

SUMMARY SLIDE DECK

# MAGF@RUM2024





Magnesium Minerals & Markets Conference

The Pomegranate Wellness Spa Hotel, Halkidiki — 13-15 May 2024







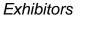




Day 1 Reception sponsor



Supporting Partners



















# MAGF@RUM2025



Magnesium Minerals & Markets Conference

Tivoli Ecoresort Praia do Forte Bahia Salvador, 19-21 May 2025

Field Trip to RHI Magnesita, Brumado, Thursday 22 May 2025







Lead Sponsor: Welcome Reception & Field Trip Host









**EXHIBITORS** 



















## Welcome Reception

















## **Tuesday Night Reception**















Magnesium Minerals & Markets Conference The Pomegranate Wellness Spa Hotel, Halkidiki — 13-15 May 2024

## MAGFORUM 2024



Magnesium Minerals & Markets Conference

The Pomegranate Wellness Spa Hotel, Halkidiki — 13-15 May 2024



































MAGFORUM 2024

Magnesium Minerals & Markets Conference
The Pomegranate Wellness Spa Hotel,
Halkidiki — 13-15 May 2024

Minchem Impex FZCO SDZ Resources Ltd Akdeniz Mineral Kaynakiari AS Hebei Meishen Technology Co. Ltd Minchem Impex Singapore Ptd Ltd Sino Minmetals Comp. Al Nawras Group **IBAR Nordeste Ltda** Mineral Concept GmbH AMI Trading & Distribution LLC Slovmag a.s **IMagine** Mineralmahlwerk Hamm SMZ a.s Jelsava Arciresa IMagine (China) Minerals GmbH & Co. KG **SPG Mining Pte** Arno Witgert Industrial Minerals Company (Maaden) Nedmag B.V Styromag Steir Magnesitind. **Atlas Materials** Inland Environmental Resources Inc. **Newport Industries TAK Industrial Minerals** Baymag Inc Interminex Handelsgesellschaft mbH **NICHE Fused Magnesia** Tanisho & Co. Ltd Benchmark Mineral Intelligence Intocast Slovakia a.s. Normag GmbH **TECHNIMAG** Big Blue Technologies Kaustik Europe B.V Omya AG Tenova Branch Office, Austria Calix Ltd KERAG s.r.o Kosice Orind Special Refractories/OSR Far East **TERNA MAG S.A** Carl Spaeter GmbH **Korea Materials** Thyme Europe Ltd Pentol-Enviro AG Kümas Magnesite PAK Minerals & Refractory Industry Premier Magnesia LLC Tifor B.V Lehman&Voss Cermatpro Ltd Cofermin Rohstoffe GmbH **Project Blue** TIMAB Magnesium Lehmann&Voss Nederland B.V **Protea Mining Chemicals** TOMRA Sorting GmbH Cremer Erzkontor GmbH MAF Magnesite **QMAG** Traxys ECO2 Magnesia Magnesia GmbH Quimíca del Rey Traxys North America LLC Magnesitas Navarras S.A Eion **ENOWA-NEOM** Redwave **UBE Materials Industries Ltd** Magnesium Trade & Consultancy Europiren B.V Maithan Ceramic Ltd Refmin China **UBE Shipping & Logistics Ltd** Refratechnik Cement GmbH **Fanglin Minerals** Vesuvius Martin Marietta Magnesia Specialties FL Smidth Refratechnik Holding GmbH XIHUA Group Co. Mathios Refractories **Xilolite Garrison Minerals LLC** RHI Magnesita Metals Hub GmbH General Abrasivi srl S&P Global Commodity Insights ZM Ropczyce S.A MFG Materia GmbH Saint Gobain Research Paris Global Monarch F.Z.C Midegasa **Grecian Magnesite** Millenis SAS Scheruhn Industrie-Mineralien GmbH & Co.

Thank you for a fantastic conference, very well hosted and organised.

Daniel Verwey, Technology Manager, Protea Mining Chemicals, South Africa

It was a pleasure for me to participate in MagForum in Greece. This event brought the global magnesia community together for four days of informative presentations, panel discussions with experts and excellent networking opportunities.

Ibrahim Karakurt, Sales Manager, Lehmann&Voss Nederland BV, Netherlands

Outstanding venue, a really nice combination of presentations across our industry. MagForum allows me to speak to producers, distributors, and suppliers across many applications. The addition of the Roundtables has been great.

David Martin, Industrial Business Director, Premier Magnesia LLC, USA

Excellent programme, enjoyed the wide range of topics covered, well organised as usual.

Suren Dias-Jayasinha, Head of Sales & Marketing, QMAG, Australia

Thanks for hosting an unforgettable MagForum 2024 in Greece. And thanks to Grecian Magnesite for a truly well organised field tour. Alex Medendorp, Managing Director, Magnesium Trade & Consultancy, Netherlands

Thank you very much to the whole team of IMFORMED. The conference was well prepared and organised. It was also great to see a lot of people from the Magnesia world again, to have good meetings and to make new connections. It was a great conference with many impressions and conversations. I'm looking forward to the next MagForum!

Jorn Messing, Executive Manager Raw Materials, Carl Spaeter GmbH, Germany

Some interesting and informative presentations, particularly relating to efforts on carbon reduction Ryan Mackenzie, Director R&D, Baymag, Canada

As always it was a pleasure having nice discussions with the global magnesia community.

Lennard Spliet, Managing Director, Lehmann&Voss Nederland BV, Netherlands



## **Chairpersons**



Mike O'Driscoll
Director, IMFORMED



**Ted Dickson** *Consultant, TAK Industrial Minerals* 



Alison Saxby Research Director, Project Blue

# Staff present to assist



Ismene Clarke
Director, IMFORMED



**Sharon Thomas**Assistant, IMFORMED



**Evie O'Driscoll**Assistant, IMFORMED

## **TUESDAY 14 MAY**

07:30 **Registration** 

### **INTRODUCTION & OVERVIEWS**

- 08:45 **Opening Remarks & Introduction**Ismene Clarke, Director & Mike O'Driscoll, Director, IMFORMED, UK
- 09:15 **Welcome Address**Dimitris Portolos, President & CEO, Grecian Magnesite, Greece
- 09:30 **65 years in the world of magnesia: review of milestones & challenges**Pantelis Vetoulas, Commercial Manager, Grecian Magnesite, Greece
- 10:00 Magnesia supply trends and outlook
  Alison Saxby, Research Director, Project Blue, UK

**10:30 COFFEE** 

### **TUESDAY 14 MAY**

#### TURKEY | ADVANCED MGO USE | KEYNOTE PANEL

- 11:30 Turkey a key source of world magnesia production & the role of Kumaş in today's challenging market

  Mustafa Çavaç, Marketing & Sales Manager Raw Materials, Kumaş,
  Turkey
- 12:00 Advancing the use of MgO for the co-production of magnesium metal, spinel, and calcium aluminates

  Aaron Palumbo, CEO, Big Blue Technologies, USA

#### 12:30 KEYNOTE PANEL DISCUSSION - MARKET OUTLOOK

- Moderator: Mike O'Driscoll, Director, IMFORMED, UK
- Dr Christoph Beyer, Managing Director, QMAG, Australia
- Sven Rosemann, Managing Director IMagine by COFERMIN, Germany
- David Torres, Global Marketing Manager, Minerals, RHI Magnesita, USA
- Michael Tsoukatos, Development Manager, Grecian Magnesite, Greece

13:00 LUNCH



## **TUESDAY 14 MAY (CONTINUED)**

### **CARBON REDUCTION**

- 14:30 Decarbonisation developments & objectives
   Andreas Drescher, VP Decarbonisation, RHI Magnesita, Austria
- 15:00 Lowering the environmental footprint of magnesia products: alternative materials & CO<sub>2</sub> capture

  Dr. Haris Yiannoulakis, R&D Manager, Grecian Magnesite, Greece
- 15:30 Magnesium oxide production with sustainability and CO<sub>2</sub> reduction
  Mohamed Abdelaziz, Project Manager Magnesium Development, ENOWA-NEOM, Saudi Arabia
- 16:00 FLSmidth: Ready to support your carbon reduction targets
  Heinz Tolke, Global Manager Technical Sales Support, FLSmidth,
  Germany

## **TUESDAY 14 MAY**

#### 16:30 COFFEE & ROUNDTABLE NETWORKING BREAKOUT SESSION

Informal networking & discussion at hosted & themed roundtables

THEME	ROUNDTABLE HOST		
Global Supply	Alison Saxby, Research Director, Project Blue, UK		
Carbon Reduction & Utilisation	Andreas Drescher, VP Decarbonisation, RHI Magnesita, Austria		
Refractories	Ted Dickson, Consultant, TAK Industrial Minerals, UK		
Speciality Markets	Samantha Wietlisbach, Director Minerals Research & Analysis, S&P Global Commodity Insights, Switzerland		

## 17:30 CLOSE OF DAY 1

19:00





LOCATION: Foyer Main Hall







#### **WEDNESDAY 15 MAY**

#### MARKETS 1: REFRACTORIES | CHEMICALS

## Speaker & title change

09:00 Hybrid aluminosilicate lining of rotary kiln for production of dead burned magnesia

Yannis Mathios, CEO, Mathios Refractories, Greece

09:30 Magnesium chemicals: review & outlook of downstream supply & demand

Samantha Wietlisbach, Director Minerals Research and Analysis, S&P Global Commodity Insights, Switzerland

10:00 Magnesium hydroxide in wastewater treatment: an effective alternative to traditional alkalis

Mac McCreless, Managing Director, Garrison Minerals, USA

## **10:30 COFFEE**

## **WEDNESDAY 15 MAY**

#### MARKETS 2: AGRICULTURE | SPECIALITY | HYDROMETALLURGY

- 11:30 Magnesium silicates use in CO<sub>2</sub> management on farms, forests, and pastures: A supply chain view from quarry to cash.

  Adam Wolf, Chief Innovation Officer, Eion, USA
- 12:00 Speciality applications of ultra-high surface area magnesium oxide
  Phil Hodgson, Managing Director & CEO, Calix Ltd, Australia
- 12:30 How & why CCM is used for cobalt hydroxide production in the Central African Copperbelt

Daniel Verwey, Technology Manager, BME Mining Chemicals, South Africa

13:00 Magnesia use in hydrometallurgy: outlook for nickel and cobalt demand

Jorge Uzcategui, Senior Analyst Cobalt & Nickel, Benchmark Mineral Intelligence, UK

#### 13.30 LUNCH & CLOSE OF CONFERENCE

o KOSTAS

10km

Νικήτη

Simantra Σήμαντρα

> Poteidaia Ποτίδαια

> > 24

Nea Fokea

Νέα Τρίγλια

Sozopoli

Σωζόπολη

Magnesium Minerals & Markets Conference

The Pomegranate Wellness Spa Hotel,

Kallikrateia Νέα

Καλλικράτεια

MAGFORUM 2024

Halkidiki — 13-15 May 2024

## **Programme**

## **THURSDAY 16 MAY:** FIELD TRIP TO GRECIAN MAGNESITE, YERAKINI

## **PLEASE NOTE:**

Field Trip is now full: attendees wishing to be placed on Waiting List please contact Ismene

Meet Lohby Pomegranate Hotel

## Itinerary\*

 $07 \cdot 30$ 

07.00	West Lobby I officialiate Hotel
07:45	Bus departs from Pomegranate Hotel
08:30	Arrival at Grecian Magnesite, Yerakini; Welcome refreshments & presentation
10:00	Tour of operations
12:00	Departure from Yerakini
12:30	"Mag Art" exhibition inspired by GM's mines in Yerakini by the Association of Visual Arts
	Artists of Chalkidiki, at the former GM plant & dock at Yerakini Beach.
13:00	Lunch at Kostas Restaurant, on the sea front at Psakoudia,
15:00	Buses depart to Pomegranate Hotel and Thessaloniki Airport
10.00	Bases aspart to 1 officgrafiato fictor and Theodalorita Aliport

Arrive Pomegranate Hotel (16:00 Arrive Thessaloniki Airport)

15:45







<sup>\*</sup> subject to change

# MAGFORUM





The world of magnesia A world of diversity



GRADE

**MARKET** 



## Magnesia

(Greek: Μαγνησία) Regional Unit of Greece



- derived from the tribe name
   Magnetes
- & son of Zeus, Magnes, first King of Magnesia
- homeland of the mythical heroes Jason, Peleus and his son Achilles.
- "Magnesite", derived from the Greek magnetes lithos (μαγνήτης λίθος), = "stone of Magnesia" (also "magnet", "manganese")

# Magnesia overview Mineral source diversity

## **Other natural MgO minerals**

Bischofite MgCl<sub>2</sub>.6H<sub>2</sub>O

Carnallite KMgCl<sub>3</sub>.6H<sub>2</sub>O

Kieserite MgSO<sub>4</sub>.H<sub>2</sub>O

Dolomite CaCO<sub>3</sub>.MgCO<sub>3</sub>

Brucite Mg(OH)<sub>2</sub>

Huntite  $Mg_3Ca(CO_3)_4$ 

Hydromagnesite  $Mg_4(OH)_2(CO_3).4H_2O$ Sementinite  $(Mg, Ee)3Si_2O_2(OH)$ 

Serpentinite  $(Mg,Fe)3Si_2O_5(OH)_4$ 

Olivine Mg<sub>2</sub>SiO<sub>4</sub>

Dunite >90% olivine

Nesquehonite MgCO<sub>3</sub>.3H<sub>2</sub>O

Periclase MgO



Sibelco's huntite-hydromagnesite mine in Kozani, Greece



## Magnesia overview **Grade & market** diversity

## MAGNESIA MARKET APPLICATIONS SUMMARY

Decreasing reactivity	increasing heat treatmer	nt refractoriness &	nrice/tonne
Decreasing reactivity,	increasing near treatmen	it, refractormess, c	price/tollile

	700-1500°C			1500-2300°C	2800-3	3000°C	
RAW Magnesite	CAUSTIC CALCINED MAGNESIA			DEAD BURNED MAGNESIA		FUSED Magnesia	
	Synthetic CCM	Natural CCM		Refractory grade 93,95,97% MgO	Refractory grate 97%+ MgO	Electrical grate 97.0%+ MgO	
Mg metal Fertiliser Glass Ceramics Rubber Insulation Paper Plastics Pigment Surface coating explosives Pesticide carrier Landscaping	HP FM electrical grade Mg metal Mg chemicals Pharmaceuticals Ceramics UHP MgO	Feedstock Cement  Agriculture Environmental  Ceramics Metallurgical flux Plastic filler Pesticide carrier Designer cerami Foundry sand Coatings Absorbent Dessicant Flame retardant Lubricant additive Slag conditioner	ics /e	Refractories — bricks — gunning — mixes — castables Welding	Transformer steel coatings Refractory bricks	Cable insulation Electrical elements UV sensors Hi-tech ceramics	



Networking and knowledge for the industrial minerals business





Sponsorship/Exhibit/Registration Enquiries
Ismene Clarke <u>ismene@imformed</u> | T: +44 (0)7905 771 494

Programme/Speaker Enquiries

Mike O'Driscoll mike@imformed.com | T: +44 (0)7985 986 255



- Launched in January 2015
- Extensive experience & reputation
- Specialising in conferences & market research in:
  - Industrial Minerals Supply/Demand
  - Magnesia
  - Refractory Minerals
  - > China
  - Mineral Recycling
  - > Fluorine
  - > India
  - Barite & Oilfield Minerals
  - > Salt

# MAGF@RUM2025



Magnesium Minerals & Markets Conference

Tivoli Ecoresort Praia do Forte Bahia Salvador, 19-21 May 2025

Field Trip to RHI Magnesita, Brumado, Thursday 22 May 2025







# MINERAL RECYCLING FORUM 2025

Pullman Cannes Mandelieu, 9-11 April 2025

Secondary raw material sources, supply, processing, and markets

Refractories | Slags | Salts | Ash | Glass | Batteries | Mine Tailings | Water | Construction







200k DBM

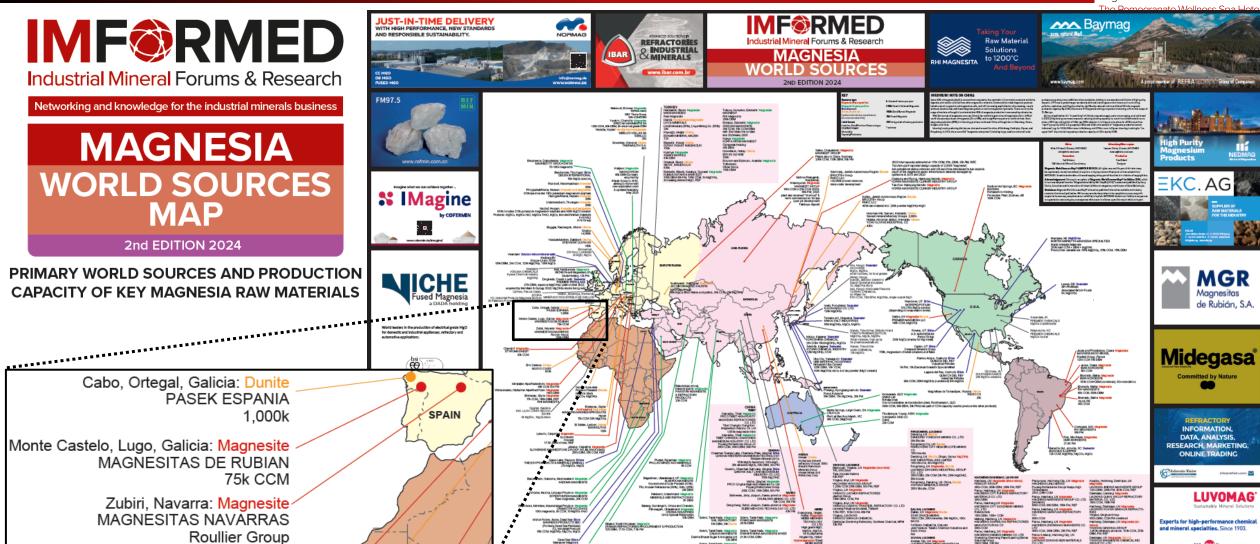
**Q**MAG

A PROJECT BLUE

MAGNESIUM

RESEARCH SERVICE

WE CREATE SOLUTIONS TO MAKE



marketing and trading of

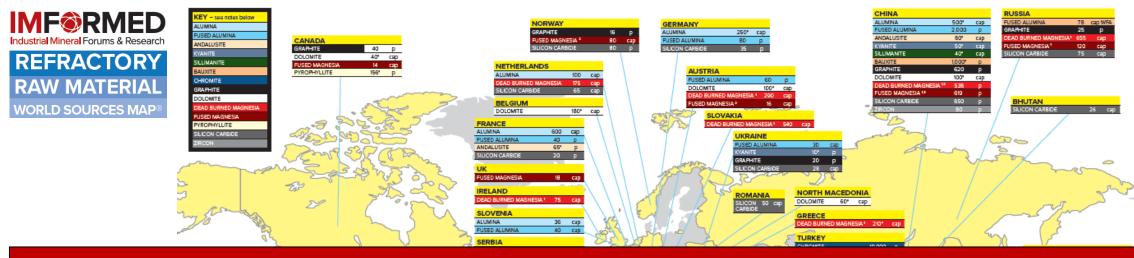
Reveal the potential of magnesium

TIMAB

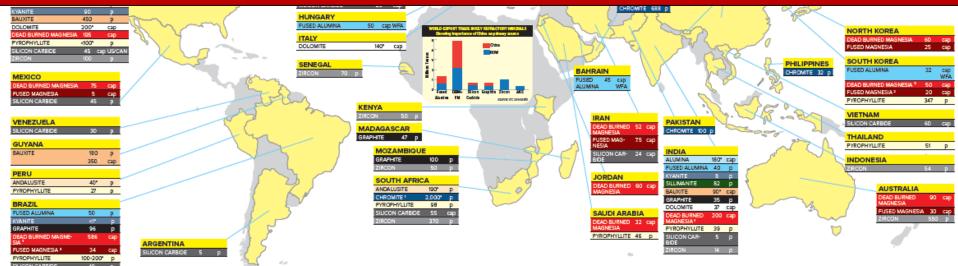
MAGNA

## Refractory minerals overview

World distribution of primary established sources of main minerals



Please drop by the IMFORMED stand to pick up your complimentary copy



## IMFORMED will be attending...





Let us know if you're in town, we would be delighted to meet up and have a chat



Magnesium Minerals & Markets Conference The Pomegranate Wellness Spa Hotel, Halkidiki — 13-15 May 2024

Participate
Learn
Enjoy