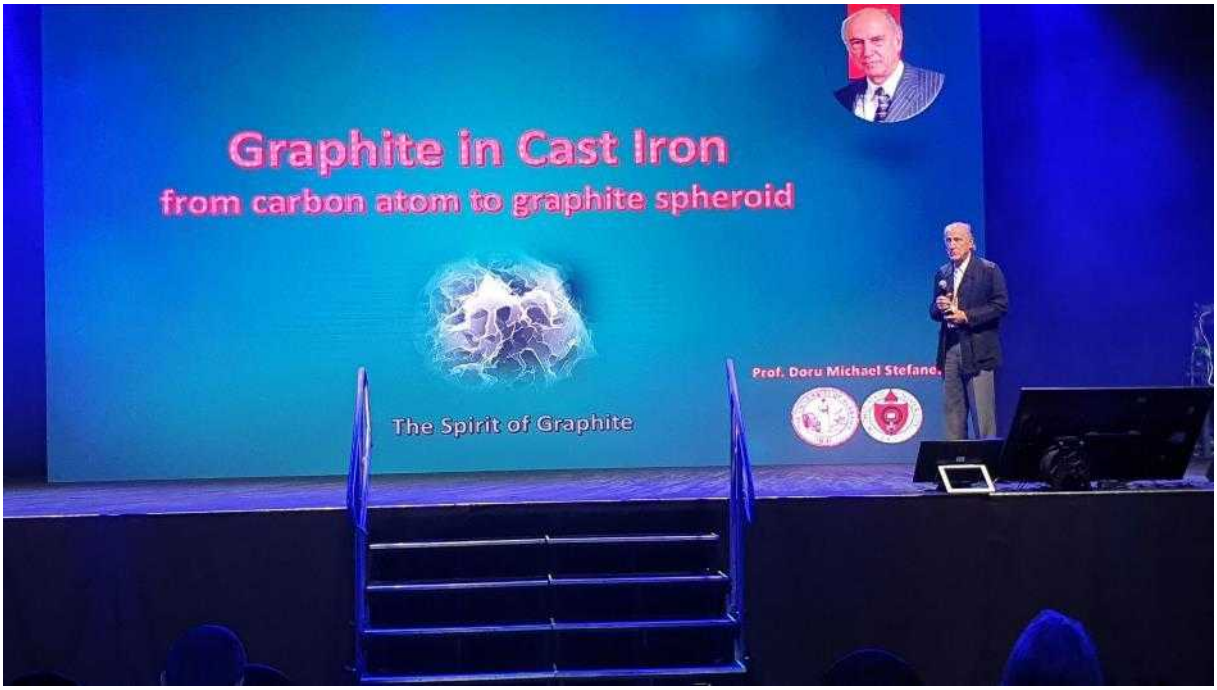
Newsletter
Green Casting LIFE on XIIIth International Symposium on the Science and Processing of Cast Iron

The XIIIth International Symposium on the Science and Processing of Cast Iron took place at the AGH University of Science and Technology in Kraków from June 23-26, 2024. This triennial conference was organised by the Faculty of Foundry Engineering, led by Dean Marcin Górny.

The conference began with a speech by the organisers, including Prof. M. Górny, Prof. K. Major-Gabryś, and Prof. A. Burbelko.

The AGH representative orchestra provided musical accompaniment, enhancing the atmosphere of the opening ceremony.

The event attracted representatives from academia and industry from 17 countries. Esteemed guests included Prof. Doru M. Stefanescu (University of Alabama, USA) and Prof. Hideyuki Yasuda (Kyoto University, Japan).



Prof. Doru M. Stefanescu speech.

Prof. Hideyuki Yasuda speech.

Green Cast ng LIFE Project Presentat ons

The research is financed within GREEN CASTING LIFE project. GREEN CASTING LIFE project is co-funded by European Union's LIFE program under grant agreement LIFE21-ENV-FI-101074439. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or CINEA. Neither the European Union nor the granting authority can be held responsible for them.

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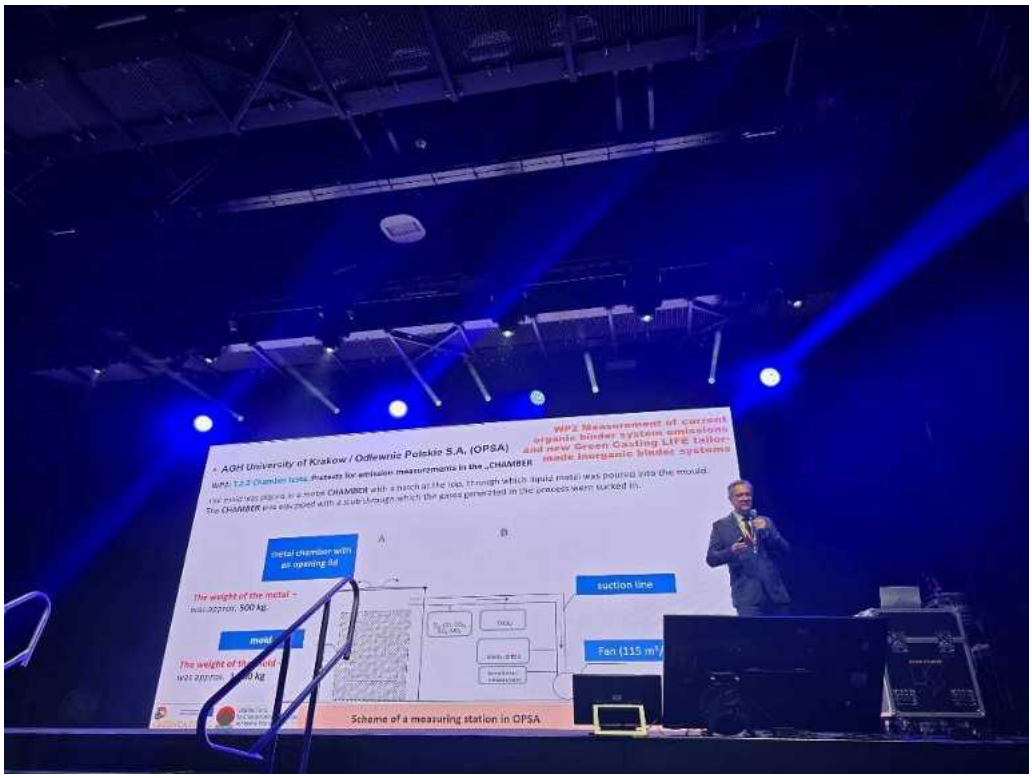
The Green Casting LIFE project was well represented, with several key presentations:

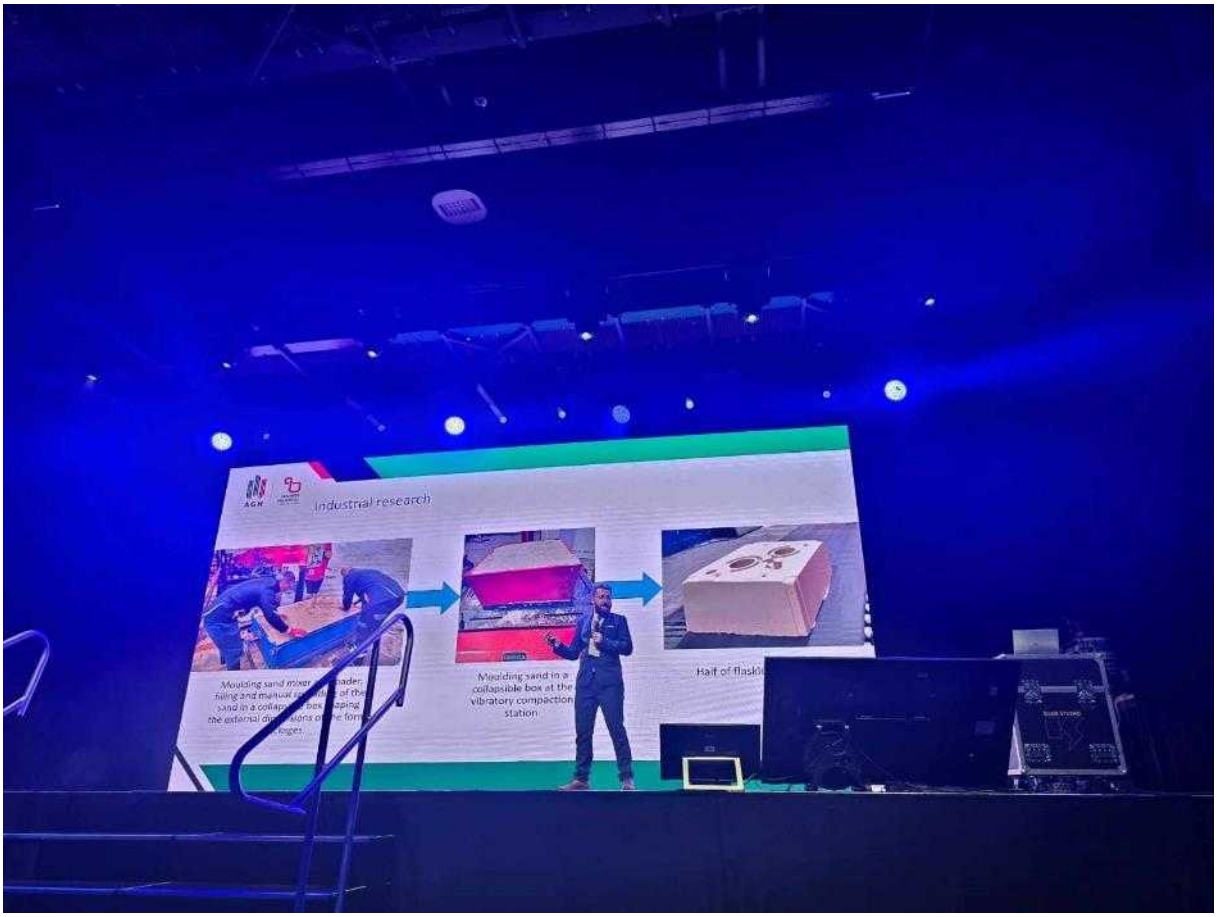
Prof. Rafał Dańko discussed the general objectives of the project, emphasising the need for alternative technologies in moulding materials, the transition to inorganic binders, environmental impacts, and future EU environmental policies. His presentation was titled *"Iron Foundries Go Green – Moulding Materials Aspects."*



MSc Eng. Iwan Stefani presented on *"Use of Cores with Inorganic Binder to Produce Thin-Walled Nodular Iron Castings,"* exploring the possibilities, benefits, and risks of using inorganic core technologies in iron casting production.

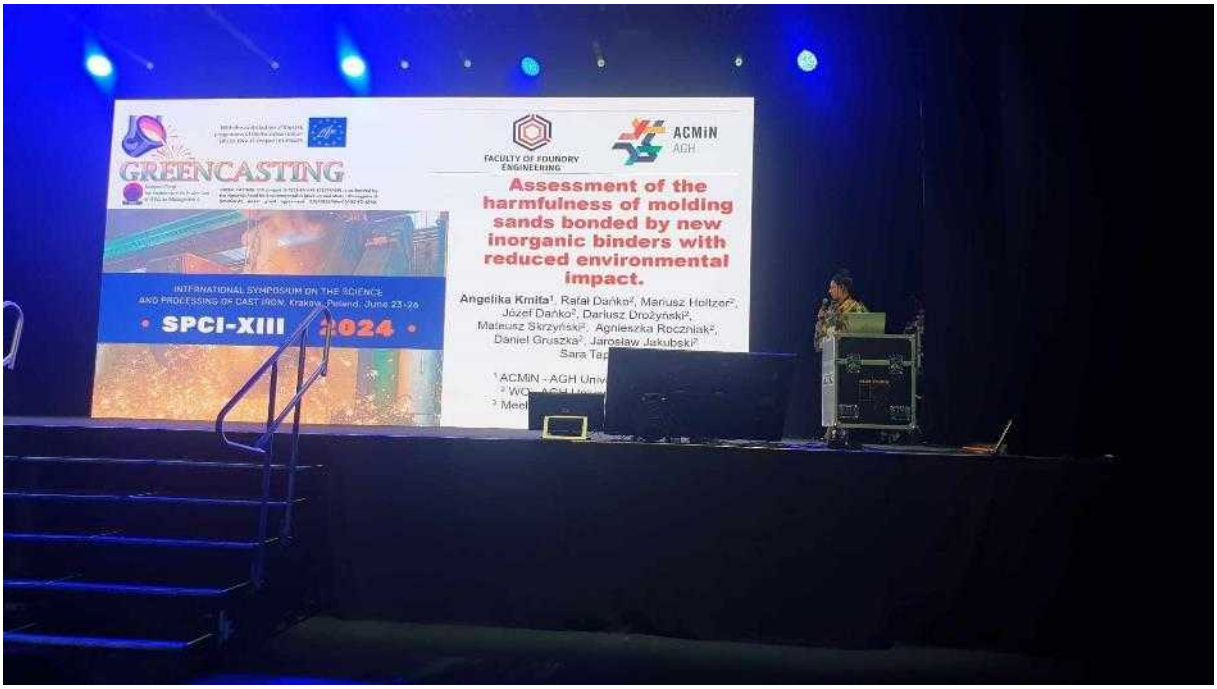
MSc Eng. Daniel Gruszka detailed industrial research conducted at the experimental hall of Odlewnia Polskie S.A. (OPSA), focusing on the early stages of implementing flaskless moulding technology with inorganic binders. His presentation was titled *"The Influence of*

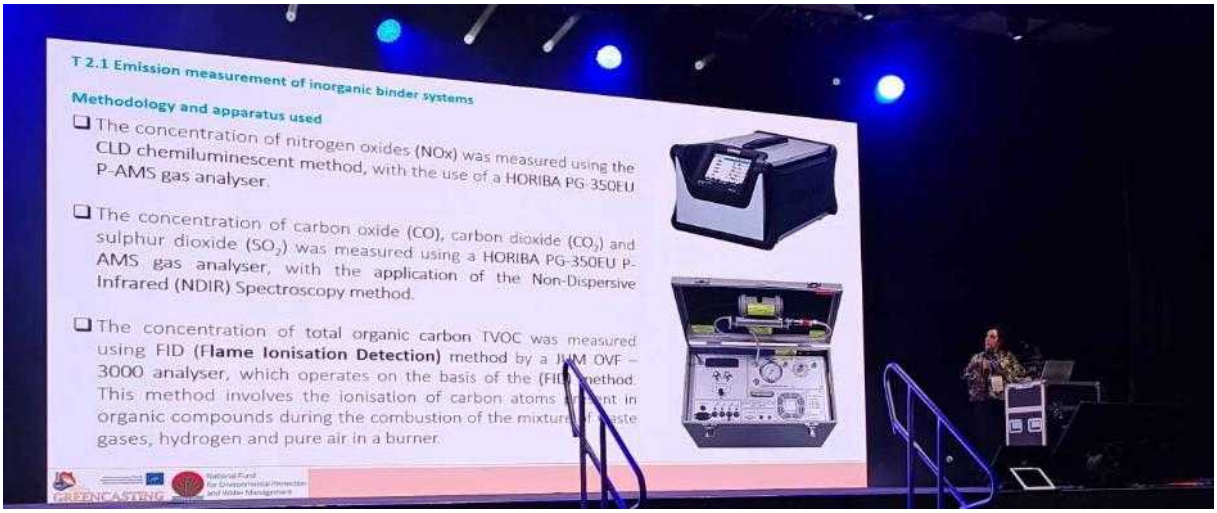
New Inorganic Foundry Binders on Gas Formation, Permeability, and Strength Properties of Flaskless Moulding Sands."



Prof. Angelika Kmita examined the emission of gases from organic and inorganic moulding materials in her presentation, *"Assessment of the Harmfulness of Moulding Sands Bonded by*

New Inorganic Binders with Reduced Environmental Impact." She showcased semi-industrial research findings, highlighting differences in the emission of harmful gases such as BTEX and PAHs between various inorganic and organic binder sands.





Prof. M. Górny, Prof. J. Dańko, Prof. M. Holtzer

Round Table Discussion

The conference concluded with a round table discussion addressing critical issues such as the future of iron alloy casting, current and future challenges for foundries, Industry 4.0, environmental protection, and legal regulations.


SPCI-XIII
2024
ROUND TABLE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ROUND TABLE

From the left: prof. A. Burbelko (AGH, Poland), prof. K. Major-Gabryś (AGH, Poland), prof. M. Górny (AGH, Poland), prof. D. M. Stefanescu (Alabama UST, USA), PhD C. Cabezas (Tupy S.A, Joinville, SC, Brazil), PhD B. Cygan (TEKSID IRON Poland Sp. z o.o), prof. R. Dańko (AGH, Poland)

We encourage you to review the abstracts available via the link below:

https://spci.agh.edu.pl/home/spci/SPCI-Book_of_Abstract.pdf

In three years, the next conference will take place in Brazil, with PhD Carlos de Souza Cabezas as one of the organisers.

Best regards,

AGH Green Casting LIFE Team