

EAF

*international
meeting*



Photo Courtesy of Arvedi Group

**PRODUCTIVITY
ENERGY EFFICIENCY
RAW MATERIALS &
DECARBONIZATION**

**BERGAMO
30 NOVEMBER
AND
1 DECEMBER
2023**

ORGANISED BY



**ASSOCIAZIONE
ITALIANA DI
METALLURGIA**

PROGRAMME



EAF

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Throughout the years, the EAF meetings have become a key-event for the industrial and academic experts involved in the EAF steelmaking. Not only they allow the improvement of technology, but most important they guarantee the “know-how inheritance”: transfer, sharing and recording of the knowledge within the company at any level. Besides the improvement in process efficiency, continuous measurements and automatic control contribute decisively to all aspects related to safety and environment. On the other hand, the transition to circular economic and the action against the climate change implies new challenges: improvement of scrap quality, use of DRI/HBI, substitution of coal injection, improvement of slag quality, control of slag composition, possible exploitation of hydrogen-burners etc. The Meeting aims at gathering and sharing information on all aspects of EAF technology, among delegates with academic and industrial backgrounds. Such an event, capable of bringing together suppliers and manufacturers, will allow the comparison between the current and future needs and will set the ground to satisfy these demands now or in the future.

CONFERENCE CHAIRPERSON

Carlo Mapelli - Politecnico di Milano

ORGANISING COMMITTEE

Mauro Bianchi Ferri - Acciarium

Serena Fasolini - DEREf

Gianpaolo Foglio - Feralpi Group

Mario Marozzi - Tenova

Jose Noldin - GravitHy

Luca Orefici - Pipex Energy

Weihong Yang - KTH





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30th November 2023

8:00 Welcome coffee & registration

8:50 Welcome addresses

Chairperson: **CARLO MAPELLI**

9:00 (eaf_038) Opportunities for supporting research and development initiatives

A. Colli - Commissione Europea, Italy

9:15 (eaf_030) Energy-efficient and hydrogen-ready technologies for EAF steelmaking

J. von Schéele, H. Groiss - Linde GmbH, Germany

H. Alshawarghi - Linde Inc., USA

P. Kwaschny - Linde AB, Sweden

J. van Lingen - Linde Gas Netherlands, Netherlands

D. Razzari - Linde Gas Italia, Italy

9:25 (eaf_003) Insight into the behavior of a Hydrogen Arc in an EAF furnace

A. Kharicha, M. Al-Nasser - Montanuniversität Leoben, Austria

9:55 (eaf_002) Hy³ (Hy-cube) project : Hyundai Steel's carbon neutral strategy

H. Kim, M. Sun, Y. H. Kim - Hyundai Steel, South Korea

10:15 (eaf_012) Failure analysis of a HDPE liner in a type IV hydrogen storage tank

A. Rondinella, G. Capurso, F. Andreatta, L. Fedrizzi - Università di Udine, Italy

D. Menotti, A. Agnoletti - Faber Industrie, Italy

10:35 LONGARETTI AWARD

10:55 *coffee break*





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Chairperson: **DAVIDE MOMBELLI**

11:10 (eaf_001) Future Green Steelmaking for high-quality steel grades via the DRP-EAF route: Case study for high and low grade DRI input

S. Chatterjee, S. Kumar Panda - Tata Steel Netherlands, The Netherlands

11:30 (eaf_013) The value of DRI - impact on steel quality

B. Vucinic - Danieli & C. Officine Meccaniche, Italy

11:50 (eaf_014) Role of physiochemical properties of biochar on the mechanical and metallurgical performance of self-reducing briquettes made of biochar and mill scale

G. Dall'Osto, D. Mombelli, L. D'Aurea, C. Mapelli - Politecnico di Milano, Italy

12:10 (eaf_019) Optimizing Fe yield and DRI integration: leveraging fast and simple OES technology for short tap-to-tap EAF operations and slag control

A. Schlemminger - QuantoLux Innovation, Germany

M. Ounanian, A. Kunz - QuantoLux GmbH, Germany

12:30 (eaf_036) I-Smelt: new smelting technology based on electricity and biochar

C. Mapelli, G. Dall'Osto, D. Mombelli - Politecnico di Milano, Italy

R. Carli - Prosimet, Italy

12:50 (eaf_033) Combination of EAF process modelling and process control for improvements of steel production through innovative approaches

P. Frittella, L. Angelini, A. Landini, G. Foglio, F. Fredi, C. Di Cecca, M. Tellaroli,

B. Cinquegrana, F. Morandini - Feralpi Siderurgica, Italy

13:10 *lunch*





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Chairperson: **MARIO MARCOZZI**

14:00 (eaf_011) Numerical modeling of mass and energy balances in EAF

S. Ferro, C. Cicutti, F. Marchini - Tenaris, Argentina

P. Galbiati - Tenaris, Italy

A. Bilancieri - Tenaris University, Italy

14:20 (eaf_022) Optimization of the energy consumption through waste heat recovery and advanced digital integrator

R. Bontempi, U. De Miranda, M. Zanforlin - ORI Martin, Italy

E. Pingaro, M. Baresi - Turboden, Italy

E.J. Chiarullo, G. Di Zanni R. Girelli - Tenova, Italy

14:40 (eaf_027) Efficient heat buffering for ORC systems on EAF

A. Dallasta, F. Ratto - Area GenoVeSE, Italy

15:00 (eaf_004) The effect of arc stability in the operation on Electric Arc Furnace

N. Lugo Flores, T.P. Wells, P. Stafford, S. Goulden, R. Corbari - GrafTech

International Ltd., Switzerland

15:20 (eaf_039) DevH2forEAF project - Developing and enabling H2 utilization to produce liquid steel in EAF

F. Ferrari - Nippon Gases Industrial, Italy

15:40 (eaf_040) Waste heat from EAF offgas utilization

A. De Vito, F. Cirilli, G. Fasliivi, I. Luzzo, A. Provesi - RINA Consulting-CSM, Italy

M. Chini, L. Bianco, D. Gaspardo -Ferriere Nord, Italy

16:00 *coffee break*





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Chairperson: **COSMO DI CECCA**

16:30 (eaf_025) Efficient and reliable transition of the steel industry: Tenova's approach

A. Grasselli - Tenova, Italy

16:50 (eaf_020) Transparency - The key pillar on the path towards sustainable industrial production and fundamental for CO2 engineered EAF refractory concepts

K-M. Zettl - RHI Magnesita, Austria

17:10 (eaf_032) Q-ONE technology, developed and patented by DANIELI, represents a breakthrough innovation in power transfer to the arc furnace

L. Morsut - Danieli & C., Italy

17:30 (eaf_007) Revolutionary EAF solution: a review of the operation of eleven EAF Quantums by Primetals

D. Catan, A. Masolini, A. Hegazy, M. Hein, J. Schwörer, C. Nayman, H. Fuchs, H-J. Krassnig - Primetals Technologies Germany GmbH, Germany

17:50 (eaf_041) Maximize your output, increase your efficiency and protect your assets

G. Cortinovis, M. Minuti - ABB, Italy

18:10 End of the session

18:30 Departure by bus from the Meeting Venue

**19:00 Meeting dinner at
VILLA MORONI
via Papa Giovanni XXIII
24040 Stezzano (BG)**





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1st December 2023

Chairperson: **MAURO BIANCHI FERRI**

8:30 (eaf_009) Application of different tools to improve process control in the EAF

J. Gaspari, L. Waridel, S. Goya - Tenaris Siderca
S. Ferro, C. Cicutti - Tenaris, Argentina

8:50 (eaf_006) The maintenance free coupling

L. Gottellini, E. Borlandelli - Rima, Italy

9:10 (eaf_008) Robotics applied to EAF steel bath deslagging

I. Rusu - Polytec, Italy

9:30 (eaf_031) Stirring efficiency generated by EMS vs gas stirring for a giant electric arc furnace

L. Teng, H. Yang, C. Almeby - ABB Metallurgy, Sweden
M. Zielinska - ABB Corporate Technology Center, Poland

9:50 (eaf_024) Efficient and highly productive EAF: operational results of a Tenova's reference plant

A. Grasselli - Tenova, Italy

10:10 *coffee break*

Chairperson: **WEIHONG YANG**

10:40 (eaf_023) EIT Raw Materials RIS-DUSTREC: investigation and selection of furnace dust samples for valuable metals recovery

D. Mombelli, C. Mapelli, G. Dall'Osto - Politecnico di Milano, Italy

G. Tavčar, R. Kocjančič - Jožef Stefan Institute, Slovenia

D. Radulović - Institute for technology of nuclear and other mineral raw materials (ITNMS), Serbia

I. Ristović - University of Belgrade, Serbia

M. Ciszewski - Łukasiewicz Research Network, Poland

J. Kastivnik - TH ReMining, Slovenia

A. Mladenovič, A. Mauko - Slovenian National Building and Civil Engineering Institute (ZAG), Slovenia





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1st December 2023

11:00 (eaf_015) Utilization of secondary lead slag as a secondary raw material
G. Tavčar, R. Kocjančič, A. Stergaršek, M. Ponikvar-Svet - Jožef Stefan Institute, Slovenia

U. Herlec, A. Šoster, M. Dolenc - University of Ljubljana, Slovenia

11:20 (eaf_016) The Synthetic Graphite Industry: The Achilles heel of Green Steel and Green Mobility through the lens of announced shortages and geopolitical disruptions

R. Van Rensburg - Africa AST Technology, South Africa

S. Alameddine - AST Technology, Switzerland

G. Ferreira - Americas AST Technology, Brazil

F. Masia - Europe ALTech Group, Italy

A. Kaushik - Asia Pacific ALTech Group, United Arab Emirates

11:40 (eaf_029) SwingDoor – immediate mean to reduce CO2 emissions in EAF operation and future improvement by hydrogen burners

M. Leber - INTECO PTI

C. Buchmaier, C. Redl - INTECO, Austria

A. Valoppi - INTECO, Italy

12:00 (eaf_037) Scrap conditioning for improving energy consumption and productivity

O. della Gaspera, V. Zanaglio - ZATO, Italy

C. Mapelli, D. Mombelli - Politecnico di Milano

12:20 lunch

Chairperson: **RICCARDO CARLI**

13:30 (eaf_035) Fossil free graphite produced from biomass for greener steel
W. Yang, Z. Shi - KTH, Sweden

13:50 (eaf_021) Exploring the use of alternative non-fossil carbon and energy sources, and novel iron carriers in electric steelworks through a dedicated flowsheet model

I. Matino, V. Colla, O. Toscanelli - Scuola Superiore Sant'Anna, Italy

A. Soto - Sidenor I+D, Spain





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14:10 (eaf_028) Chromium refining during scrap melting process in an EAF

D. Papamantellou, R. B. Lopes Cancado, F. Schrama - Tata Steel Netherlands
A. Smith - Materials Processing Institute

14:30 (eaf_034) iSlag: The improved control of slag conditions through application of process modelling and new detection systems aiming at improvement of steelmaking process and slag recovery conditions

P. Frittella, L. Angelini, M. Bersani, C. Senes, C. Di Cecca, F. Fredi, F. Guerra,
V. Duro, G. Badina, G. Miglietta, G. Mazzi - Feralpi Siderurgica, Italy

14:45 coffee break

Session GREEN STEEL (*in Italian language only*)

Moderatore: **ENRICO MALFA**

15:10 Decarbonizzazione e definizione di "Green steel"

Alfredo Schweiger - Federacciai

15:35 Il calcolo dell'impatto ambientale nel settore acciaio

Carlo Brondi - CNR-STIIMA

16:00 Approfondimento dello standard GSCC per il processo EAF

Giovan Battista Landra - Gruppo Beltrame

16:25 TAVOLA ROTONDA

moderata da: Davide Lorenzini - Siderweb

Roberto De Miranda - Ori Martin

Vincenzo Maragliano - Gruppo Feralpi

Marco Geneletti - TenarisDalmine

Carlo Beltrame - Gruppo Beltrame

Alessandro Misul - Cogne Acciai Speciali

17:45 End of the Meeting





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POSTER SESSION

(eaf_010) Optimization of deoxidation process to control nitrogen and inclusions of ER50-6 produced by EAF

T. Chen, J. Yang, J. Zhou, M. Yi, Y. Liu - Shougang Group Co. Ltd, China

(eaf_017) iSteel-Expert: a solution to improve situation awareness in the EAF area which enforces process efficiency, reliability and sustainability while favouring preservation and transfer of steelworks know-how

R. Girelli, V. Scipolo - Tenova, Italy

V. Colla, M. Vannucci - Scuola Superiore Sant'Anna, Italy

L. Bianco, L. Battigelli - Siderpotenza, Italy

J. Possik, B. Paree - Institut Catholique de Lille, France

E. Jimenez, B. Argáiz - Universidad de la Rioja, Spain

M. Cardelli, M. Massei - Sim4Future, Italy

A. Bruzzone - Università di Genova, Italy

**POSSIBLE CHANGES TO THE PROGRAMME WILL BE
COMMUNICATED DURING THE MEETING.**





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GENERAL INFORMATION

VENUE

The International Meeting will be held in Bergamo at the Congress Center Giovanni XXIII - Oggioni room, Viale Papa Giovanni XXIII, 106 (www.congresscenter.bg.it).

ACCOMMODATION [>>link](#)

LANGUAGE

The official language of the Meeting will be English.

PROCEEDINGS

All participants will receive the PDF presentations at the Meeting.

Authors interested in writing full papers for publication on "La Metallurgia Italiana - International Journal of the Italian Association for Metallurgy" (the scientific journal of AIM, which is covered in the Science Citation indexed by Clarivate Analytics (formerly Thomson Reuters), and in Scopus by Elsevier B.V) are invited to inform the Editorial Secretariat (met@aimnet.it).

PAYMENT AND REMITTANCE

- by bank transfer, to the order of Associazione Italiana di Metallurgia - AIM at "CREDITO EMILIANO SpA", Branch no. 052 Milano Sede – Via Andegari, 14 - 20121 Milano - Italy, account no. 010000480455 cod. ABI 03032 - CAB 01600 - cin M - IBAN: IT33M0303201600010000480455, swift code BACRIT22MI
The transfer order must specify the name of the participant and the reference "EAF 2023". A copy of the transfer order must be sent to AIM, together with the Registration Form.
- by credit card online (www.aimnet.it).





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REGISTRATION FEES

FEES FOR DIGITAL PARTICIPATION ARE THE SAME AS ON-SITE ATTENDANCE FEES
ALL REGISTRATION FEES ARE REVENUE STAMP INCLUDED

| | AIM MEMBER | NON-MEMBER |
|------------------------------------------------------------------------------------------------------------------------|--------------|--------------|
| <ul style="list-style-type: none"> • SPEAKER • SESSION CHAIRPERSON • COMMITTEE MEMBER | 380 | € 470 |
| <ul style="list-style-type: none"> • PARTICIPANT (NON-PRESENTER) | € 550 | € 640 |

For non-members, the fee includes AIM Membership for the last quarter of 2023 and for the year 2024

| | | |
|-------------------------------------------------------------------------------|--------------|--------------------|
| STUDENT Student will have to provide valid proof of student status. | € 370 | (22% VAT included) |
|-------------------------------------------------------------------------------|--------------|--------------------|

Additional ticket for Meeting dinner for accompanying persons: € 110 (plus 22% VAT)
(Includes only the Meeting dinner on November 30, 2023)

MEETING REGISTRATION FEES INCLUDE:

- Admittance to the technical sessions
- Meeting bag with electronic proceedings
- Meeting dinner on November 30
- Coffee breaks and lunch

REGISTRATION

If you plan to attend, please register online on the Meeting website <http://www.aimnet.it> or fill in the PDF registration form and send it to aim@aimnet.it
Please use a separate form for each participant.
Please contact the Organising Secretariat by e-mail, if possible.





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SPEAKERS REGISTRATION

Please be aware that only presentations submitted on time and with presenting author regularly registered (registration fee paid) **before November 10, 2023** will be included in the final programme and distributed to all attendees.

Registration forms will not be processed without payment. A maximum of two presentations will be accepted for each speaker registered in time.

SPEAKERS CANCELLATION AND REFUND POLICY

A refund, less 20% deduction for administrative costs, will be issued for written cancellations received by November 10, 2023. For speakers who notify their cancellation **after November 10, 2023** or will not attend the Meeting, **a charge of 100% of the conference fee will be withheld**. Their presentations will be distributed anyway and a copy of all presentations will be sent after the event.

CANCELLATION AND REFUND POLICY

A refund, less 20% deduction for administrative costs, will be issued for written cancellations received by November 10, 2023. For attendees who notify their cancellation **after November 10, 2023** or will not attend the conference, a charge of 100% of the conference fee will be withheld and a copy of all presentations will be sent after the event.

MEETING DINNER

The Meeting dinner will be offered in the evening of November 30 at **VILLA MORONI - Via Papa Giovanni XXIII, 6, 24040 Stezzano (BG)** at 19:00.

A transfer service will be provided. The buses will leave at 18:30 in front of the Congress Center Giovanni XXIII. After the dinner, the bus transfer will bring back the guests to Bergamo.

BERGAMO

Bergamo greets visitors with its Venetian Walls. Surrounded by rivers and lush, verdant valleys, crossed by paths that widen to Parco dei Colli, the area's largest park, the city looks like a lounge filled with art, culture and nature, with a fascinating and complex history just waiting to be shared with others. The "upper and lower" city reveals a mixture of pleasant surprises and unexpected encounters, such as those with Gaetano Donizetti, the great composer of international renown, Bartolomeo Colleoni, the Bergamo leader who served under the Republic of Venice and Lorenzo Lotto, among the most famous Italian Renaissance artists who lived and worked in Bergamo for over a decade.





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INSURANCE

The Organising Secretariat cannot assume any responsibility for personal accident, loss or damage to the private property of participants and accompanying persons, which may either occur during or arise from the Meeting. Participants should therefore take whatever steps they consider necessary as regards insurance.

DIGITAL ATTENDANCE

For delegates with travel restrictions only: It will be possible to follow the presentations digitally, in live streaming (Zoom).





Please complete and return this form by **November 10, 2023**

to: ASSOCIAZIONE ITALIANA DI METALLURGIA

via F. Turati 8 - 20121 Milano · Italy

phone: +39 0276021132

e-mail: aim@aimnet.it - www.aimnet.it

ALL REGISTRATION FEES ARE REVENUE STAMP INCLUDED

FEES FOR DIGITAL PARTICIPATION ARE THE SAME AS ON-SITE ATTENDANCE FEES

For non-members, the fee includes AIM Membership for the last quarter of 2023 and for the year 2024

| | AIM MEMBER | NON-MEMBER | STUDENT Student will have to provide valid proof of student status. |
|------------------------------------------------------------------------------------------------------------------------|------------|------------|------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • SPEAKER • SESSION CHAIRPERSON • COMMITTEE MEMBER | € 380 | € 470 | |
| <ul style="list-style-type: none"> • PARTICIPANT (NON-PRESENTER) | € 550 | € 640 | € 370 (22% VAT included) |

Additional ticket for Meeting dinner for accompanying persons: € 110 (plus 22% VAT)

(Includes only the Meeting dinner on November 30, 2023)

PERSONAL DATA

Please use **BLOCK** letters throughout form (photocopies can be used)

FAMILY NAME _____

FIRST NAME(S) _____

E-MAIL FOR CORRESPONDENCE _____

TEL. _____

INVOICING DATA

COMPANY NAME _____

COMPANY FISCAL ADDRESS _____

ZIP CODE _____ TOWN _____

COUNTRY _____

E-MAIL FOR INVOICING AND BILLING INFORMATION _____

VAT NUMBER _____

ORDER REF. NUMBER (IF REQUESTED ON THE INVOICE) _____

ONLY FOR ITALIAN SOCIETIES

Indirizzo posta elettronica certificate (PEC) _____

Codice destinatario _____

I WILL ATTEND AS: DELEGATE (NON-PRESENTER) - SESSION CHAIRPERSON - COMMITTEE MEMBER - STUDENT (A valid proof of student status is required)

SPEAKER (PRESENTER) PAPER NR. EAF(N°) _____ AND EAF(N°) _____ (EACH REGISTRATION COVERS A MAXIMUM OF TWO PAPERS)

ON-SITE DIGITALLY (ONLY DELEGATES)

AIM MEMBER - NON-MEMBER

EURO _____

N° _____ ADDITIONAL TICKET(S) FOR SOCIAL EVENT (NOVEMBER 30)

EURO _____

FOR ACCOMPANYING PERSON AIM MEMBER

TOTAL AMOUNT BEING PAID

EURO _____

PAYMENT AND REMITTANCE

by bank transfer, to the order of Associazione Italiana di Metallurgia - AIM at "CREDITO EMILIANO SpA", Branch no. 052 Milano Sede - Via Andegari, 14 - 20121 Milano - Italy, account no. 010000480455 - cod. ABI 03032 - CAB 01600 - cin M IBAN: IT33M0303201600010000480455, swift code BACRIT22MIL. The transfer order must specify the name of the participant and the reference "EAF-23". A copy of the transfer Order must be sent to AIM, together with the Registration Form.

by credit card online

against invoice

PRIVACY

I, the undersigned, have read the Privacy notice at the following page and I accept that AIM processes my personal data in accordance with articles 13-14 of EU Regulation no. 679/2016 (GDPR). Furthermore, I authorize AIM:

- to send any invitations to events of interest from other worldwide metallurgical associations: yes no

- to insert my name in the list of event participants: yes no

DATE _____ SIGNATURE _____

PRIVACY NOTICE

Pursuant to artt. 13-14 EU REG. n. 679/2016 (GDPR)

AIM, Italian Association of Metallurgy (VAT number 00825780158), in person of the legal representative Mr Silvano Panza (hereinafter the "Data Controller"), current in Milan, via Turati n. 8, informs you that, pursuant to art. 13 of the EU Regulation n. 2016/679 (hereinafter "GDPR"), your data will be processed in the manner and for the following purposes.

1. Personal Data.

The Data Controller processes personal identifying data (i.e.: name, surname, company name, address, telephone number, e-mail address, username, bank and payment details, hereinafter referred to as "Personal Data") that you have communicated on the occasion of the paper registration or through the website www.metallurgia-italiana.net.

2. Purpose of the treatment.

Your data will be processed by the Data Controller for the following possible purposes:

- transmission of periodic communications by e-mail;
- invitation to activities and/or events promoted by the Data Controller;
- in case of registration on the website www.metallurgia-italiana.net, registration on the site and creation of a user (username and password);
- in case of registration for events, inclusion in the list of participants at the event, receipt of invitations for relevant events from other worldwide metallurgical associations and invoicing of the fee for the participation at the event, if due;
- in case of association with AIM, sending of the membership card;
- in case of purchase of books or other material, delivery of the same and invoicing.

3. Processing methods.

The processing of your personal data is carried out by means of the operations indicated in art. 4 n. 2) GDPR and more precisely: collection, registration, organization, storage, consultation, processing, modification, selection, extraction, comparison, use, interconnection, blocking, communication, cancellation and destruction of data. Your personal data are subjected to both paper and electronic processing. The Data Controller will process personal data for the time necessary to fulfill the aforementioned purposes and in any case for no more than 10 years from the termination of the relationship.

4. Access to the Data.

Your data may be made accessible, for the purposes referred to in art. 2, to the employees and collaborators of the Data Controller, in their capacity as persons in charge and/or internal managers of the processing and/or system administrators.

5. Data communication and data transfer abroad.

The Data Controller may communicate your name, nationality and e-mail address to foreign associations, exclusively in the case of participation in itinerant congress editions.

The aforementioned associations, operating in countries located in or outside the EU, may not provide adequate data protection safeguards (a complete list of countries providing adequate data protection safeguards is available on the EU Guarantor's website for the Protection of Personal Data). In such cases, the transfer of your data will be carried out in compliance with the applicable international rules and agreements, as well as with the adoption of appropriate measures (e.g. standard contractual clauses).

Personal data are stored on servers located in Milan (IT), within the European Union. In any case, it is understood that the Data Controller, if necessary, will have the right to move the servers even outside the EU. In this case, the Data Controller hereby ensures that the transfer of non-EU data will take place in accordance with the applicable legal provisions, subject to the stipulation of the standard contractual clauses provided by the European Commission.

6. Rights of the Data Subject.

In your capacity as a Data Subject, you have the rights set forth in art. 15 GDPR and, precisely, the rights of:

- to obtain confirmation of the existence or not of personal data concerning you, even if not yet registered, and their communication in an intelligible form;
 - to obtain the indication: a) of the origin of personal data; b) of the purposes and methods of the processing; c) of the logic applied in case of treatment carried out with the aid of electronic instruments; d) of the identification details of the Data Controller, the data processors and the designated representative pursuant to art. art. 3, paragraph 1, GDPR; e) the subjects or categories of subjects to whom the personal data may be communicated or who may become aware of it in their capacity as designated representative in the territory of the State, managers or agents;
 - to obtain: a) updating, rectification or, when interested, integration of data; b) the cancellation, transformation into anonymous form or blocking of data processed unlawfully, including data whose retention is unnecessary for the purposes for which the data were collected or subsequently processed; c) the attestation that the operations referred to in letters a) and b) have been brought to the attention, also as regards their content, of those to whom the data have been communicated or disseminated, except in the case where such fulfillment is it proves impossible or involves a use of means manifestly disproportionate to the protected right;
 - to object, in whole or in part, for legitimate reasons to the processing of personal data concerning you, even if pertinent to the purpose of the collection.
- Where applicable, it also has the rights referred to in articles 16-21 GDPR (right of rectification, right to be forgotten, right of limitation of treatment, right to data portability, right of opposition), as well as the right of complaint to the Guarantor Authority.

7. How to exercise rights.

You can exercise your rights at any time by sending: a registered letter to AIM, Italian Association for Metallurgy, via Turati n. 8, Milan or an e-mail to info@aimnet.it.

8. Data Controller and person in charge.

The Data Controller is AIM, Italian Association of Metallurgy, via Turati n. 8, Milan. The person in charge of data processing is Dr. Federica Bassani, via Turati n. 8, Milan - e-mail info@aimnet.it.

The updated list of data processors is kept at the Data Controller's headquarters.

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ORGANISING SECRETARIAT



**ASSOCIAZIONE
ITALIANA DI
METALLURGIA**

Via Filippo Turati 8 · 20121 Milano · Italy

t. +39 0276021132

t. +39 0276397770

aim@aimnet.it

www.aimnet.it