Curriculum Vitae: Dr. Stjepko Krehula (August 2019)

Personal Data

Name: Stjepko Krehula

Date of Birth: December 13, 1975.

Place of Birth: Virovitica, Croatia

Citizenships: Croatian

E-mail: krehul@irb.hr

Current Position

Position: Senior Research Associate
Affiliation: Division of Materials Chemistry, Ruđer Bošković Institute (RBI)
Address: Bijenička cesta 54, 10000 Zagreb, Croatia

Education

2006. PhD at Faculty of Science, University of Zagreb, Zagreb, Croatia
Supervisor: Dr. Svetozar Musić
Thesis: *Synthesis and Microstructural Properties of Iron Oxyhydroxides and Oxides*

2000. BSc at Faculty of Science, University of Zagreb, Zagreb, Croatia
Supervisor: Prof. dr. Nikola Kallay
Thesis: *Determination of Surface Reactions Enthalpy by Mass Titration*

Work Experience

2014. - Senior Research Associate, Division of Materials Chemistry, RBI
2008. - 2014. Research Associate, Division of Materials Chemistry, RBI
2007. - 2008. Higher research assistant, Division of Materials Chemistry, RBI
2000. - 2007. Research assistant, Division of Materials Chemistry, RBI

Teaching Experience

2007. Exercises in Physical Chemistry, Graduate studies at the Faculty of Science, University of Zagreb

Field Of Interest

Synthesis and properties of metal oxide and (oxy)hydroxide nanoparticles and nanostructures; solid solutions of metal oxides and (oxy)hydroxides; synthesis and properties of iron oxide and ferrite nanoparticles; influence of metal cations on the formation and properties of iron oxide nanoparticles; characterization of metal oxide nanoparticles using X-ray powder diffraction, Mössbauer spectroscopy, Fourier-transform infrared (FT-IR) spectroscopy, ultraviolet-visible-near infrared (UV-Vis-NIR) spectroscopy, field emission scanning electron microscopy (FE-SEM), energy-dispersive X-ray spectroscopy (EDS), thermal analysis techniques (TGA, DTA), magnetic properties, photocatalytic and electrocatalytic properties

PROJECTS (project leader or associate)

2019. – 2021. *Composites of mixed iron and transition metal oxide and hydroxide nanoparticles for the photocatalytic and electrocatalytic applications* (bilateral Croatian-Serbian project, project leader dr. sc. Stjepko Krehula)

2017. - 2021. *Formation and properties of 1D α-Fe_2O_3 nanostructures doped with selected metal ions* (Croatian science foundation project, project leader dr. sc. Mira Ristić)

2017. - 2021. *Synthesis of advanced inorganic catalysts with increased number of acidic sites* (Croatian science foundation project, project leader dr. sc. Josip Bronić)

2017. - 2019. *Design of nanoferrites for agriculture and environmental protection* (bilateral Croatian-Hungarian project, project leader dr. sc. Mira Ristić)

2016. - 2017. *Nanostuctured iron oxides for environmental applications* (bilateral Croatian-Serbian project, project leader dr. sc. Mira Ristić)

2016. - 2017. *Nano/microstructure, optical and magnetic properties of doped electrospun α-Fe_2O_3 and ZnO fibers* (bilateral Croatian-Austrian project, project leader dr. sc. Mira Ristić)

2015. - 2017. *Synthesis and characterization of iron oxide nanoparticles and nanofibers and their application in environmental catalysis* (bilateral Croatian-Chinese project, project leader dr. sc. Mira Ristić)

2012. - 2013. *Investigations of the factors that influence the properties of metallic and metal oxide nanoparticles* (bilateral Croatian-Austrian project, dr. sc. Mira Ristić)

2008. - 2010. *Metal oxides - synthesis, structural and magnetic properties* (bilateral Croatian-Serbian project, project leader dr. sc. Mira Ristić)

2007. - 2012. *Synthesis and microstructure of metal oxides and oxide glasses* (Croatian Ministry of science project, project leader dr.sc. Svetozar Musić till 2011., dr. sc. Mira Ristić from 2011.)

2002. - 2006. *Synthesis and microstructure of metal oxides and oxide glasses* (Croatian Ministry of science project, project leader dr.sc. Svetozar Musić)

2000. - 2002. *Synthesis and microstructure of metal oxides and oxide glasses* (Croatian Ministry of science project, project leader dr.sc. Svetozar Musić)

ORGANIZATIONAL EXPERIENCE

2018. Member of Organizing Committee of MECAME 2018 – 4th Mediterranean Conference on the Applications of the Mössbauer Effect (27-31 May 2018 Zadar, Croatia)

2017. Member of Organizing Committee of MECAME 2017 – 3rd Mediterranean Conference on the Applications of the Mössbauer Effect (5-7 June 2017 Jerusalem, Israel)

2016. Member of Organizing Committee of MECAME 2016 – 2nd Mediterranean Conference on the Applications of the Mössbauer Effect (31 May – 3 June 2016 Cavtat, Croatia)

2015. Member of Organizing Committee of MECAME 2015 – Mediterranean Conference on the Applications of the Mössbauer Effect (7-10 June 2015 Zadar, Croatia)

2013. Member of Organizing Committee of ICAME 2013 – 32nd International Conference on the Applications of the Mössbauer Effect (1-6 September 2013 Opatija, Croatia)

2010. Member of Organizing Committee of Ruđer Bošković Institute Open Days

2008. Member of Organizing Committee of EUCMOS 2008 – XXIX European Congress on Molecular Spectroscopy (31 August – 5 September 2008 Opatija, Croatia)

2008. Member of Organizing Committee of Ruđer Bošković Institute Open Days

Book Of Abstracts Editing

2017 Book of Abstracts MECAME 2016 – 2nd Mediterranean Conference on the Applications of the Mössbauer Effect (Jerusalem, Israel)

2016. Book of Abstracts MECAME 2016 – 2nd Mediterranean Conference on the Applications of the Mössbauer Effect (Cavtat, Croatia)

2015. Book of Abstracts MECAME 2015 – Mediterranean Conference on the Applications of the Mössbauer Effect (Zadar, Croatia)

2013. Book of Abstracts ICAME 2013 – 32nd International Conference on the Applications of the Mössbauer Effect (Opatija, Croatia)

2008. Book of Abstracts EUCMOS 2008 – XXIX European Congress on Molecular Spectroscopy (Opatija, Croatia)

Journal Editing

2017. Guest editor for the special issue of journal *Hyperfine Interactions* - Proceedings of the 3rd Mediterranean Conference on the Applications of the Mössbauer Effect (MECAME 2017), Jerusalem, Israel, 5–7 June 2017

2016. Editor-in-charge for the special issue of journal *Croatica Chemica Acta* dedicated to dr. sc. Svetozar Musić (*Musić Festschrift*)

Refereeing Experience

Articles reviewed for:

- Chemistry of Materials (IF 10.159),
- Materials Research Letters (IF 7.440),
- Applied Surface Science (IF 5.155),
- Journal of Alloys and Compounds (IF 4.175),
- CrystEngComm (IF 3.382),
- Journal of the American Ceramic Society (IF 3.094),
- Materials Chemistry and Physics (IF 2.781),
- Materials Science in Semiconductor Processing (IF 2.722),
- Journal of Magnetism and Magnetic Materials (IF 2.683),
- Industrial & Engineering Chemistry Research (IF 2.587),
- Beilstein Journal of Nanotechnology (IF 2.269),
- Journal of Advanced Ceramics (IF 1.605),
- Journal of Crystal Growth (IF 1.573),
- Desalination and Water Treatment (IF 1.383),
- Journal of Nanoscience and Nanotechnology (IF 1.354),
- Clay Minerals (IF 1.219),
- Croatica Chemica Acta (IF 0.731),
- Hyperfine Interactions

International Collaborators

Prof. Shiro Kubuki - Tokyo Metropolitan University, Tokyo, Japan
Prof. Junhu Wang - Dalian Institute of Chemical Physics, Dalian, China
Prof. Michael Reissner - Technische Universität Wien, Vienna, Austria
Prof. Zoltan Homonnay - Eötvös Loránd University, Budapest, Hungary
Dr. Erno Kuzmann - Eötvös Loránd University, Budapest, Hungary
Dr. Marija Perović - Institute of Nuclear Sciences Vinca, Belgrade, Serbia
Dr. Marko Bošković - Institute of Nuclear Sciences Vinca, Belgrade, Serbia
Dr. Dalibor Stanković - Institute of Nuclear Sciences Vinca, Belgrade, Serbia
Dr. Bratislav Antić - Institute of Nuclear Sciences Vinca, Belgrade, Serbia
Dr. Martin Fabian - Institute of Geotechnics, Slovak Academy of Sciences, Slovakia

PAPERS (in JCR journals, *corresponding author)

[1] T. Preočanin, S. Krehula, N. Kallay*, *Enthalpy of surface reactions: temperature dependency of pH of acidic or basic concentrated hematite suspension*, *Applied Surface Science* 196 (2002) 392-400 (IF 5.155, Q1 in Materials Science, Coatings & Films).

[2] S. Krehula, S. Popović, S. Musić*, *Synthesis of acicular α-FeOOH particles at a very high pH*, *Materials Letters* 54 (2002) 108-113 (IF 3.019, Q2 in Materials Science, Multidisciplinary).

[3] S. Musić*, S. Krehula, S. Popović, Ž. Skoko, *Some factors influencing forced hydrolysis of $FeCl_3$ solutions*, *Materials Letters* 57 (2003) 1096-1102 (IF 3.019, Q2 in Materials Science, Multidisciplinary).

[4] S. Musić*, S. Krehula, S. Popović, *Thermal decomposition of β-FeOOH*, *Materials Letters* 58 (2004) 444-448 (IF 3.019, Q2 in Materials Science, Multidisciplinary).

[5] S. Musić*, S. Krehula, S. Popović, *Effect of HCl additions on forced Hydrolysis of $FeCl_3$ solutions*, *Materials Letters* 58 (2004) 2640-2645 (IF 3.019, Q2 in Materials Science, Multidisciplinary).

[6] S. Krehula, S. Musić*, S. Popović, *Influence of Ni-dopant on the properties of synthetic goethite*, Journal of Alloys and Compounds 403 (2005) 368-375 (IF 4.175, Q1 in Materials Science, Multidisciplinary).

[7] S. Krehula, S. Musić*, *Influence of ruthenium ions on the precipitation of α-FeOOH, α-Fe_2O_3 and Fe_3O_4 in highly alkaline media, Journal of Alloys and Compounds* 416 (2006) 284-290 (IF 4.175, Q1 in Materials Science, Multidisciplinary).

[8] S. Krehula, S. Musić*, S. Popović, Ž. Skoko, *The influence of Zn-dopant on the precipitation of α-FeOOH in highly alkaline media, Journal of Alloys and Compounds* 420 (2006) 260-268 (IF 4.175, Q1 in Materials Science, Multidisciplinary).

[9] S. Krehula, S. Musić*, *Influence of Mn-dopant on the properties of α-FeOOH particles precipitated in highly alkaline media, Journal of Alloys and Compounds 426 (2006) 327-334* (IF 4.175, Q1 in Materials Science, Multidisciplinary).

[10] S. Krehula, S. Musić*, *The influence of Cd-dopant on the properties of α-FeOOH and α-Fe_2O_3 particles precipitated in highly alkaline media, Journal of Alloys and Compounds 431 (2007) 56-64* (IF 4.175, Q1 in Materials Science, Multidisciplinary).

[11] S. Krehula*, S. Musić, *Influence of copper ions on the precipitation of goethite and hematite in highly alkaline media*, Journal of Molecular Structure 834-836 (2007) 154-161 (IF 2.120, Q3 in Chemistry, Physical).

[12] S. Krehula*, S. Musić, *Formation of magnetite in highly alkaline media in the presence of small amounts of ruthenium,* Croatica Chemica Acta 80 (2007) 517-527 (IF 0.731, Q4 in Chemistry, Multidisciplinary).

[13] S. Krehula*, S. Musić, *Influence of aging in an alkaline medium on the microstructural properties of α-FeOOH*, Journal of Crystal Growth 310 (2008) 513-520 (IF 1.573, Q3 in Materials Science, Multidisciplinary).

[14] S. Krehula*, S. Musić, *Influence of cobalt ions on the precipitation of goethite in highly alkaline media*, Clay Minerals 43 (2008) 95-105. (IF 1.219, Q4 in Chemistry, Physical)

[15] S. Krehula*, S. Musić, *A novel route for the synthesis of nanosize particles of metallic palladium, Materials Letters 62 (2008) 4369-4370* (IF 3.019, Q2 in Materials Science, Multidisciplinary).

[16] S. Krehula*, S. Musić, *The influence of a Cr-dopant on the properties of α-FeOOH particles precipitated in highly alkaline media*, *Journal of Alloys and Compounds 469 (2009) 336-342* (IF 4.175, Q1 in Materials Science, Multidisciplinary).

[17] S. Krehula*, S. Musić, *Formation of iron oxides in a highly alkaline medium in the presence of palladium ions,* Journal of Molecular Structure 924-926 (2009) 201-207 (IF 2.011, Q3 in Chemistry, Physical).

[18] S. Krehula*, S. Musić, *Spectroscopic and electron microscopic investigation of iron oxides formed in a highly alkaline medium in the presence of rhodium ions,* Journal of Molecular Structure 976 (2010) 61-68 (IF 2.120, Q3 in Chemistry, Physical).

[19] S. Krehula*, S. Musić, *Growth of uniform lath-like α-(Fe,Al)OOH and disc-like α-$(Fe,Al)_2O_3$ nanoparticles in a highly alkaline medium*, Materials Chemistry and Physics 123 (2010) 67-76 (IF 2.210, Q2 in Materials Science, Multidisciplinary).

[20] S. Krehula*, S. Musić, *The influence of platinum(IV) ions on the formation of iron oxides in a highly alkaline medium*, Journal of Molecular Structure 993 (2011) 382–389 (IF 2.120, Q3 in Chemistry, Physical).

[21] S. Krehula*, S. Musić, *Hydrothermal synthesis of platinum group metal nanoparticles,* Croatica Chemica Acta 84 (2011) 465-468 (IF 0.705, Q4 in Chemistry, Multidisciplinary).

PAPERS (in JCR journals, *corresponding author)

[22] S. Krehula*, S. Musić, *The effect of iridium(III) ions on the formation of iron oxides in a highly alkaline medium,* Journal of Alloys and Compounds 516 (2012) 207-216 (IF 4.175, Q1 in Materials Science, Multidisciplinary).

[23] S. Krehula*, G. Štefanić, K. Zadro, L. Kratofil Krehula, M. Marciuš, S. Musić, *Synthesis and properties of iridium-doped hematite (α-Fe_2O_3), Journal of Alloys and Compounds 545 (2012) 200-209* (IF 4.175, Q1 in Materials Science, Multidisciplinary).

[24] S. Krehula*, S. Musić, *Formation of $AgFeO_2$, α-FeOOH, and Ag_2O from mixed $Fe(NO_3)_3$-$AgNO_3$ solutions at high pH*, Journal of Molecular Structure, 1044 (2013) 221-230 (IF 2.011, Q3 in Chemistry, Physical).

[25] S. Krehula*, L. Kratofil Krehula, S. Musić, *Synthesis and microstructural properties of α-$Fe_{1-x}Ga_xOOH$ solid solutions*, Journal of Alloys and Compounds 581 (2013) 335-343 (IF 4.175, Q1 in Materials Science, Multidisciplinary).

[26] G. Štefanić*, S. Krehula, I. Štefanić, *The high impact of a milling atmosphere on steel contamination,* Chemical Communications 49 (2013) 9245-9247 (IF 6.164, Q1 in Chemistry, Multidisciplinary).

[27] K. Kos, H. Posilović*, A. Durman, M. Ristić, S. Krehula, *White Encrustation Produced from Deer Antler Phosphate on Prehistoric Ceramics from Podunavlje*, Archaeometry 57 (2015) 636–652 (IF 1.545, Q3 in Chemistry, Inorganic & Nuclear).

[28] S. Krehula*, M. Ristić, S. Kubuki, Y. Iida, M. Fabián, S. Musić, *The formation and microstructural properties of uniform α-GaOOH particles and their calcinations products*, Journal of Alloys and Compounds, 620 (2015) 217-227 (IF 4.175, Q1 in Materials Science, Multidisciplinary).

[29] S. Krehula*, M. Ristić, S. Kubuki, Y. Iida, M. Perović, M. Fabián, S. Musić, *Synthesis and microstructural properties of mixed iron–gallium oxides*, Journal of Alloys and Compounds 634 (2015) 130–141 (IF 4.175, Q1 in Materials Science, Multidisciplinary).

[30] Y. Iida, K. Akiyama, B. Kobzi, K. Sinkó, Z. Homonnay, E. Kuzmann, M. Ristić, S. Krehula, T. Nishida, S. Kubuki*, *Structural analysis and visible light-activated photocatalytic activity of iron-containing soda lime aluminosilicate glass*, Journal of Alloys and Compounds 645 (2015) 1–6 (IF 4.175, Q1 in Materials Science, Multidisciplinary).

[31] G. Štefanić*, S. Krehula, I. Štefanić, *Phase development during high-energy ball-milling of zinc oxide and iron – the impact of grain size on the source and the degree of contamination*, Dalton Transactions 44 (2015) 18870-18881 (IF 4.052, Q1 in Chemistry, Inorganic & Nuclear).

[32] S. Krehula*, M. Ristić, S. Kubuki, Y. Iida, L. Kratofil Krehula, S. Musić, *The effects of In^{3+} doping on the properties of precipitated goethite*, Journal of Alloys and Compounds 658 (2016) 41-48 (IF 4.175, Q1 in Materials Science, Multidisciplinary).

[33] S. Krehula*, M. Ristić, M. Reissner, S. Kubuki, S. Musić, *Synthesis and properties of indium-doped hematite*, Journal of Alloys and Compounds, 695 (2017) 1900-1907 (IF 4.175, Q1 in Materials Science, Multidisciplinary).

[34] M. Ristić*, S. Krehula, M. Reissner, M. Jean, B. Hannoyer, S. Musić, *Synthesis and properties of precipitated cobalt ferrite nanoparticles*, Journal of Molecular Structure 1140 (2017) 32–38 (IF 2.120, Q3 in Chemistry, Physical).

[35] B. Kobzi, E. Kuzmann, K. Sinko, Z. Homonnay, M. Ristić, S. Krehula, T. Nishida, S, Kubuki*, *The relationship between Sn^{II} fraction and visible light activated photocatalytic activity of SnO_xSiO_2 glass studied by Mossbauer spectroscopy*, Journal of Radioanalytical and Nuclear Chemistry 311 (2017) 1859-1865 (IF 1.186, Q3 in Chemistry, Inorganic & Nuclear).

[36] L. Kratofil Krehula*, A. Papić, S. Krehula, V. Gilja, L. Foglar, Z. Hrnjak-Murgić*, *Properties of UV protective films of poly(vinyl-chloride)/TiO_2 nanocomposites for food packaging*, Polymer Bulletin 74 (2017) 1387-1404 (IF 1.858, Q3 in Polymer Science).

[37] B. Kobzi, Y. Watanabe, K. Akiyama, E. Kuzmann, Z. Homonnay, S. Krehula, M. Ristić, T. Nishida, S. Kubuki*, *^{57}Fe-Mossbauer study and methylene blue decomposing effect of nanoparticle mixtures composed of metallic iron and maghemite*, Journal of Alloys and Compounds 722 (2017) 94-100 (IF 4.175, Q1 in Materials Science, Multidisciplinary).

[38] M. Ristić*, S. Krehula, M. Reissner, S. Musić, *^{57}Fe Mössbauer, XRD, FT-IR, FE SEM Analyses of Natural Goethite, Hematite and Siderite*, Croatica Chemica Acta 90 (2017) 499–507 (IF 0.731, Q4 in Chemistry, Multidisciplinary).

[39] M. Ristić*, S. Krehula, M. Reissner, S. Musić, *Microstructural Properties of Natural Allophane/Gibbsite from a White Bauxite Deposit in Montenegro*, Croatica Chemica Acta 91 (2018) 65–70 (IF 0.731, Q4 in Chemistry, Multidisciplinary).

PAPERS (in JCR journals, *corresponding author)

[40] B. Kobzi, E. Kuzmann, Z. Homonnay, S. Krehula, M. Ristić, S. Kubuki*, *Improving the visible-light photocatalytic activity of SnO_x·SiO_2 glass systems by introducing SnO_x nanoparticles*, Journal of Radioanalytical and Nuclear Chemistry 316 (2018) 579-586 (IF 1.186, Q3 in Chemistry, Inorganic & Nuclear).

[41] S. Krehula*, M. Ristić, C. Wu, X. Li, L. Jiang, J. Wang, G. Sun, T. Zhang, M. Perović, M. Bošković, B. Antić, L. Kratofil Krehula, B. Kobzi, S. Kubuki, S. Musić, *Influence of Fe(III) doping on the crystal structure and properties of hydrothermally prepared β-$Ni(OH)_2$ nanostructures*, Journal of Alloys and Compounds 750 (2018) 687–695 (IF 4.175, Q1 in Materials Science, Multidisciplinary).

[42] M. Ristić*, M. Reissner, S. Krehula, S. Musić, *^{57}Fe Mössbauer spectroscopic study and magnetic properties of 1D $Fe(IO_3)_3$ particles and their thermal decomposition to α-Fe_2O_3*, Materials Letters 227 (2018) 47–50 (IF 2.687, Q2 in Materials Science, Multidisciplinary).

[43] V. Gilja, L. Kratofil Krehula*, Z. Katančić, S. Krehula, Z. Hrnjak-Murgić, J. Travas-Sejdic, *Influence of Titanium Dioxide Preparation Method on Photocatalytic Degradation of Organic Dyes*, Croatica Chemica Acta 91 (2018) 323–334 (IF 0.731, Q4 in Chemistry, Multidisciplinary).

[44] S. Krehula*, M. Ristić*, I. Mitar, C. Wu, X. Li, L. Jiang, J. Wang, G. Sun, T. Zhang, M. Perović, M. Bošković, B. Antić, S. Musić, *Synthesis and Properties of Ni-doped Goethite and Ni-doped Hematite Nanorods*, Croatica Chemica Acta 91 (2018) 389–401 (IF 0.731, Q4 in Chemistry, Multidisciplinary).

[45] L. Kratofil Krehula*, J. Stjepanović, M. Perlog, S. Krehula, V. Gilja, J. Travas-Sejdic, Z. Hrnjak-Murgić, *Conducting polymer polypyrrole and titanium dioxide nanocomposites for photocatalysis of RR45 dye under visible light*, Polymer Bulletin 76 (2019) 1697–1715 (IF 1.858, Q3 in Polymer Science).

[46] S. Krehula*, M. Ristić, Ž. Petrović, L. Kratofil Krehula, I. Mitar, S. Musić, *Effects of Cu doping on the microstructural, thermal, optical and photocatalytic properties of α-FeOOH and α-Fe2O3 1D nanoparticles*, Journal of Alloys and Compounds 802 (2019) 290–300 (IF 4.175, Q1 in Materials Science, Multidisciplinary).

BOOK CHAPTER

S. Musić, M. Ristić, S. Krehula, *^{57}Fe Mössbauer spectroscopy in the investigation of the precipitation of iron oxides* in V.K. Sharma, G. Klingelhofer, T. Nishida (editors), *Mossbauer spectroscopy: applications in chemistry, biology, industry, and nanotechnology*, John Wiley & Sons, Hoboken, New Jersey, USA, 2013, pages 470-504.

INVITED LECTURES

[1] S. Krehula: *The influence of metal cations on the synthesis and microstructural properties of iron oxides*, Magbiovin workshop: Advanced Techniques for physico-chemical characterization of MNPs, Vinča Institute, Belgrade, Serbia, 6 July 2015.

[2] S. Krehula: *Properties of doped iron oxides synthesized in a highly alkaline medium*, Faculty of Humanity-Oriented Science and Engineering, Kindai University, Iizuka, Fukuoka, Japan, 10 March 2016.

[3] S. Krehula: *Properties of doped iron oxides synthesized in a highly alkaline medium*, Japan Mössbauer Spectroscopy Forum, Tokyo Metropolitan University, Tokyo, Japan, 17 March 2016.

[4] S. Krehula: *Hydrothermal synthesis, characterization and OER activity of nanostructured Ni-Fe (oxy)hydroxides*, 13th National Mössbauer Spectroscopy Conference, Beijing, China, 22 July 2017.

[5] S. Krehula: *Influence of Metal Doping on the Properties of Iron Oxide Nanoparticles*, International Workshop on Advances in Nanomaterials, 17-21 September 2018, National Institute of Materials Physics, Magurele, Bucharest, Romania.

[6] S. Krehula: *Influence of Doping on the Structural, Optical and Photocatalytic Properties of Iron Oxide Nanoparticles*, 5th Mediterranean Conference on the Applications of the Mössbauer Effect and 41st Workshop of the French Speaking Group of Mössbauer Spectroscopy (MECAME & GFSM 2019), Montpellier, France, 19-23.05.2019.

PARTICIPATION ON SCIENTIFIC CONFERENCES

[1] S. Musić, **S. Krehula**, S. Popović, Ž. Skoko: *Some factors influencing forced hydrolysis of $FeCl_3$ solutions* (oral presentation), 11th Slovenian-Croatian Crystallographic Meeting, 27-30 June 2002, Bohinj, Slovenia.

[2] **S. Krehula**, S. Musić, S. Popović, N. Ljubešić: *Formation of β-FeOOH by forced hydrolysis of $FeCl_3$ solutions and thermal decomposition of β-FeOOH particles* (oral presentation), 12th Croatian-Slovenian Crystallographic Meeting, 19-22 June 2003, Plitvice, Croatia.

[3] **S. Krehula**, S. Musić, Ž. Skoko, S. Popović: *Influence of Zn-doping on the properties of synthetic goethite* (oral presentation), 14th Croatian-Slovenian Crystallographic Meeting, 21-24 June 2005, Vrsar, Croatia.

[4] **S. Krehula**, S. Musić, S. Popović: *Influence of Ni-dopand on the properties of synthetic goethite* (poster presentation), International Conference on the Applications of the Mössbauer Effect (ICAME 2005), 5-9 September 2005, Montpellier, France.

[5] **S. Krehula**, S. Musić: *Influence of Copper Ions on Precipitation of Goethite and Hematite in Highly Alkaline Media* (poster presentation), XXVIII European Congress on Molecular Spectroscopy (EUCMOS 2006), 3-8 September 2006, Istanbul, Turkey.

[6] **S. Krehula**, S. Musić: *The Influence of Cr-dopant on the properties of alpha-FeOOH particles precipitated in highly alkaline media* (oral presentation), E-MRS Fall Meeting, 17-21 September 2007, Warsaw, Poland.

[7] **S. Krehula**, S. Musić: *Formation of iron oxides in a highly alkaline medium in the presence of palladium ions* (poster presentation), XXIX European Congress on Molecular Spectroscopy (EUCMOS 2008), 31 August – 5 September 2008, Opatija, Croatia.

[8] **S. Krehula**, S. Musić: *Formation of iron oxides in a highly alkaline medium in the presence of rhodium ions* (poster presentation), International Conference on the Applications of the Mössbauer Effect (ICAME 2009), 19-24 July 2009, Vienna, Austria.

[9] **S. Krehula**, S. Musić: *Nastajanje željezovih oksida u jako lužnatom mediju u prisutnosti paladijevih iona* (poster), XXI. Hrvatski skup kemičara i kemijskih inženjera, 19-22.04.2009., Trogir, Hrvatska.

[10] **S. Krehula**, S. Musić: *Precipitation of α-FeOOH at high pH in the presence of Au(III)* (poster presentation), 239th ACS National Meeting, 21-25 March 2010, San Francisco, USA.

[11] **S. Krehula**, S. Musić: *The influence of platinum(IV) ions on the formation of iron oxides in a highly alkaline medium* (poster presentation), 30th European Congress on Molecular Spectroscopy (EUCMOS 2010), 29 August – 3 September 2010, Florence, Italy.

[12] **S. Krehula**, S. Musić: *The effect of various metal cations on the formation of iron oxides in a highly alkaline medium* (poster presentation), The 31st International Conference on the Applications of the Mössbauer effect (ICAME 2011), 25-30 September 2011, Kobe, Japan.

[13] **S. Krehula**, S. Musić: *Formation of α-FeOOH, $AgFeO_2$ and Ag_2O from the mixed $Fe(NO_3)_3$-$AgNO_3$ solutions at high pH* (poster presentation), 31st European Congress on Molecular Spectroscopy (EUCMOS 2012), 26-31 August 2012, Cluj-Napoca, Romania.

[14] **S. Krehula**, Lj. Kratofil Krehula, S. Musić: *Synthesis and microstructural properties of α-$Fe_{1-x}Ga_xOOH$ solid solutions* (poster presentation), International Conference on the Applications of the Mössbauer effect (ICAME 2013), 1-6 September 2013, Opatija, Croatia.

[15] **S. Krehula**, M. Ristić, S. Musić: *Synthesis and microstructural properties of uniform α-GaOOH, α-Ga_2O_3 and β-Ga_2O_3 particles of different shapes* (poster presentation), NANOCON 2013, 16-18 October 2013, Brno, Czech Republic.

[16] **S. Krehula**, M. Ristić, S. Kubuki, Y. Iida, M. Fabián, S. Musić: *Synthesis and microstructural properties of mixed iron-gallium oxide nanoparticles* (poster presentation), NANOCON 2014, 5-7 November 2014, Brno, Czech Republic.

[17] **S. Krehula**: *Synthesis and Microstructural Properties of Mixed Iron-Gallium Oxides* (poster presentation), Mediterranean Conference on the Applications of the Mössbauer effect (MECAME 2015), Zadar, Croatia, 7-10 June 2015.

[18] **S. Krehula**, M. Ristić, S. Kubuki, S. Musić: *Preparation and properties of indium-doped goethite* (poster presentation), International Conference on the Applications of the Mössbauer effect (ICAME 2015), 13-18 September 2015, Hamburg, Germany.

PARTICIPATION ON SCIETIFIC CONFERENCES

[19] **S. Krehula**, M. Ristić, M. Reissner, C. Frandsen, S. Musić, *^{57}Fe Mössbauer spectroscopy analysis of Fe-bearing phases in the manufacture of TiO_2 pigment* (poster presentation), 33rd European Congress on Molecular Spectroscopy (EUCMOS 2016), 30 July – 4 August 2016, Szeged, Hungary.

[20] **S. Krehula**, M. Ristić, C. Wu, X. Li, L. Jiang, J. Wang, G. Sun, T. Zhang, M. Perović, M. Bošković, B. Antić, B. Kobzi, S. Kubuki and S. Musić, *Microstructural properties and OER activity of hydrothermally prepared Ni-Fe (oxy)hydroxides* (oral presentation), 3rd Mediterranean Conference on the Applications of the Mössbauer Effect (MECAME 2017), Jerusalem, Israel, 5–7 June 2017.

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