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Phosphates New Uses and New Technologies

Guest Editor: B. Elouadi

**Proceedings of the
IMPHOS-International Workshop on Phosphorus and Phosphate
Compounds (IMPHOS-IWPPC)
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Editorial Office

Department of Applied Chemistry, College of Engineering
Chubu University, Matsumoto-cho, Kasugai,
Aichi 487-8501, Japan
Tel: +81-568-51-9646
Fax: +81-568-51-3833

Japanese Association of Inorganic Phosphorus Chemistry

PREFACE

The IMPHOS-International Workshop on Phosphorus and Phosphate Compounds (IMPHOS-IWPPC-1) was held on July 10-13, 2002, at Friedrich Schiller Universität in Jena, Germany. This important workshop was organised by the Institut Mondial du Phosphate (IMPHOS) with the collaboration of the Japanese Association of Inorganic Phosphate Chemistry (JAIPC) and the Otto Schott Institute, Faculty of Chemistry and Earth Sciences, Jena.

Moreover, IMPHOS decided to organise IMPHOS-IWPPC in close conjunction with the fourth International Symposium on Inorganic Phosphate Materials (ISIPM-4, July 10-13, 2002) and the 7th International Otto Schott Colloquium (July 7-11, 2002) on Glass Physics and Chemistry. Since IMPHOS is an international non profit organisation devoted to the promotion of the phosphate industry through rational development and use of phosphates (Ref. 1), its aim was to provide appropriate opportunity to researchers and engineers from both the private and public sectors in order to exchange experiences and ideas about inorganic phosphate compounds, their engineering processes in addition to their applications in various domains of modern technology.

It is worthwhile underlining the wise and efficient decision of IMPHOS and JAIPC leaders, ISIPM-4 and IMPHOS-IWPPC organising Committees and the Otto Schott Institute, to work together to organise a joint conference with two complementary aspects: academic research and applied R&D, which are of vital interest to the phosphate industry. Such initiative is rather unique at the international level. It proved to be a great success at the Jena Conferences. Indeed, the fact that ISIPM-4 and IMPHOS-IWPPC were held in parallel, has allowed a feedback between the two, which was enriching for all participants to both meetings! The originality of such an organisation and the efficiency of the results obtained, were in great part due to the scientific program, which was designed in a complementary manner and particularly thanks to the planning of a whole day for shared lectures and oral presentations besides the permanent display of all Posters during common sessions.

It is also of interest to mention that IMPHOS organised its first international congress on inorganic phosphates in Rabat (Morocco) on October, 17-21, 1977 (Ref. 2). In the continuation of Boston and Brussels Conferences (Refs. 3 & 4), the Institut Mondial du Phosphate has sponsored many other international symposia, mainly on the phosphate fertiliser sector and related issues.

IMPHOS-IWPPC in Jena could therefore be seen as pursuit of these past activities that shows the constant interest of IMPHOS in both academic and applied research on inorganic phosphates taken as a whole. This workshop of international level will also be followed by another joint event IMPHOS-IWPPC / ISIPM-5, which will be held on September 6-8, 2005, at Chubu University (Kasugai, Japan).

The present Proceedings of IMPHOS-IWPPC contain selected articles related to some of the most widely discussed topics, which are: i) Phosphate Industry; ii) Industrial Recycling and Environmental Aspects; iii) Current and Potential Industrial Applications of Phosphates; iv) Structural Investigations and Physical Properties.

We are indebted to the Referees who analysed all submitted articles and to IMPHOS who sponsored the workshop and the publication of this special issue of *Phosphorus Research Bulletin*. We are also very happy to address our sincere thanks to Professor Dr Dörte STACHEL for her significant contribution to the success of the joint conferences: IMPHOS-IWPPC / ISIPM-4.

The contributions of both Professor Dr Makoto WATANABE and the General Secretary of IMPHOS, Mr Tayeb MRABET, are also greatly acknowledged. Furthermore, the authors and the participants as well as the Organising Committees (from Jena University and from IMPHOS) played a great part in the success of Jena meetings. Indeed, to all of you, I would like to say: **thank You!**

Parallel to IMPHOS-IWPPC / ISIPM-4 conferences, Professor Stachel initiated a discussion regarding the creation of an International Society of Inorganic Phosphates (ISIP). In that prospect, different meetings were held during and after the Jena events. Such a Society is expected to be officially launched at the occasion of the Chubu University meeting (Ref. 5). Therefore, we take the opportunity of the publication of the present Proceedings to call the international community involved in inorganic phosphate research and development to join us at Chubu University to contribute both to the IMPHOS-IWPPC / ISIPM-5 and to the elaboration of the official regulations of ISIP.

The involvement of IMPHOS in the creation of ISIP should be considered, in our opinion, as a positive attitude because for more than three decades, IMPHOS has invested a lot of resources to promote the phosphate industry as well as phosphorus compounds. It also seems to us worth mentioning here that there is a need for an international body that could play a reference role (data bank, etc.) for all that may concern the phosphate industry and materials. These activities must be discussed in an objective manner in order to avoid overlapping of private interests when it comes to discussing some crucial issues related to the phosphate industry, like environmental impact, etc. However, the strategy of scientific communities from both industry and academia, working hand in hand in an objective manner (on such sensitive issues) is the best way to come to satisfying conclusions.

For some specific research studies (environment, applied technologies, fundamental topics, etc.), many investigators would be very happy to get access to reliable data concerning phosphorus based compounds and engineering processes. IMPHOS is already editing a newsletter (Ref. 1) on phosphate fertilisers and is also used to providing any data that it detains on phosphates. Therefore, phosphate researchers could expect to get more in the future from IMPHOS-ISIP association, when it exists! Hence, researchers from universities and phosphate companies are all invited to join us for the extended discussions that will take place at Chubu University next September 2005 (Ref. 5).

References

Ref.1.- Institut Mondial des Phosphates (IMPHOS) was created in 1973. For more details, visit IMPHOS website: <http://www.imphos.org>

Ref.2.- Proceedings of the First International Congress on Phosphorous Compounds, Rabat, Morocco (October 17-21, 1977), published by IMPHOS, Morocco.

Ref.3.- Proceedings of the Second International Congress on Phosphorous Compounds, Boston, USA (April 21-25, 1980), published by IMPHOS, Morocco.

Ref.4.- Proceedings of the Third International Congress on Phosphorous Compounds, Brussels, Belgium (October, 4-6, 1983), published by IMPHOS, Morocco.

Ref.5.- Visit the website : <http://isipm.chubu.ac.jp>

La Rochelle University, Thursday, 2nd December 2004

Brahim ELOUADI,
Professeur des Universités

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