

Curriculum vitae

Dr. sc. Srećko I. Kirin

Division of Materials Chemistry, Ruđer Bošković Institute (RBI), Bijenička c. 54, HR-10000 Zagreb, Croatia

Web: www.irb.hr/eng/People/Srecko-Kirin, www.researchgate.net/profile/Srecko_Kirin

Bibliography: <http://bib.irb.hr/lista-radova?autor=192540&lang=EN>, www.researcherid.com/rid/B-6488-2012

Education

- 03.1995 – 05.1998 Doctor of Science (Dr. sc.) in Chemistry, University of Zagreb, Croatia
01.1992 – 12.1994 Master of Science (M. sc.) in Organic chemistry, University of Zagreb, Croatia
10.1987 – 12.1991 Diploma (B. sc.) in Chemistry, University of Zagreb, Croatia

Work experience

- 03.2017 – today **Senior Research Associate**, Bioinorganic chemistry and catalysis, RBI, Zagreb
03.2016 – today **Head**, Laboratory for solid state and complex compounds chemistry, RBI, Zagreb
09.2008 – 03.2017 **Research Associate**, Bioinorganic chemistry and catalysis, RBI, Zagreb
02.2008 – 09.2008 **Senior Assistant**, Magnetic materials, RBI, Zagreb
04.2006 – 12.2007 **Postdoctoral Assistant**, Bioinorganic materials, Pennsylvania State University, USA
09.2001 – 03.2006 **Postdoctoral Assistant**, Bioinorganic chemistry, University Heidelberg, Germany
04.1995 – 09.2001 **Senior Assistant** (until 08.1998 **Assistant**), Organometallic chemistry, RBI, Zagreb
04.1993 – 03.1995 **Junior Assistant**, Homogeneous catalysis, RBI, Zagreb
01.1992 – 03.1993 **Researcher**, Pharmaceutical industry, Research institute PLIVA, Zagreb

Scientific projects

Active projects (principle investigator).

- 11.2016 – 10.2020 **Minimal artificial enzymes**, Croatian Science Foundation (CSF), DOK-2015-10-2072
Career development program (doctoral scholarship to S. Opačak), 65.000 €
05.2016 – today **Synthesis of pharmaceuticals**, PLIVA pharmaceutical company
06.2015 – 05.2019 **Minimal artificial enzymes**, Croatian Science Foundation (CSF), IP-2014-09-1461
Research project program, 103.500 €
11.2014 – 11.2018 **From molecules to crystals - how do organic molecules form crystals? (Crystallize)**
COST Action CM1402, Management Committee member (Croatian representative)

Completed projects (principle investigator).

- 11.2014 – 10.2015 **Bioinspired asymmetric catalysis**, NewFelPro scholarship 38/14, 24.000 €
Marie Curie FP7-People-2011-Cofund; postdoc: M. Kumar, mentor: S. Kirin
01.2014 – 06.2016 **Metalloocene peptides as probes for Alzheimer disease drug screening**
Croatian-Chinese bilateral grant program; PI's: S. Kirin and Y.-N. Liu (Changsha)
01.2014 – 12.2015 **Catalytic and biological properties of metal complexes with nitrogen ligands**
Croatian-Slovenian bilateral grant program; PI's: S. Kirin and I. Turel (Ljubljana)
05.2012 – 04.2016 **Functional metal complexes that bind to biomolecules**
COST Action CM1105; Management Committee member (Croatian representative)
01.2010 – 12.2011 **Synthesis and characterization of multi-metallic bioconjugates**, Croatian-German
bilateral grant program (MZOŠ - DAAD), PI's: S. Kirin and N. Metzler-Nolte (Bochum)
01.2010 – 10.2011 **Metallated bioconjugates for applications in biological and material sciences**
Homing grant program (02.04/23), Croatian Science Foundation (CSF), 100.000 €
02.2010 – 01.2011 **Organometallic and inorganic bioconjugates as potential enantioselective catalysis**
Homeward grant program (36/08), Unity through knowledge fund (UKF), 260.000 €
1998 – 2001 **New polycyclic organometallic compounds with rigid structure**
Young scientists program (108N409), Ministry of Science and Technology, 2.400 €

Active collaborations (project team member).

- 2017 – 2021** **Quantum-chemical design, synthesis and biological properties of organometallic nucleobase derivatives**, Research project program, PI: V. Vrčec (FPB, Uni. Zagreb)
- 2016 – 2017** **NMR Simulations of oxalamide gels**, Croatian-German bilateral grant program (MZOŠ - DAAD), PI's: L. Frkanec (RBI) and B. Luy (Karlsruhe)

Completed projects (project team member).

- 2015 – 2016** **Aromatic pseudo-peptides as model compounds of artificial secondary structures**, Rapid-Access program, Argonne National Laboratory (APS), PI: B. Perić
- 2015 – 2016** **Metallated bioconjugates as supramolecular metallochelators**, Croatian Academy of Sciences and Arts Foundation, Development of science and arts program, PI: Z. Kokan
- 2015 – 2016** **Impact of surface defects in yttria-stabilized zirconia on catalytic CO oxidation**, Croatian-French bilateral grant program, PI's: G. Štefanić (RBI) and H. Kaper (Saint-Gobain)
- 2008 – 2013** **Multi-metallic systems: synthesis and properties**, Ministry of science and Sports (MZOŠ), Z-projects program 098-0982904-2946, PI: P. Planinić, since 12.2012: B. Perić
- 2006 – 2007** **Inorganic DNA**, David and Lucile Packard Foundation, USA; PI: M. E. Williams
- 2006 – 2006** **Biological function of organometallic compounds**, Deutsche Forschungsgemeinschaft (FOR 630), PI: N. Metzler-Nolte
- 2004 – 2005** **Structural and functional models for {Ni-Fe}-hydrogenase**, Deutsche Forschungsgemeinschaft (SFB 623-C4), PI: N. Metzler-Nolte
- 2001 – 2003** **Development of designer-meganuclease - mediated homologous recombination**, Volkswagenstiftung (I/77-097), PI's: N. Metzler-Nolte and C. Klein
- 2001 – 2001** **E-School**, Ministry of Science and Technology, PI: K. Pisk
- 1998 – 2000** **E-School of young scientists**, Croatian natural sciences society; PI: K. Pisk
- 1997 – 2001** **Electronic structure of organic and organosilicon compounds**, Ministry of Science and Technology (00980801), PI: M. Eckert-Maksić
- 1995 – 1997** **Fused 7-oxanorbornenes as building blocks of novel macropolycyclic molecules**, Deutsches Zentrum für Luft- & Raumfahrt, PI's: M. Eckert-Maksić and P. Rademacher
- 1995 – 1996** **Structure and reactivity of organic molecules**, Ministry of Science and Technology (1-07-193); PI: M. Eckert-Maksić
- 1994 – 1994** **Biocatalysis and structure determination of substrate and substrate-lipase complexes**, Forschungszentrum Jülich, PI's: V. Šunjić and H. Duddeck
- 1993 – 1995** **Structure and application of homogeneous stereoselective catalysts**, Ministry of Science and Technology (1-07-257), PI: V. Šunjić
- 1992 – 1993** **Synthesis of generics**, PLIVA pharmaceutical industry, PI: N. Kujundžić

Mentorship

Current group members.

- 04.2017 – today** **Jeremy Le Pennec**, ERASMUS student (ENSICAEN, France)
- 12.2016 – today** **Natalija Pantalon Juraj**, doctoral student
- 10.2016 – today** **Saša Opačak**, doctoral student
- 05.2016 – today** **Ivka Štefanić**, chemical technician (part time)
- 09.2014 – today** **Dr. sc. Zoran Kokan**, postdoctoral student
- 01.2013 – today** **Dr. sc. Berislav Perić**, senior research associate
- 09.2010 – today** **Ernest Sanders**, chemical technician

Former group members.

- 11.2014 – 12.2015** **Dr. Manish Kumar**, postdoctoral student (Marie Curie FP7)
- 10.2014 – 10.2014** **Timon Rosman**, high school student, Elisabeth-von-Thadden-Schule, Heidelberg, Ger.
- 10.2013 – 02.2015** **Tamara Miljuš**, undergraduate student (University of Zagreb)
- 09.2013 – 02.2014** **Kristina Kučanda**, undergraduate student (University of Zagreb)
- 09.2011 – 05.2013** **Mladen Borovina**, undergraduate student (Uni. Zagreb), received Rector's award
- 04.2011 – 04.2011** **Lukasz Raszaja**, visiting doctoral student, (Ruhr Uni Bochum, Germany)

- 01.2011 – 08.2014 **Zoran Kokan**, doctoral student, defended doctoral thesis 06.2014
 07.2010 – 01.2011 **Đani Škalamera**, professional associate (funded by UKF)
 03.2010 – 01.2011 **Dr. sc. Goran Kovačević**, postdoctoral student (funded by UKF)
 02.2010 – 07.2010 **Ivana Borilović**, undergraduate student (University of Zagreb)
 02.2009 – 12.2010 **Zoran Kokan**, professional associate (funded by UKF)

Immediate mentorship.

- 2005 – 2005 **David Köster**, undergraduate student (Uni Heidelberg, Germany)
 2005 – 2005 **Daniel Siebler**, undergraduate student (Uni Heidelberg, Germany)
 2004 – 2004 **Radoslav Enchev**, undergraduate student (Uni Heidelberg, Germany)
 2004 – 2004 **Dirk Wissenbach**, undergraduate student (Uni Heidelberg, Germany)
 2004 – 2004 **Elham Mehmansefat**, high school student (BOGy), (Uni Heidelberg, Germany)
 2003 – 2004 **Moritz Menacher**, undergraduate student (Uni Heidelberg, Germany)
 2003 – 2003 **Pierre Dübon**, undergraduate student (Uni Heidelberg, Germany)
 2002 – 2002 **Ralf Mulfinger**, undergraduate student (Uni Heidelberg, Germany)
 2002 – 2004 **Marina Sibereis**, tech assistant trainee (Uni Heidelberg, Germany)
 2001 – 2005 **Tim Kersebohm**, defended **Doctoral thesis 2005**. (Uni Heidelberg, Germany)
 2001 – 2002 **Nancy Sauer**, tech assistant trainee (Uni Heidelberg, Germany)
 2001 – 2002 **Silvia Hrubanova**, nee **Klčova**, defended **Diploma thesis 2002**. (Uni Prague, Czech Rep.)
 2001 – 2001 **Vesna Cmrečki**, undergraduate student (Uni Zagreb)
 2001 – 2001 **Filip Kovačić**, undergraduate student (Uni Zagreb)
 2000 – 2001 **Jelka Pleadin**, professional associate (RBI)
 1999 – 2000 **Andra Klarić**, defended **Diploma thesis 2000**. (Uni Zagreb)
 1998 – 2001 **Ante Pupačić**, chemical technician (RBI, part time)
 1997 – 1998 **Ranko Klaneček**, defended **Diploma thesis 1998**. (Uni Zagreb)
 1995 – 1996 **Andrea Balen**, defended **Diploma thesis 1996**. (Uni Zagreb)
 1995 – 1996 **Tatjana Leko**, defended **Diploma thesis 1996**. (Uni Zagreb)

Bibliographic data

47 publications (1 book chapter, 35 peer-reviewed journal paper, 2 patents, 9 professional paper)
 110 presentations (28 public lectures; at meetings 3 invited, 16 oral i 63 posters); h-index = 14
 Citations: >850 (WoS or Scopus) + >150 (books & patents); impact factor, total / average **IF₂₀₁₅** = 152.5 / 4.4

Teaching activity

- 2008 – 2012 **Inorganic Chemistry** (Lab), Faculty of Science, University of Zagreb
 majors in chemistry (4 × 60 hrs)
 2003 – 2005 **Chemistry of Biopolymers** (Seminar), University of Heidelberg, Germany
 Introduction of the course for the new molecular biotechnology program (2 × 8 hrs)
 2003 – 2005 **Chemistry of Biopolymers** (Lab), University of Heidelberg, Germany
 Introduction of the course for the new molecular biotechnology program (2 × 50 hrs)
 2002 – 2005 **Inorganic Chemistry** (Seminar), University of Heidelberg, Germany
 Introduction of the course for the new molecular biotechnology program (3 × 6 hrs)
 2002 – 2005 **Inorganic Chemistry** (Lab), University of Heidelberg, Germany
 Introduction of the course for the new molecular biotechnology program (3 × 70 hrs)
 2001 – 2003 **General Chemistry** (Seminar), University of Heidelberg, Germany
 Introduction of the course for the new molecular biotechnology program (2 × 14 hrs)
 2001 – 2002 **Organic Chemistry** (Lab), University of Heidelberg, Germany
 Introduction of the course for the new molecular biotechnology program (70 hrs)
 2001 – 2005 **Introduction to Experimental Chemistry (Lab)**, University of Heidelberg, Germany
 Introduction of the course for the new molecular biotechnology program (4 × 10 hrs)
 2001 – 2005 **Qualitative Inorganic Analysis** (Seminar), University of Heidelberg, Germany
 majors in pharmacy (3 × 12 hrs)

- 2001 – 2005** **Qualitative Inorganic Analysis** (Lab), University of Heidelberg, Germany
majors in pharmacy (2 × 208 hrs, 2 × 168 hrs)
- 1990 – 1991** **Organic Chemistry** (Lab), Faculty of Science, University of Zagreb
majors in chemistry (1 × 60 hours) or biology (2 × 30 hrs)

Scientific visits to foreign institutions

- 2016** **Karlsruhe Institute of Technology**, Germany; with Professor Burkhard Luy (1 week)
- 2015** **Saint-Gobain** (CNRS), Courthezon, France; with Dr. Helena Kaper (1 week)
- 2014** **Central South University Changsha**, China; with Professor You-Nian Liu (1 week)
- 2014** **University of Ljubljana**, Slovenia; with Professor Iztok Turel (1 day)
- 2011** **Ruhr University Bochum, Germany**; with Professor Nils Metzler-Nolte (6 weeks)
- 2010** **University of Western Ontario**, Canada; with Professor Heinz-Bernhard Kraatz (10 days)
- 2003** **Medical School Hannover**, Germany; with Professor Christoph Klein (1 week)
- 2002** **Universitätsklinikum Heidelberg**, Germany; with Professor Walter Mier (1 month)
- 1997** **University GH Essen**, Germany, with Professor Paul Rademacher (3 months, **DAAD** scholarship)
- 1996** **University GH Essen**, Germany; with Professor Paul Rademacher, (1 month)
- 1994** **University Hannover**, Germany; with Professor Helmut Duddeck, (1 month)
- 1991** **Karl-Franzens University Graz**, Austria; with Professor Thomas Kappe, (1 month, **ÖAD** scholarship)

Reviewing journal papers (> 50 manuscripts)

Chemistry - A European Journal, Dalton Transactions, ChemPhysChem, RSC Advances, European Journal of Inorganic Chemistry, Journal of Organometallic Chemistry, Current Organic Chemistry, Bioorganic Chemistry, Journal of Molecular Structure, Zeitschrift für anorganische und allgemeine Chemie, Fuel Processing Technology, Solid State Communications, Croatica Chemica Acta, Kemija u Industriji

Awards and recognition

- 2014** **Competitiveness Award**, Ruđer Bošković Institute
- 2013** **Competitiveness Award**, Ruđer Bošković Institute
- 2010** **Director's Award for exceptional scientific success**, Ruđer Bošković Institute
- 2000** **Swiss National Science Foundation Scholarship**, for 35th Conference on Stereochemistry, Switzerland
- 1999** **Eugene Corey Memorial Fund Scholarship**, for 12th Int. Symp. on Organosilicon Chemistry, Sendai, Japan
- 1997** **Scholarship**, for International School on Organometallic Chemistry, Camerino, Italy
- 1997** **DAAD graduate research scholarship**, University GH Essen, Germany; 3 months
- 1997** **GDCh Scholarship**, for 9th IUPAC Symposium on Organometallic Chemistry (OMCOS), Göttingen, Germany
- 1996** **Scholarship**, for 5th Postgraduate Winter School on Organic Reactivity, Bressanone, Italy
- 1993** **Diploma**, Croatian Chamber of Economy, for "special accomplishments in promoting Croatian economy"
- 1993** **Golden medal**, 42nd World Exhibition of Invention EUREKA, Brussels, Belgium
- 1993** **Grand prix**, 2nd Croatian Exhibition of Invention, Zagreb, Croatia
- 1991** **ÖAD undergraduate research scholarship**, University Graz, Austria; 1 month
- 1988-1991** **PLIVA undergraduate Scholarship**, Zagreb, Croatia