

**DR.  
BISERKA KOJIĆ-  
PRODIĆ,  
DISTINGUISHED  
SCIENTIST  
CURRICULUM VITAE**  
update 24.04.2018.



**PERSONAL INFORMATION**

Name, Date of Birth, Nationality  
Address

**BISERKA KOJIĆ-PRODIĆ**, 29 August 1938, Croatian

E-mail, telephone  
website

kojic@irb.hr, +385 91 7639510 (mobile), +385 1 4680126 (office)

**WORK EXPERIENCE**

- Dates (from – to)
- Name and address of employer
- Position
  
- Dates (from – to)
- Name and address of employer
- Position held
  
- Dates (from – to)
- Name and address of employer
- Position held
  
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- Position held
  
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- Name and address of employer
- Position held
  
- Dates (from – to)
- Name and address of employer
- Position held
  
- Dates (from – to)
- Name and address of employer
- Position held

2004 – Distinguished Scientist-Emerita  
Ruđer Bošković Institute, Bijenička 54, 10000 Zagreb, Croatia  
Distinguished scientist - emerita

1997 – 2004  
Ruđer Bošković Institute, Bijenička 54, 10000 Zagreb, Croatia  
Senior Scientist, Head of Laboratory of Chemical and Biological Crystallography

1981 – 1997  
Ruđer Bošković Institute, Bijenička 54, 10000 Zagreb, Croatia  
Senior scientist

1976 – 1981  
Ruđer Bošković Institute, Bijenička 54, 10000 Zagreb, Croatia  
Senior Research Associate

1968 – 1976  
Ruđer Bošković Institute, Bijenička 54, 10000 Zagreb, Croatia  
Research Associate

1961-1968  
Ruđer Bošković Institute, Bijenička 54, 10000 Zagreb, Croatia  
Assistant

1960 – 1960  
Ruđer Bošković Institute, Bijenička 54, 10000 Zagreb, Croatia  
Technician

**EDUCATION AND TRAINING**

1968 PhD in Chemistry (University of Zagreb, Croatia)  
1963 MSc in Chemistry (University of Zagreb, Croatia)  
1961 BSc in Chemistry (University of Zagreb, Croatia)

1988 Synchrotron Station DESY Hamburg  
1983/84 University of Utrecht  
1976/77 Medical Foundation of Buffalo, Texas Christian University Fort Worth  
1972 University of Uppsala

**LANGUAGES** **Croatian** (mother tongue), **English** (very fluent), **Russian** (good), **German** (good), **Italian** (good)

#### **AWARDS AND QUALIFICATIONS**

2011 Rudjer Bošković Institute Award  
2010 National Science Award for Life Achievement (Croatia)  
2005 Title of Distinguished Scientist  
2003 Member of European Academy of Sciences (Brussels)  
1995 AND 2000 DAAD Visiting Scientist Award  
1997 Croatia Academy of Sciences and Arts Award  
1971 National Science Award (Croatia)

#### **(INTER)NATIONAL SOCIETIES**

2003-present European Academy of Sciences  
Croatian Society for Biochemistry and Molecular Biology  
Croatian Crystallographic Association and Croatian Association of Crystallographers

#### **RESEARCH ACTIVITY**

Principal investigator in 2 Research projects funded by the Croatian Ministry of Science; principal investigator in a Research project funded by Volkswagen-Stiftung (1997-2000), a Research project funded by the EU (Utrecht, 1991-1994), a Research project funded by National Science Foundation of USA (Buffalo 1988-1992), and a long-time collaboration with PLIVA (Zagreb) pharmaceutical industry (1972-2001); principal investigator in 14 bilateral collaborations.

Number of invited lectures and several dozen oral presentations at international meetings.

Co-editor of *Acta Crystallographica* (2004-2014), member of Organizing Committees of National Crystallographic Meetings and series of workshops Hot Topics in Crystallography 2016, 2017, 2018, member of the International Commission for Chemical Crystallography of the International Union of Crystallography (1989-1998).

Referee for the major Scientific Journals in Chemistry; referee for Ministry of Science (Croatia) and the Croatian Science Foundation; member and deputy president of the Evaluation Committee for National Science Awards (2004-2009); referee for Human Frontier Science Program.

#### **PUBLICATION RECORDS**

orcid.org/0000-0001-6292-9825  
Scopus Author ID: 7003725053  
ResearcherID: A-7562-2012

More than 286 articles in peer-reviewed international scientific journals. In database <http://bib.irb.hr/lista-radova?autor=021602>

#### **TEACHING ACTIVITY**

before 2014

Selected topics on X-ray crystallography, University of Zagreb, Ph.D. study of Chemistry  
Diffraction methods in crystallography, University of Zagreb, Ph.D. study of Chemistry  
Instrumental analytical methods, University of Zagreb, Academy of Art – Department of Conservation and Restoration

#### **SUPERVISION OF JUNIOR RESEARCHERS**

Mentor to 12 PhD students, 8 MSc students and 9 BSc students.

## Some of Scientific Achievements

At the beginning of my research I started from scratch: equipment facilities were poor and the group was small. Therefore, a lot of my time and effort were spent on providing money and manpower to realise reasonable facilities for research including experimental base and computer facilities (implementation of crystallographic software and data bases). In the period 1991-1994 I was the coordinator and principal investigator of the project financed by European Union; the research was related to plant glycosides. More intensive research on plant growth hormone auxin in collaboration with dr. Volker Magnus followed. The research was acknowledged by United States Department of Agriculture in 1993.

My main field has been chemical crystallography, however, spectroscopy methods and molecular modelling, particularly molecular dynamics, have been exploited in my research. Such an interdisciplinary approach I used in structure/activity correlation of biological and pharmaceutically active molecules (29 years of collaboration with pharmaceutical industry).

I worked on the application of crystallography in history of art and art restoration, in industry, and medical diagnostics.

The nature and the role of hydrogen bond has been in the focus of my scientific interest; last fifteen years I have been interested in proton and charge transfer and other noncovalent interactions, such as  $\pi$ -interactions of non-aromatic systems. We have directed our research more to find structure-property correlation and to use the gained knowledge in design of functional materials.

Proton and charged transfers in enzyme catalysis are also in my area of the current research interest.

My scientific record includes about 285 papers published in international journals.

### Other skills and competences

President of Collegium Emeritorum October 2011-2015

Distinguished Scientist of Rudjer Boskovic Institute 2005-

Member of the International Commission for Chemical Crystallography of the International Union of Crystallography, 1989-98

Member of European Academy of Sciences, 2003-

Co-Editor Acta Crystallographica 2004-2014

Head of the National Affiliated Centre of The Cambridge Crystallographic Data Centre, responsible for implementation and dissemination of crystallographic data bases in Croatia, Slovenia, and Macedonia, 1985-2007

The referee for Ministry of Science and Technology, Croatia

The referee for international scientific journals

The member of the Evaluation Committee for National Science Awards, 2004-2009.

The referee for Human Frontier Science Program

Member of Organizing Committees of National Crystallographic Meetings

Vice- president of the Election Board - Chemistry, Rudjer Bošković Institute, 1980-1983

Vice-president of the Scientific Board of Rudjer Bošković Institute, 1981-1983

President of the Scientific Board of Rudjer Bošković Institute 1985-1987

Vice-president of the Scientific Board of the University of Zagreb, 1986-1988