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## Hydrometallurgy

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## 100th Volume Editorial

The 100th volume of this Journal represents a milestone in the development of this field over the past 40 years. The founding editor, Gordon Ritcey, first approached Elsevier about launching a new Journal after the International Solvent Extraction Conference in Liege in 1971. Both he, and the first co-editor Neville Rice, recognised that despite the economic recession, inflation and limited research budgets at that time, there was a need for a multidisciplinary Journal that drew upon chemistry, engineering, mineralogy, economic and environmental principles and brought together papers that focused on the fundamentals and application of hydrometallurgical processes that would otherwise be scattered amongst a variety of Journals or published in national mining Journals or Conference Proceedings with limited circulation.

When the first volume of this Journal was launched in 1975, hydrometallurgy was still a relatively young discipline with established roots in the Bayer Process for alumina and the MacArthur–Forrest process for gold and new growth in the pressure leaching of nickel and zinc sulfides and in the various leaching and recovery options for the processing of uranium ores. By that date the recovery of copper by dump leach–solvent extraction–electrowinning was just becoming established and there was rapidly growing industrial interest in the solvent extraction of other metals such as base metals, rare earths and other radionuclides. New research was focused on the bacterial leaching and chloride processes for copper and base metals and on methods to avoid environmental pollution from waste water, effluents, residues or tailings. This has not changed, nor has the main focus of this Journal, but the scope and breadth of papers has expanded widely along with the number of countries that are now contributing

Many of the early volumes featured papers on solvent extraction and the new reagents being developed at that time for the nuclear and base metal industries. In subsequent years, the application of new reagents to the separation and recovery of nickel and cobalt were reported; as well as more fundamental studies on the leaching of base metal sulfides. During the 1980s many papers focused on gold processing and the carbon-in-pulp process which later led to many studies on alternative reagents for gold such as thiourea and thiosulphate. More recently, there has been a greater focus on bacterial leaching, the leaching of mineral sands and nickel laterites, the modelling of unit operations such as heap leaching, and the removal of impurities or toxic metals on resins, biomass or iron oxides to meet tighter environmental regulations and to improve product quality.

However, even more significant changes have taken place in word processing, information technology, computer data bases and electronic media that has made mass communication and the dissemination of knowledge so much easier since 1975. This has led to a rapid

increase in the number of papers published in technical Journals, particularly since the start of the electronic era in 1995. To keep up with this rapid growth, Elsevier and the other publishers have made large investments in IT to develop the Electronic Editor System (EES) and electronic data bases such as Scopus and Science Direct which streamlines and enhances the publishing process for authors, reviewers and editors. In recent years, publishers have also developed research performance measures (bibliometrics) of author's output and paper quality, as well as Journal rankings, through publication and citation reports, impact factors and highly cited h-factors. Such factors are now used widely by funding agencies to determine which researchers should receive grants — which in turn drive the push for more publications.

Between 1975 and 1989, there were 23 volumes of this Journal which grew to 52 volumes by 1999 and now 100 volumes in 2009. Today this Journal receives over 400 submissions per year from about 40 different countries, with China, Chile, Turkey, India, Australia and Canada contributing the most. However, our Editorial Board and reviewers typically reject about 50% for various reasons, which is average for international professional Journals across all fields which strive for quality papers. Since 2004, the number of citations of articles from this Journal has doubled and the Impact Factor has increased each year from about 1.09 to about 1.77 which now ranks the Journal as 6th in the 63 recognised Journals in the field of Metallurgy and Metallurgical Engineering.

We thank our Board members and other reviewers for their time and efforts to provide useful and constructive comments to authors to improve or change or clarify their manuscripts. Sometimes the work is sound but is best published elsewhere or needs more experimental data. Often the English needs improving because of the increasing contributions from non-English countries, but this does not usually form the basis for rejection. The new generation of graduates armed with improved word processing and translation software promises higher quality manuscripts with more global dissemination of their work in English. No doubt, more and more will come from Chinese authors who published few papers in this Journal just 5 years ago, but this year China took over as the country with the most publications.

Over the years, the Journal has been steered by a number of editors and we acknowledge their work and dedication. Firstly, the founding editor Gordon Ritcey and Neville Rice who shared the role over the first 6 years. Neville then passed his baton to Mike Slater and enlisted the support of Ron Molnar and then Charles Cooper as assistant editors for a short period. After 20 years, Gordon Ritcey stood down and Kwadwo Osseo-Asare took over; this time with the support of Frank Crundwell and Frank Walsh as assistant editors for a few years. Finally, in 2003, Mike Slater retired after 22 years as co-editor and handed the baton to David Muir and Nick Welham just before paper

copies and the posting of manuscripts became extinct. David and Nick, together with Osseo, saw in the introduction of electronic mailing and handling of manuscripts as well as the new EES system — just as the numbers of submissions increased significantly.

Out of the original Board members in 1975, only Nevill Rice remains as one of our regular reviewers. However, Radanath Das, John Dutrizac, Fiona Doyle, David Dreisinger, John Monhemius, and until recently, Jiayong Chen and John Preston have served on the Editorial Board for over 20 years and we thank them especially for their loyal and valuable service. Further thanks go to Francisco Alguacil, Corale Brierley, Mike Collins, George Demopoulos, Chris Fleming, Alberto Gonzalez, Ralph Hackl, Gary Kordosky, Bruce Moyer and Geoff Stevens who continue on the Board after over 10 years service. These, as well as others that have long retired or passed on, have shaped our Journal and maintained the high standards that are set.

But the real contributions and accolades must go to the authors that strive for excellence in their research and take pride in their publications. The Journal provides a platform and showcase for their work and we look forward to another 100 volumes over the next generation and the further technological and publishing changes that will inevitably take place.

In the years ahead, factors such as water and product quality, energy minimisation and a sustainable environment will drive future hydrometallurgical processes and improvements and this will lead to a further expansion of the topics covered by this Journal. With regard to publishing, it is unlikely that the peer review system will be changed, but we will see changes in publishing ethics and expanded

cross-referencing and word searching capabilities through the introduction of "Crosscheck" to minimise plagiarism and multiple submissions which occasionally blight the system. It is now possible to search and compare whole papers with other papers published elsewhere. Elsevier has also started to provide Technical Screening services to selected Journals to screen all submissions before they are sent to a Journal and to weed out the 10–20% of manuscripts that are poorly prepared and written or difficult to understand. Elsevier is also introducing a platform for the speedy on-line publication of Conference papers (without review) by arrangement with the organisers which will further expand the knowledge base and perhaps take the pressure off submissions to Journals and reviewers to ensure that only quality papers are published. We look forward to seeing more valuable contributions and to meeting the challenges ahead.

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