictures.



# AIST FOUNDATION REAL STEEL VIDEO CONTEST

7 student teams from Instituto Tecnológico de Morelia participated in the AIST Foundation Real Steel Video Contest 2022. This annual contest, sponsored by the AIST Foundation, challenges university and high school students to create three-minute videos that educate viewers about steelmaking.





A Steel World and ML, AI & IoT – Improvement and Growth of the Steel Industry won the 2nd and 3rd places, videos edited by students from Instituto Tecnologico de Morelia.

# ACERS INFORMATIVE MEETING

AIST-ITM Student Chapter was invited to attend ACerS 2022 informative Meeting, held online on March 30th, in which all programs and benefits of being member of ACerS were displayed. The executive board attended, and our Faculty Advisor PhD Monserrat López was personally thanked by Mark Mecklenborg, AcerS's Executive Director, for all her efforts in inspiring students to join the Material Advantage Community







# SOCIAL ACTIVITIES

# FALL MEETING

In December 2020, we had a pizza meeting with our members having the opportunity to share our experiences from the first time in a presence mode since March 2020.

This celebration had the objective of reunite most of the active members from the student chapter, get to know each other and participate in surprise games. We also talk about the Material Advantage programs and opportunities, as well as the Chapter AIST-ITM.





# CASA QUE MAULLA DONATION

Student Chapter AIST-ITM organized a collection to aid the 'Casa que maulla' cat shelter. Through this activity, we achieved the collection of 55 pounds (25 kilograms) of cat food, and later that day this food was given to the shelter's managers.

# COSTUME CONTEST

To celebrate the Día de los Muertos in Mexico, celebration that takes place every November 2nd, the committee arranged a contest for the students of the Instituto Tecnológico de Morelia that were members of the Student Chapter AIST-ITM. On the contest the member with the best costume would achieve the prize of 25 USD (500 Mexican pesos). Photographs were uploaded on the official Facebook page and the winner was decided reaching the highest number of likes





#### POSADA

On December 10th in collaboration with M3 Student Chapter-ITM, having the purpose to celebrate and having a connivance between the members from both student chapters. This connivance also had the quality of combining two activities, the first one being the celebration and the second one being a collect of dog and cat food, and also clothes destined for donation.

At the end of the event, we collected a total of:



- 50 pounds (23 kilograms) of dog and cat food.
- 4 cat food pouches.
- 2 large bags of clothing.

# 2<sup>ND</sup> METALLURGICAL RALLY

The "Metallurgical Rally 2" was a competition that was part of the program of "COHIAC 2022", was a knowledge competition in topics like steelmaking processes,

iron, and steel and basics, sciences and engineering. Competition was proposed for six teams, which would participate in six rounds and each round having a total of twelve questions, thus giving us seventy-two questions for the entire activity. The questions were projected on screens, being visible to all competitors, as well as general public. Finally, awarding of the three winning teams took place on March 25, 2022, at closing ceremony of "COHIAC 2022" event, winner teams were awarded by president and vice-president of the AIST-ITM Student Chapter.



#### TOY DRIVE



AIST-ITM Student Chapter, collaborated with IEEE-ITM, ASME-ITM, AMM-ITM, Student Chapters of our University, in a toy drive. Asking all the Chapters' members to donate toys. The drive lasted 3 days, providing all kind of toys, which were delivered by the executive board representatives to the children's home 'Felicitas del rio'





Instituto Tecnológico de Morelia Subdirección Académica Departamento de Ingeniería en Materiales

Morelia, Michoacán, May 24, 2022

**Reference Letter** 

#### To whom it may concern,

As Advisor to the Material Advantage Student Chapter at the Instituto Tecnológico de Morelia, it is a pleasure to give my support to AIST ITM Student Chapter to be evaluated as Most Outstanding Chapter.

This year, the main goal for the student board was to enroll more students in the chapter, organize the annual iron and steel colloquium and continue with technical training programs in presence modality. They began the academic year with a CV workshop to create a successful resume and improve their networking through LinkedIn. To improve their hard skills, the student chapter organized training seminars as Heat Treatment Processes, Ladle Metallurgy, and Steelmaking.

AIST-ITM members have participated in programs organized by AIST, ASM, ACerS and TMS, the following stand out: MS&T 2021, IMAT 2021, TMS 2022 151th Annual Meeting & Exhibition, AISTech 2022, Steel to Student Program, Real Steel Video Contest, Steel Intern Scholarship with 4 students awarded from Instituto Tecnologico de Morelia for 3 years in a row, and winning for the third time Recruit a member Challenge sponsored by AIST.

For fifth consecutive year, the AIST-ITM Chapter organized "The Colloquium of Iron and Steel" in March 2022, which is now considered a national event where some of the biggest companies in the steelmaking sector are eager to present technical conferences, to inform the students about work and internship opportunities, as well as industrial tours. This event was held from March 23 to 25, gathering more than 100 students per conference in a presence modality.

The student board organized K-12 activities such as IMAT Tour and "Pony Orienta" Career Fair, to advance the awareness, understanding, and appreciation of science, technology, engineering, and math (STEM) in the K-12 student population. AIST-ITM student chapter main objective is to achieve that more young people in the city of Morelia, Michoacán, Mexico generate an interest in the study of metallurgy and applications for the use of iron and steel, providing opportunities for the personal and professional growth of our students with the attraction and connection of important companies in the sector.

For all of the above, I give my recommendation and support to the student board and its members.

Monserrat Ool (a Lopez Monserrat Sofia López Cornejo
Assistant Professor, Adviser AIST ITM Student Chapter
Materials Engineering Department
monserrat.lc@morelia.tecnm.mx











