ROSATOM

CDBMB

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COMPANY OF ROSATOM

STATE ATOMIC ENERGY CORPORATION «ROSATOM»

ALEKSANDRA L. SIROTKINA

Master of Science, Nuclear Power Engineering and Thermal Physics

3d Category Design Engineer of "Central Design Bureau of Machine Building" (ROSATOM)

Post-graduated student of "Peter the Great State Polytechnic University"

Education and achievements

Education

The main education:

2008..2012 – St.Petersburg State Polytechnical University, Bachelor of Science, Technical Physics

2012..2014 – Peter the Great State Polytechnic University, Master of Science, Nuclear Power Engineering and Thermal Physics

2014.. – Peter the Great State Polytechnic University, Post-graduated student, Nuclear Energy Units

Additional education:

2013..2015: «Rosatoms Corporative Academy», courses of effective presentation, leadership; School of fast reactors (Central Institute of Qualification Enhancement); course of TRIS (theory of invention problems solving)

2015.. – Peter the Great State Polytechnic University, additional qualification: translator in professional area

Main achievements

2012 – 3d level prize, Rosenergoatoms Contest “Youth nuclear scientists knowledge to NPP”

2013 – Winner of Rosatoms Contest “TeMP-2013” (as a head of CDBMB team)

2013 – Laureate of St.Petersburg State Polytechnical University Prize “The best student in investigation area”

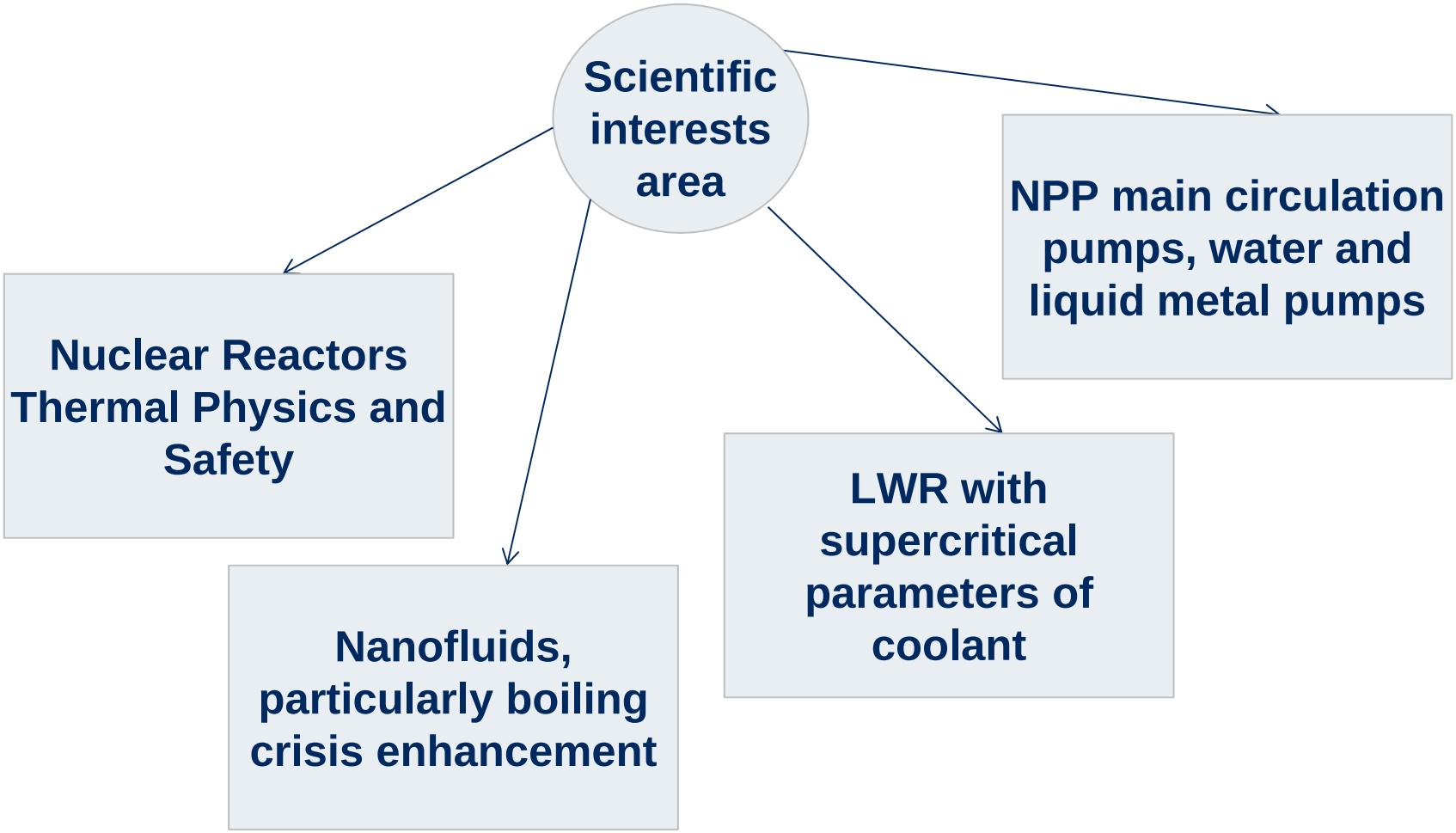
2014 – Laureate of St.Petersburg Government Grant Contest

2015 – Winner of Rosatoms Contest “TeMP-2015” (as an adviser of CDBMB team)

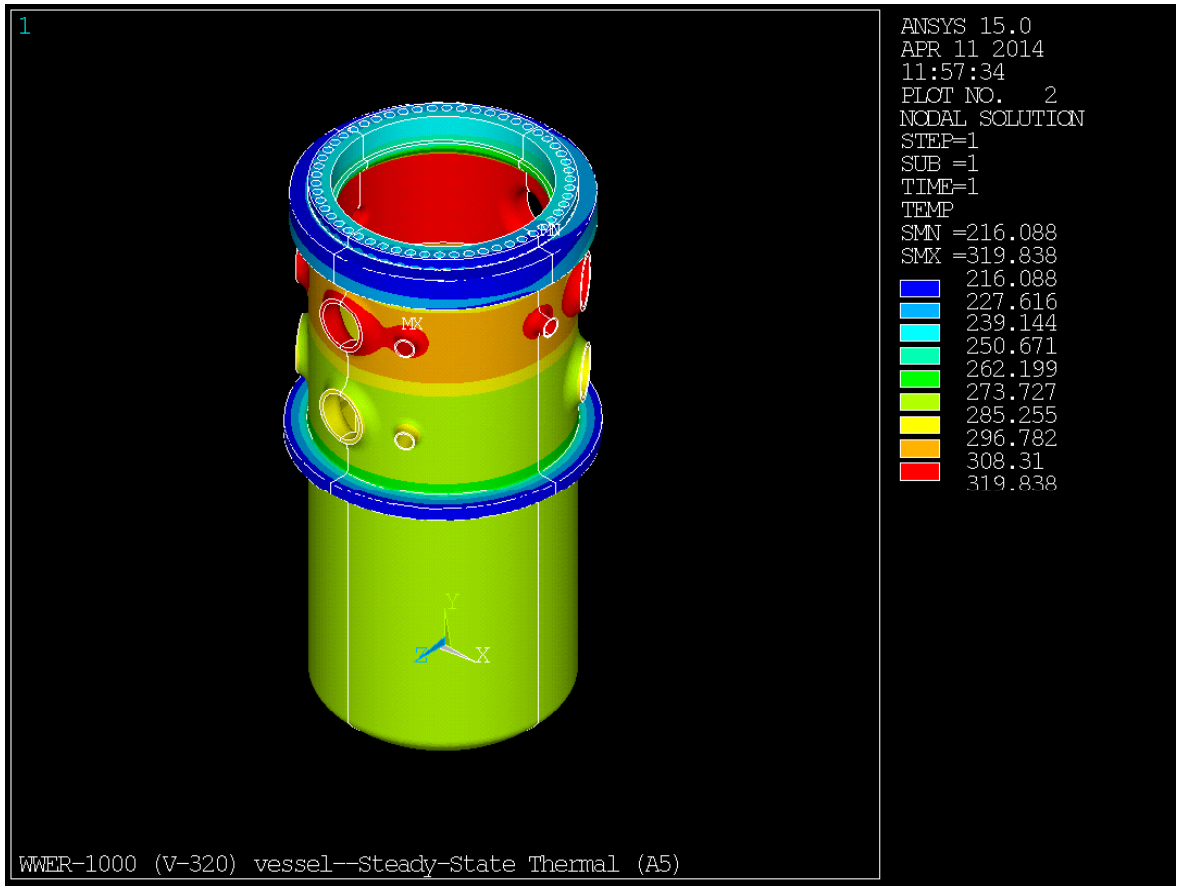
Since 2013: about 10 scientific publications

Laureate of Rosatom Scolarship (2013, 2014), Rosenergoatom Scolarship (2013), Russian Government Scolarship (2014).

Scientific interests

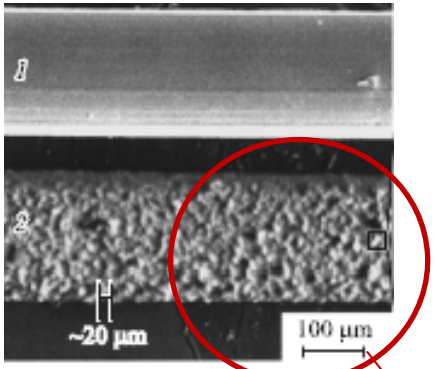


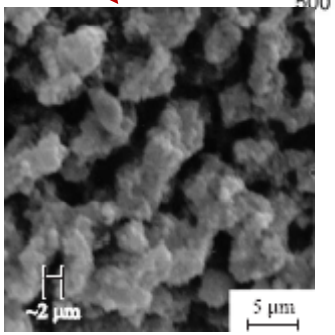
Nuclear Reactors Thermal Physics and Safety

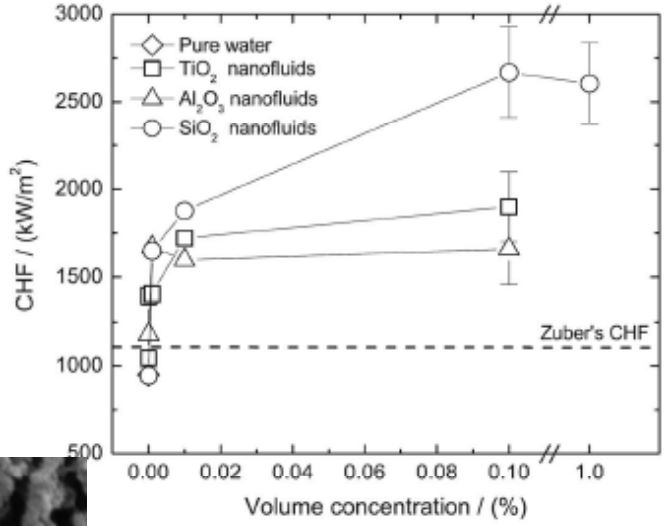


- Analysis of thermal fields during normal operation time and during accidents;
- Thermal stress analysis;
- Using of “ANSYS” CAE;
- Boiling crisis in different circumstances investigation;
- Calculation of safety limits

Nanofluids

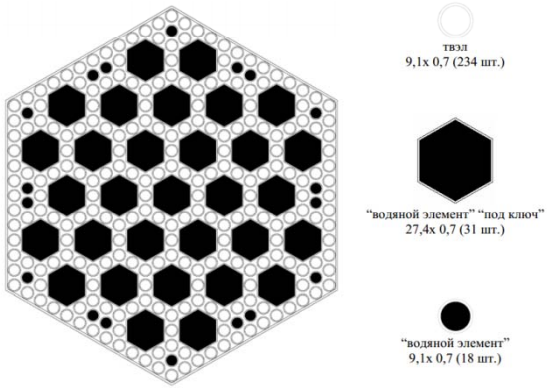


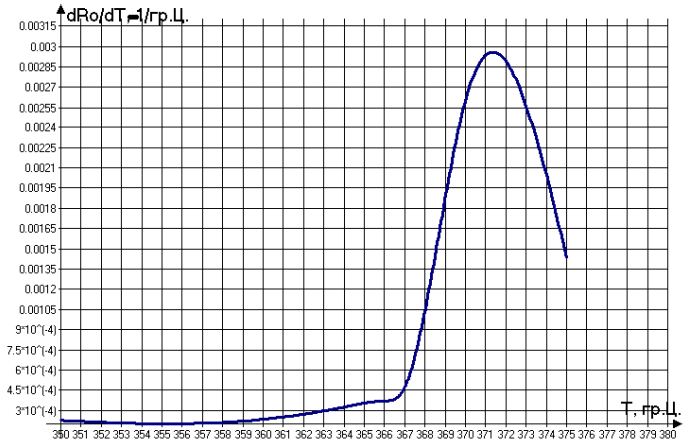


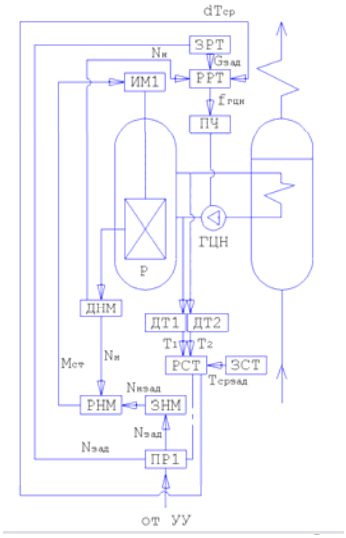


The main goal of my investigation is to find an empirical and theoretical correlations of Critical Heat Flux (CHF).

LWR with supercritical parameters of coolant







- Special physical features of SCWR;
- System of control;
- Transient calculations;
- Estimation of possibility of using such reactors with variable power level consumption

Contact information

Thank you for your attention!

Contacts:

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