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Editorial

Celebrating 40 years of the Croatian Microscopy Society

DANIJELA POLJUHA^{1*} GORAN KOVAČEVIĆ²

¹ Institute of Agriculture and Tourism, Poreč, Croatia

² Faculty of Science, University of Zagreb, Department of Biology, Zagreb, Croatia

*Correspondence:

Danijela Poljuha E-mail address: danijela@iptpo.hr We are delighted to present a special issue of *Periodicum biologorum*, dedicated to the $30^{\rm th}$ anniversary of the Croatian Microscopy Society as an independent Society and the $40^{\rm th}$ anniversary of its foundation.

Since its establishment in 1983, the Croatian Microscopy Society has been playing a vital role in advancing microscopy in Life and Materials Sciences. The Society began its work as a Section of the Croatian Society of Natural Sciences, which established the *Periodicum biologorum* in 1886 as the first Croatian international journal in the field of biological sciences. The journal still provides an important platform for Croatian and international researchers to share their findings with a global audience. Given that the Society's history is also deeply entwined with that of the journal, it seemed appropriate to honor this significant milestone with a dedicated issue.

This entire volume of *Periodicum biologorum* is intended to be a testament to the enduring legacy of microscopy as a crucial tool in scientific research and its pivotal role in advancing our understanding of the natural world. The articles featured in this collection, written primarily by Croatian scientists, cover a diverse range of scientific subjects relating to microscopy presently being explored in Croatia and beyond. Furthermore, it serves as a testament to the persistence of the employment and advancement of microscopic techniques in this region. We take great pleasure in offering our support as Guest Editors to share the scientific achievements of our colleagues through this issue.

The volume has been thematically divided into three sections, each offering a distinct perspective on microscopy (Figure 1). The first part is devoted to the history of the Croatian Microscopy Society (1) and the Spiridion Brusina Medal, awarded for an exceptional contribution to Croatian science (2). It features a special presentation by Prof. Miran Čeh, a longtime honorary member of the Society and recipient of the Medal for his remarkable contributions to microscopy in Croatia. The presentation (3) highlights the Centre for Electron Microscopy and Microanalysis (CEMM) at Jožef Stefan Institute in Ljubljana (Slovenia). The second part provides an overview of the current research of Croatian scientists and members of the Croatian Microscopy Society, covering a whole range of topics and focusing on plant biology (4,5), zoology (6,7), neuroscience (8) and chemistry (9). The third thematic unit presents a series of methodological review papers (10-14) that provide a comprehensive overview of various microscopic methods and their applications in different fields of biology and medicine. The volume ends with an exploration of the education methodology in the field of biology (15).

As we celebrate the 40th anniversary of the Croatian Microscopy Society, we acknowledge the contributions of its members to the broad fields of biology. Our gratitude goes to the authors for their scientific contributions and to the reviewers for their valuable comments and

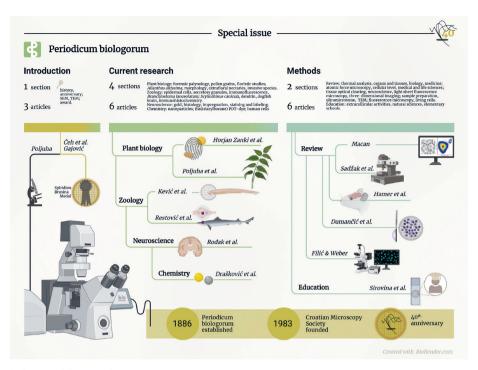


Figure 1. Graphical Abstract of the Special Issue

assistance. We hope this Special Issue of *Periodicum biologorum* will serve as a testament to the rich legacy of Croatian microscopy and inspire future generations of scientists to continue exploring the mysteries of this wonderful biological world.

REFERENCES

- POLJUHA D 2023 Croatian Microscopy Society 1983-2022. Period Biol 125(1–2): 3–7. https://doi.org/10.18054/pb.v125i1-2.24681
- 2. GAJOVIĆ A 2023 Proposal of the Croatian Microscopy Society for awarding the "Spiridion Brusina" Medal to Professor Miran Čeh, PhD, Jožef Stefan Institute, Ljubljana, Slovenia. Period Biol 125(1–2): 9–10. https://doi.org/10.18054/pb.v125i1-2.24850
- 3. ČEH M, HREŠČAK J, DREV S 2023 SEM and TEM investigations of materials at the Centre for Electron Microscopy and Microanalysis (CEMM). Period Biol 125(1–2): 11–14 https://doi.org/10.18054/pb.v125i1-2.25775
- **4.** HORJAN ZANKI I, HRUŠEVAR D, MITIĆ B 2023 Forensic potential of pollen grains: A case study from continental Croatia (town of Donja Stubica). Period Biol 125(1–2): 15–25. https://doi.org/10.18054/pb.v125i1-2.24327
- 5. POLJUHA D, UZELAC M, ZUBIN FERRI T, DAMIJANIĆ D, ŠIMUNIĆ M, KOROVLJEVIĆ H, WEBER T, SLADONJA B 2023 Morphology of extrafloral nectaries of Ailanthus Altissima (Mill.) Swingle (Simaroubaceae). Period Biol 125(1–2): 27–34. https://doi.org/10.18054/pb.v125i1-2.24852
- 6. KEVIĆ N, RESTOVIĆ I, BOČINA I 2023 Ultrastructural and immunofluorescence features of the epidermal cells and its secretory granules in the amphioxus *Branchiostoma lanceolatum* L. Period Biol 125(1–2): 35–42. https://doi.org/10.18054/pb.v125i1-2.23764
- RESTOVIĆ I, VUČEMILO M, OBAD M, KEVIĆ N, KELAM N, RACETIN A, BOČINA I 2023 Expression of dendrin, neurofilament and glial fibrillary acidic protein in the brain of the dogfish

- *Scyliorhinus canicula* L. Period Biol 125(1–2): 43–55. https://doi.org/10.18054/pb.v125i1-2.23766
- 8. ROĐAK E, ZJALIĆ M, CIBOK S, VILAND S, HEFFER M, GRGAC R, BELOVARI T, ORŠOLIĆ N, BIJELIĆ N 2023 Retro is the new modern: Contemporary application of gold impregnation staining on brain cryosections for digital image analysis. Period Biol 125(1–2): 57–63. https://doi.org/10.18054/pb.v125i1-2.23747
- 9. DRAŠKOVIĆ I, FABIJANIĆ I, FERGER M, MARDER TB, MAJHEN D, PIANTANIDA I 2023 Interactions of variously coated gold and silver nanoparticles with a bis(triarylborane) photodyanmic therapy (PDT)-dye; their cellular uptake, cytotoxicity and photo-activity. Period Biol 125(1–2): 65–74. https://doi.org/10.18054/pb.v125i1-2.23726
- MACAN J 2023 Application of thermal analysis methods in biology and medicine. Period Biol 125(1–2): 75–100. https://doi.org/10.18054/pb.v125i1-2.24858
- SADŽAK A, MANDIĆ L, STRASSER V, ŠEGOTA S 2023 Use of atomic force microscopy for characterization of model membranes and cells. Period Biol 125(1–2): 101–113. https://doi.org/10.18054/pb.v125i1-2.24080
- 12. HAMER D, PETRINEC D, BERECKI M, GLASNOVIĆ A, GAJOVIĆ S 2023 Tissue optical clearing methods for microscopy: A review of their application in neuroscience. Period Biol 125(1–2): 115–121. https://doi.org/10.18054/pb.v125i1-2.24860
- 13. DUMANČIĆ E, VOJTA L, FULGOSI H 2023 Beginners guide to sample preparation techniques for transmission electron microscopy. Period Biol 125(1–2): 123–131. https://doi.org/10.18054/pb.v125i1-2.25293
- 14. FILIĆ V, WEBER I. 2023 A young researcher's guide to three-dimensional fluorescence microscopy of living cells. Period Biol 125(1–2): 133–137. https://doi.org/10.18054/pb.v125i1-2.25140
- 15. SIROVINA D, PETRINEC D, TRAMONTANA P, KOVAČE-VIĆ G. Attendance of extracurricular activities in the field of natural sciences and the attractiveness of the content offered for extracurricular activities in biology in elementary schools. Period Biol 125(1–2): 139–145 https://doi.org/10.18054/pb.v125i1-2.24077