

# Electrocrystallization of Metals in Compact and Dispersed Form

Ural Federal University named after the first President of Russia B.N. Yeltsin

Degree or qualification is awarded: **Candidate of Science**

Language of study: **Russian, English**

Mode of study: **full-time**

Duration: **4 years**

Availability of free education: **no**

Price: **For non-CIS countries: 231,700 RUB (Year 1). Discounts apply. Please consult the curator for more details**

Programme webpage at the university website:

<https://urfu.ru/en/international/programs-and-courses/doctoral-programs-in-english/>

Programme curator: **Anna Oykher**

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## **Research supervisor:**

Prof. Tatiana N. Ostanina, Doctor of Science

View profile at [UrFU Research Portal](#)

## **Research goal:**

The research is aimed at studying the structure and regularities in formation of dendritic and spongy metal deposits with special properties for the creation of a new electrode materials and technologies (3D prototype).

## **Aspects studied:**

- Research on the influence of electrolysis conditions on the structural and morphological characteristics of the dispersed deposits
- Study of regularities of anode processes on active metal

## **Research highlights:**

- Prediction of dynamics of the electrodeposition and properties of dendritic deposits of metals depending on the conditions and modes of electrolysis.
- Analysis of the mechanism of anodic dissolution of metals and zinc-rich composite coatings.

## **Career opportunities:**

Research activities in the field of electrochemical processes and corrosion protection.

## **Specializations within this programme**