

CALL FOR PAPERS

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XXVIII | Québec City, Canada

IMPC 2016

Quebec City, Canada
September 11–15, 2016



About the IMPC Congress

The International Mineral Processing Congress has been in existence for more than sixty years, with the first one held in London in 1952. With 39 technical papers and 332 delegates, it was indeed an impressive start to what would become a long and successful series of world-renowned congresses. The IMPC has been a major driving force for the promotion of scientific and technical knowledge in mineral processing and extractive metallurgy across the globe, becoming the most prestigious event in its field in the world today. The congress is truly international in scope with delegates from all parts of the world deliberating and collaborating on critical issues facing the mining and mineral processing industry globally. We are proud that the Conference of Metallurgists including the Iron Control Symposium will be part of this Congress.

IRON CONTROL IN HYDROMETALLURGY 4th International symposium

The control, stabilization and disposal of iron plays a key role in the design and operation of most hydrometallurgical processes. In some processes, the iron dissolves and is precipitated in a subsequent operation; in other processes, such as those used to leach nickel laterites and bauxite, the iron is rejected in situ. In all the processes, the environmentally acceptable and economically sound disposal of the iron is of paramount importance to both existing operations and developing technologies.

The Fourth International Symposium on Iron Control in Hydrometallurgy – building on the successes of the previous three symposia in Toronto (1986), Ottawa (1996) and Montreal (2006) – will bring together plant operators, consulting engineers and researchers to discuss the theory and practice of the iron control problem as it relates to the processing of base and precious metals, the leaching of nickel laterites and bauxite, and the treatment of pickle liquors. The key role of iron precipitation in impurity element containment will also be considered. The Symposium will provide a forum for the international metallurgical community to review the recent technological developments in iron control, stabilization and disposal. The meeting will facilitate a better understanding of the theory and practice of iron control in hydrometallurgical processes and the identification of innovative iron control technologies. The meeting addresses iron chemistry, process design, equipment selection and plant economics. This symposium is organized by the Hydrometallurgy Section of the Metallurgy and Materials Society of CIM.

VENUE

Quebec City is vibrant and proud of its rich history of being one of the early settlements in Canada. It is situated on the St. Lawrence River and its natural beauty is an attraction for tourists. It offers a diversity of dining, entertainment, site seeing and cultural activities. Old Quebec City is designated as a UNESCO world heritage site.





PROCEEDINGS

The proceedings of the Symposium will be published in electronic format and will be available at the meeting. Both the Symposium and its proceedings will be in English. All papers will be refereed and edited prior to final acceptance and publication.

CALL FOR PAPERS

Papers are invited on the following (and other) topics relevant to iron control in hydrometallurgy:

- ◆ Iron control technologies and plant descriptions
- ◆ Iron control during the leaching of nickel laterites and bauxite
- ◆ Treatment of pickle liquors and iron solutions
- ◆ Role of iron precipitation to control impurity species such as arsenic
- ◆ Emerging iron control technologies
- ◆ Fundamental aspects of iron control
- ◆ Thickening and filtration of iron precipitates
- ◆ Stabilization and disposal of iron residues and precipitates, including red muds
- ◆ Environmental considerations, trends and regulations related to iron residue disposal
- ◆ Uses and applications of hydrometallurgical iron

Submit at www.metsoc.org

SHORT COURSE ON IRON CONTROL

A one-and-a-half or two day short course will be offered immediately before the Symposium, on Saturday, September 10 and Sunday, September 11, 2016. The short course is designed to complement the industrially focused Symposium program, and will provide an in-depth study of the fundamentals and practice of iron control in hydrometallurgy. The short course will be given by a number of lecturers of international stature in their fields of expertise.

Topics could include:

- ◆ Mineralogical characterization of iron precipitates and their stability.
- ◆ Equipment selection (heat exchangers, pumps, agitators, autoclaves)
- ◆ Solid-Liquid separation (equipment, particles size control and stability)
- ◆ Ferric iron leaching (oxygen transfer in hydrometallurgy)
- ◆ Iron removal: behaviour of iron during the leaching of roasted zinc concentrates, laterites and bauxites
- ◆ Pyrometallurgical treatment options for iron precipitates
- ◆ Environmental considerations for disposal of iron residues or solutions (including acid regeneration)
- ◆ Tools for process design and engineering such as risk management, continuous improvement and economic assessments

The short course attendance is limited, and a separate registration fee will be charged.

TECHNICAL TOUR

In conjunction with the Electrometallurgy Symposium we plan to offer multiple technical tours on the Thursday and/or Friday after the Symposium (September 15-16, 2016). Please visit our website for updates on the tours and their locations: www.metsoc.org

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