Editorial

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This September has brought a change in the editorial office of *Reaction Kinetics, Mechanisms and Catalysis*. Prof. István Fábián, who had served as Editor-in-Chief since 2009, passed the torch to me. The journal has grown enormously under his leadership. I feel honored for this opportunity to join the Publisher in thanking him for his unflagging pursuit of excellence in his job.

As I worked with István as Managing Editor during his entire tenure, I have already had my chance to exert some influence on editorial policies. Therefore, I do not plan any major changes. We wrote an Editorial together in 2013 [1], and I wish to re-iterate my strong commitment to the principles laid out there. Naturally, some new trends and problems have emerged since the publication of that editorial and I would like to call the attention of the readers to some of them.

First, I wish to make sure that the authors and readers of this journal all speak the same scientific language. There is an amazing multitude of notations and conventions used in chemistry, and this diversity is already an impediment to efficient communication. To alleviate this problem, I am asking all authors to follow the recommendations of a golden standard, which is the IUPAC Compendium of Chemical Terminology—the Gold Book [2]. It is freely available both in a searchable online database form and as a downloadable pdf document.

Second, I would like to join a recently started movement, promoted by Science magazine [3] and the American Statistical Association [4], that calls for improving the standards of quantitative and numerical evaluation in scientific disciplines. In our field, it is primarily the interpretation of kinetic measurements that gives serious cause for concern. Although current best practices are clearly described in a number of easily available textbooks [5–7], there is a strong tendency among manuscript

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authors to ignore these. In addition, there are a number of more specific problems, e.g. the use of isokinetic plots [8], turnover frequencies and turnover numbers [9–11], and the kinetic evaluation of thermal analysis data [12–14], where strong and scientifically well-argued objections have been raised to the current state of affairs. These phenomena have not gone unnoticed in the scientific community: I very much welcome the collaborative efforts toward benchmarking in catalysis science [15].

I also wish to use this editorial to announce two upcoming scientific meetings which will be directly supported by *Reaction Kinetics, Mechanisms and Catalysis*. The first is the Mathematics in (bio) Chemical Kinetics and Engineering (MaCKiE) [16] workshop, which will be organized between 25 and 27 May 2017 in Budapest, the capital of Hungary. As the title shows, it primarily aims to bring together a highly interdisciplinary group of researchers interested in the mathematical descriptions used in chemical kinetics. The second meeting, focusing on catalysis, mechanism and kinetics, is planned for the summer of 2018 in Budapest and is hoped to be the inaugural event of a series of conferences. Our authors and reviewers will be informed about both meetings in future e-mails.

Finally, I would like to thank all those who contribute to operating this journal: the readers, the authors, the reviewers, the editorial board, the Publisher and our very dedicated team of technical editors. I strongly believe that our co-operation is essential in serving the progress of science.

References

1. Fábíán I, Lente G (2013) *Reac Kinet Mech Cat* 110:1–3
2. <http://goldbook.iupac.org/>
3. McNutt M (2014) *Sci* 345:9
4. <https://www.amstat.org/newsroom/pressreleases/P-ValueStatement.pdf>
5. Espenson JH (1995) *Chemical kinetics and reaction mechanisms*, 2nd edn. McGraw-Hill, New York
6. Marin GB, Yablonsky GS (2011) *Kinetics of chemical reactions*. Wiley-VCH, Weinheim
7. Lente G (2015) *Deterministic kinetics in chemistry and systems biology*. Springer, New York
8. McBane GC (1998) *J Chem Ed* 75:919–922
9. Kozuch S, Martin JML (2012) *ACS Catal* 2:2787–2794
10. Lente G (2013) *ACS Catal* 3:381–382
11. Crooks AB, Yih KH, Li L, Yang JC, Ozkar S, Finke RG (2015) *ACS Catal* 5:3342–3353
12. L'vov BV (2014) *Reac Kinet Mech Cat* 111:415–429
13. Galwey AK (2015) *Reac Kinet Mech Cat* 114:1–29
14. L'vov BV (2015) *Reac Kinet Mech Cat* 116:1–18
15. Bligaard T, Bullock RM, Campbell CT, Chen JG, Gates BC, Gorte RJ, Jones CW, Jones WD, Kitchin JR, Scott SL (2016) *ACS Catal* 6:2590–2602
16. <http://mackie2017.akcongress.com/>