

# Dr Jelena Radjenovic, Dipl.-Ing.

## Curriculum vitae



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### PERSONAL INFORMATION

Jelena Radjenovic

Born July 23<sup>rd</sup> 1980 in Belgrade, Serbia

Nationality: Spanish, Serbian, Australian.

<https://www.icrea.cat/Web/ScientificStaff/jelena-radjenovic-273979>

### SUMMARY

I graduated in 2004 in Biochemical Engineering at the University of Belgrade, Serbia. I received a PhD from the University of Barcelona in July 2009 with “cum laude” distinction. Shortly after, I moved to the University of Queensland (UQ), Australia, where electrochemical water treatment systems became my primary research interest. From 2009-2014 I worked at the Advanced Water management Centre (AWMC), UQ, where I established a new research line in Next Generation Technologies, which is still existing. In 2014, I relocated to the Catalan Institute for Water Research (ICRA), Spain, with a Marie-Curie fellowship. I was awarded with a Ramón and Cajal fellowship in 2015. In 2017, I obtained an ICREA Research Professor position. I was awarded the Catalan National Research Award for Young Talent for 2021.

My research interests are at the interface of electrochemistry, nanotechnology, water treatment and chemistry, focused on the development of nanostructured electrode materials to achieve energy-efficient removal of persistent pollutants from water. The long-term goal of my research is developing cost-effective, safe, chemical-free, and sustainable water treatment technologies that are efficient in eliminating persistent, toxic, and carcinogenic chemicals from our water cycle. This work is largely funded through the European Research Council (ERC) Starting Grant ELECTRON4WATER (2017-2023) and Proof of Concept Grant GRAPHEC (2023-2024). The recently developed and patented low-cost graphene sponge electrodes enable for the first time an efficient electrochemical treatment of complex and saline waste streams contaminated by per- and polyfluoroalkyl substances (PFAS), which have been a cause of global concern for the past 20 years and are resistant to all advanced water treatment options. Moreover, with the recently awarded ERC Consolidator Grant ELECTROmonoLITH (2024-2029) the work of my group is expanded towards the development of electrochemical systems for the recovery of valuable resources (e.g., critical raw materials) from the industrial waste streams. In my quest for interdisciplinary research in material science, electrochemistry, water treatment engineering and high-resolution mass spectrometry of organic contaminants, I have established collaborations in US, Australia, Germany, Netherlands, and other countries.

## MAIN ACHIEVEMENTS

- Awarded with **European Research Council (ERC) Consolidator Grant**, 2023. ELECTROmonoLITH. 2 million €.
- Awarded with **ERC Proof of Concept Grant**, 2023. GRAPHEC. 150,000 €.
- Awarded with the **FCRi Catalan National Research Award for Young Talent, 2021**. Catalonia receives >40% of ERC grants in Spain.
- Awarded with **ERC Starting Grant**, 2016. ELECTRON4WATER, 1.5 million €.
- Awarded with **three prestigious and highly competitive post-doctoral fellowships**:
  - Early Career Smart Future Fellowship, 2012. Queensland Government Australia.
  - Marie Curie International Incoming Fellowship, 2013. European Commission (EC), Spain.
  - Ramón y Cajal Fellowship, 2015. Spanish Government, Spain.
- **70 scientific publications** including 63 peer-reviewed ISI publications and 7 book chapters; in total >6,000 citations (Scopus database, 10/2023),
- **H-index = 36**.
- **Leader of the AIII.3 Next generation and nature-based technologies research line** at ICRA.
- **Thirteen PhD thesis supervised** (ten as principal advisor).
- **>80 participations at international conferences, seminars, workshops**, >20 invited and keynote lectures; scientific committee of multiple conferences.

## CURRENT POSITION

01/2018-present: ICREA Research Professor at ICRA (Catalan Institute for Water Research, [www.icra.cat](http://www.icra.cat)), Spain.

ICREA (Catalan Institution for Research and Advanced Studies, [www.icrea.cat](http://www.icrea.cat)) is a foundation supported by the Catalan Government for competitive hiring of extraordinary scientists and academics.

## PREVIOUS POSITIONS

05/2022-08/2022: Visiting scholar at the Berkeley Water Centre, University of California (UC), Berkeley, US.

04/2016-12/2017: Ramon y Cajal Research Fellow, ICRA, Spain.

11/2014-04/2016: Marie Curie Research Fellow, ICRA, Spain.

01/2013-09/2014: Research Fellow and leader of the Environmental Electrochemistry group, Australian Centre for Water and Environmental Biotechnology (ACWEB), The University of Queensland (UQ), Australia.

09/2009-12/2012: Postdoctoral Research Fellow, ACWEB-UQ, Australia.

01/2005-07/2009: PhD student, Institute of Environmental Assessment and Water Research (IDAEA), CSIC, Spain.

## EDUCATION

- 07/2009: **PhD in Environmental Chemistry**, Thesis title: "Fate and behaviour of pharmaceutical residues in wastewater and drinking water treatment", *cum laude distinction*.  
Institute of Environmental Assessment and Water Research (IDAEA), Spanish National Research Council (CSIC), Spain.  
Supervisors: Damia Barceló Culleres, Mira Petrovic.
- 09/2004: **Dipl.-Ing. in Biochemical Engineering and Biotechnology, valedictorian student in 2004 (GPA 9.75/10)**  
Faculty of Technology and Metallurgy, The University of Belgrade, Serbia.

## FELLOWSHIPS AND AWARDS

- ERC Consolidator Grant ELECTROmonoLITH, 11/2023 (awarded).
- ERC Proof of Concept Grant GRAPHEC, 02/2023.
- Catalan National Research Award for Young Talent, 2021.
- ICREA Research Professorship, Catalan Government. 01/2018.
- ERC Starting Grant ELECTRON4WATER, 05/2017.
- Ramon y Cajal Fellowship, Spanish Government (10% success rate), 06/2015.
- Marie Curie International Incoming Fellowship, EC (14% success rate), 02/2014.
- Early Career Smart Future Fellowship, Queensland Government (6% success rate), 02/2012.
- JAE pre-doctoral fellowship, Spanish Government. 01/2005.
- Multiple awards and competitive scholarships during the undergraduate studies as one of the top students in the country; Honour of the best student graduated in the year 2004, Faculty of Technology and Metallurgy, Belgrade University; Reward of the Government of Republic of Serbia, awarded to 500 best students of Belgrade University. 2001; Scholarship from the Ministry of Science, Research and Technology, Government of Republic of Serbia. 09/2002-09/2004; Scholarship for Excellent Academic Performance of Faculty of Technology and Metallurgy, Belgrade University. 09/2000-09/2003.

## PATENTS

- Patent *Method to prepare a graphene coated sponge-based electrode, electrode obtained thereof and use of the electrode for water treatment*. J. Radjenovic, L Baptista-Pires, G.F. Norra, N. Duinslaeger, WO2022069621A1.
- Patent *Method to prepare an electrode with a manganese oxide coated titanium oxide nanotube array interlayer, electrode obtained thereof, and uses of the electrode*. N. Sergienko, J. Radjenovic, 21-0584-EP. *Published but not pursued further*.

## CAREER BREAKS

08/2013-02/2014, and 11/2016-03/2017 (maternity leaves).