

EARLY CAREER RESEARCH DAY: REFLECTIONS ON PUBLISHING ON MODELLING RESEARCH

Gabriele Kaiser¹ and Serife Sevinc²

¹*University of Hamburg, Germany & Nord University, Norway;* ²*Middle East Technical University, Turkey*

The purpose of this workshop at the Early Career Research Day is to provide an overview of the procedures of scientific publications in the area of research mathematical modelling. In this session, we aim to share our current experiences, reflections, and suggestions for publishing on modelling research.

The workshop will start with fundamental standards of scientific publishing including an adequate structure of a scientific paper on modelling research. More specifically, the most critical aspects of each section of a manuscript from abstract to discussion and possible errors, which may happen, will be discussed. Particularly, the importance of identifying clear research questions and providing the state of research in the introduction section will be emphasized followed by the need for an adequate theoretical framework, theoretical constructs, and methodological approach. Furthermore, we address the need for a clear description of the results and interpretations of results with reference to the theoretical framework and literature survey. We also present some special issues of high-ranking journals on mathematical modelling research, which may provide young researchers with a first overview.

In addition, some tips and suggestions for pursuing scientific publications will be discussed. Especially, the importance of presenting each section of the manuscript connected with one another and supporting the research with a theoretical framework and/or theoretical conceptualizations or constructs at each stage. Moreover, we address the use of visuals to better communicate and show examples of visuals from different studies.

In the last part of the session, we address the publication procedure in high-quality journals by presenting different examples of a decision letter and examine the decision letter in detail. Finally, an example of a response letter which addresses the reviewers' comments and respond to them will be presented.

Our goal in the Early Career Research Day session is to motivate and prepare young researchers towards publishing strong scientific papers on mathematical modelling research in high-quality journals. The session will be closed by a Questions & Answers part so that participants have the chance to present their particular difficulties and concerns.

References

Kaiser, G., & Presmeg, N. (Eds.) (2019). *Compendium for Early Career Researchers in Mathematics Education*. Springer. (Open access).