

# Curriculum Vitae (January 2021)

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## Curriculum vitae – Saša Marcinek

**Date and place of birth:** 19/01/1991, Zagreb, Croatia

**Address:** Ruđer Bošković Institute, Division for Marine and Environmental Research, Laboratory for physical chemistry of traces, Bijenička 54, 10000 Zagreb, Croatia

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## **Education**

- 2017 – Present PhD in Oceanology, Faculty of Science, University of Zagreb
- 2017 MEng in Environmental Engineering, Faculty of Chemical Engineering and Technology, University of Zagreb
- 2015 BSc in Environmental Engineering, Faculty of Chemical Engineering and Technology, University of Zagreb

## **Work experience**

- 2017 – Present PhD student, Ruđer Bošković Institute

## **Research interest**

Determination and speciation of trace metals in natural waters using electroanalytical and spectroscopic techniques, trace metal speciation, chromophoric dissolved organic matter

## **Research projects**

- 2018 – 2020 Croatian-Chinese Scientific and Technological Cooperation: The speciation of trace metals in seawater at phase boundaries - implementation of advanced methodologies (collaborator)
- 2017 – 2019 New methodological approach to biogeochemical studies of trace metal speciation in coastal aquatic ecosystems, HRZZ (PhD, student; collaborator)

## **Trainings**

- 2019 – International Summer School GEOTRACES; Universidad de Cádiz - Buque Intermares, Cádiz (Spain), 23 - 28 September 2019
- 2018 – Scholarship of French embassy and Ruđer Bošković Institute; Université de Toulon, Institut Méditerranéen d'Océanologie, La Garde (France), 8 October - 3 November

## **Visits to foreign research and education institutions**

- 2019 Université de Toulon, Institut Méditerranéen d'Océanologie, La Garde (France), 25 November – 4 December
- 2019 CNR - Istituto di Biofisica, Pisa (Italy), 31 July - 10 August 2019
- 2019 CNR - Istituto di Biofisica, Pisa (Italy), 18 - 30 March 2019 – Public presentation (29 March); *Trace metal speciation and organic matter characterisation by spectroscopic and electrochemical methods*
- 2019 First Institute of Oceanography, Ministry of Natural resources, Qingdao (China), 25 February - 1 March 2019 – Public presentation (27 February); *Seasonal characterization of colored dissolved organic matter (CDOM) in the pristine Krka River estuary (Croatia)*

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## Organizational skills and competences

- 2021 Member of organizing committee of *10<sup>th</sup> ISE Satellite Student Regional Symposium on Electrochemistry*, online event, 2 July 2021
- 2019 Member of organizing committee of *COST ACTION TD 1407 Final Meeting: "Technology critical elements – sources, chemistry and toxicology"*, Zagreb, (Croatia) 2-3 April 2019
- 2017 – 2020 Member of organizing team of exhibition point at IRB Open House

## List of Publications

1. **Marcinek, S.\***, Chapoulie, A., Salaün, P., Smith, S., Omanović, D.\* (2021). Revised application of copper ion selective electrode (Cu-ISE) in marine waters: a new meta-calibration approach. *Talanta* 226:122170, 10. doi:10.1016/j.talanta.2021.122170
2. Pađan, J., **Marcinek S.\***, Cindrić, A. M., Santinelli, C., Retelletti Brogi, S., Radakovitch, O., Garnier, C., Omanović, D.\* (2021). Copper speciation by anodic stripping voltammetry (ASV) in estuarine waters with high dissolved organic matter. *Frontiers in Chemistry* 8:628749, 16. doi:10.3389/fchem.2020.628749
3. **Marcinek, S.\***, Santinelli, C., Cindrić, A. M., Evangelista, V., Gonnelli, M., Layglon, N., Mounier, S., Lenoble, V., Omanović, D. (2020). Dissolved organic matter dynamics in the pristine Krka River estuary (Croatia). *Marine chemistry*, 225:103848, 12. doi:10.1016/j.marchem.2020.103848
4. Cindrić, A. M., **Marcinek, S.**, Garnier, C., Salaün, P., Cukrov, N., Oursel, B., Lenoble, V., Omanović D.\* (2020). Evaluation of diffusive gradients in thin films (DGT) technique for speciation of trace metals in estuarine waters - A multimethodological approach. *Science of The Total Environment*, 721:137784, 15. doi:10.1016/j.scitotenv.2020.137784
5. Pađan, J., **Marcinek, S.**, Cindrić, A. M., Layglon, N., Garnier, C., Garcia, A. C., Omanović, D.\* (2020). Determination of sub-pico-molar levels of platinum in the pristine Krka River estuary (Croatia) using improved voltammetric methodology. *Environmental Chemistry*, 17 (2), 74-84. doi:10.1071/EN19157
6. Pađan, J., **Marcinek, S.**, Cindrić, A. M., Layglon, N., Lenoble, V., Salaün, P., Garnier, C., Omanović D.\* (2019). Improved voltammetric methodology for chromium redox speciation in estuarine waters. *Analytica Chimica Acta*, 1089C, 40-47. doi:10.1016/j.aca.2019.09.014.
7. Omanović, D., Santinelli, C., **Marcinek, S.**, Gonnelli, M. (2019). ASFit - An all-inclusive tool for analysis of UV-Vis spectra of colored dissolved organic matter (CDOM). *Computers & Geosciences* 133:104334, 9. doi:10.1016/j.cageo.2019.104334.

## Conferences/Meetings

1. **Marcinek, S.**, Cindrić, A. M., Garnier, C., Pađan, J., Omanović, D. Copper speciation in the Krka River estuary (Croatia). *42nd CIESM Congress*, Cascais, Portugal, 2019 (**poster, flash talk**)
2. **Marcinek, S.**, Cindrić, A. M., Pađan, J., Garnier, C., Omanović, D. Copper speciation in natural waters by CLE-AdCSV - a methodological uncertainties. *Goldschmidt2019 Congress*, Barcelona, Spain, 2019 (**poster, flash talk**)
3. **Marcinek, S.**, Layglon, N., Pađan, J., Cindrić, A. M., Santinelli, C., Gonnelli, M., Garnier, C., Mounier, S., Omanović, D. Dissolved organic matter (DOM) dynamics in the pristine Krka River estuary (Croatia). *XV International Estuarine Biogeochemistry Symposium (IEBS)*, Vigo, Spain, 2019 (**oral**)
4. **Marcinek, S.**, Jadreško, D., Omanović, D. Development of voltammetric method for characterization and determination of surface active natural organic matter (humic substances), *MEBTRACE mini workshop*, Šibenik, Croatia, 2019 (**oral**)
5. **Marcinek, S.**, Layglon, N., Pađan, J., Cindrić, A. M., Santinelli, C., Gonnelli, M., Garnier, C., Mounier, S., Omanović, D. Dissolved organic matter (DOM) dynamics in the pristine Krka River estuary (Croatia), *MEBTRACE mini workshop*, Šibenik, Croatia, 2019 (**oral**)

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6. **Marcinek, S.**, Jadreško, D., Omanović, D. Development of voltammetric method for characterization and determination of surface active natural organic matter (humic substances). *RSE SEE 7 Satellite student symposium*, Split, Croatia, 2019 (**oral**)
7. Chapoulié, A., **Marcinek, S.**, Omanović, D. Application of Cu(II) ion-selective electrode (Cu-ISE) for Cu speciation in coastal waters. *9th ISE Satellite Student Regional Symposium on Electrochemistry*, Zagreb, Croatia, 2019 (**oral**)
8. Pađan, J., **Marcinek, S.**, Cindrić, A. M., Layglon, N., Durrieu, G., Garnier, C., Cobelo-García, A., Omanović, D. Determination of sub-pico-molar levels of platinum in the Krka River estuary (Croatia). *COST ACTION TD 1407 Final Meeting*, Zagreb, Croatia, 2019 (**poster**)
9. **Marcinek, S.**, Layglon, N., Pađan, J., Cindrić, A. M., Santinelli, C., Gonnelli, M., Garnier, C., Mounier, S., Omanović, D. UV/Vis spektrofotometrijska karakterizacija kromoforne otopljene organske tvari (CDOM) u estuariju rijeke Krke. *Treći Simpozij studenata doktorskih studija PMF-a*, Zagreb, Croatia, 2019 (**oral**)
10. Omanović, D., Santinelli, C., **Marcinek, S.** ASFit - an all-inclusive tool for analysis of UV-Vis spectra of colored dissolved organic matter (CDOM). *International Workshop on Organic Matter Spectroscopy 2018 (WOMS 2018)*, La Garde City, France, 2018 (**oral**)
11. **Marcinek, S.**, Layglon, N., Pađan, J., Cindrić, A. M., Santinelli, C., Gonnelli, M., Garnier, C., Mounier, S., Omanović, D. UV-Vis spectroscopic study of coloured dissolved organic matter (CDOM) in the pristine Krka River estuary (Croatia). *International Workshop on Organic Matter Spectroscopy 2018 (WOMS 2018)*, La Garde City, France, 2018 (**oral**)
12. Pađan, J., **Marcinek, S.**, Cindrić, A.M., Layglon, N., Garnier, C., Omanović D. Determination of sub-pico-molar levels of platinum in the Krka River estuary (Croatia). *40th International Conference on Environmental & Food Monitoring*, Santiago de Compostela, Spain, 2018 (**oral**)
13. **Marcinek, S.**, Garnier, C., Pađan, J., Pižeta, I., Omanović, D. Segmented multi-detection window approach for organic speciation of trace metals – a model and experimental study in estuarine system. *40th International Conference on Environmental & Food Monitoring*, Santiago de Compostela, Spain, 2018 (**oral**)
14. Pađan, J., **Marcinek, S.**, Cindrić, A. M., Layglon, N., Garnier, C., Omanović, D. Determination of sub-pico-molar levels of platinum in the Krka River estuary. *5. Dan elektrokemije & 8th ISE Satellite Student Regional Symposium on Electrochemistry*, Zagreb, Croatia, 2018 (**oral**)
15. **Marcinek, S.**, Garnier, C., Pađan, J., Pižeta, I., Omanović, D. Teoretska i eksperimentalna razrada metodologije "multi-detection window" za specijaciju metala u tragovima u estuarijskom sustavu, *5. Dan elektrokemije & 8th ISE Satellite Student Regional Symposium on Electrochemistry*, Zagreb, Croatia, 2018 (**oral**)
16. Šipić, K., **Marcinek, S.**, Šuman, M., Kučić D. Removal of phenols from aqueous solution by adsorption on olive mill waste. *XI. Susret mladih kemijskih inženjera*, Zagreb, Croatia, 2016 (**poster**)