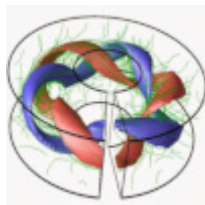


Session Program

20-22 Sept 2021



RMHD-2021

Applied magnetohydrodynamics

Perm, Russia Federation
Academician Korolev Street, 1

Monday 20 September

10:00

Applied magnetohydrodynamics: Session 1 - Applied magnetohydrodynamics

Session | **Location:** Perm, Russia Federation, Academician Korolev Street, 1

10:00–10:20

Injection of nanoparticles of boron nitride in liquid aluminum during its MHD-stirring

Speaker

Stanislav Khripchenko

10:20–10:40

Development of electromagnetic pump for the second loop of the MBIR reactor

Speaker

D Obukhov

10:40–11:00

Liquid metal level measurement

Speaker

Ruslan Khalilov

11:00–11:20

Electromagnetic stirring in continuous casting of steel

Speaker

S Gruzd

11:20

11:30

Applied magnetohydrodynamics

Session | **Location:** Perm, Russia Federation, Academician Korolev Street, 1

11:30–11:50

Magnetic flowmeter for fast sodium reactors

Speaker

I Velt

11:50–12:10

Electromagnetic flowmeter for liquid metals: calculation, design and calibration

Speaker

Alexander Pavlinov

12:10–12:30

Electromagnetic field in the flowmeter channel for liquid metals

Speaker

Yu Mikhailova

12:30–12:50

Temperature correlation method application to the problem of measuring the flow rate of liquid sodium

Speaker

Андрей Мамыкин

12:50–13:10

Elimination of magnetic flowmeters nonlinearity caused by the MHD-effect

13:10

Speaker
V Sudarikov

16:30

Applied magnetohydrodynamics: Session 7 - Applied magnetohydrodynamics

Session | **Location:** Perm, Russia Federation, Academician Korolev Street, 1

16:30–16:50

Vertical heat transfer in a cylindrical vessel with liquid metal under alternating exposure to traveling and rotating magnetic fields

Speaker
Stanislav Khripchenko

16:50–17:10

Impurity distribution in a rectangular cell under travelling magnetic field

Speaker
I Sokolov

17:10–17:30

Nonstationary instability of axisymmetric flow of a liquid in a rotating magnetic field

Speaker
A Zibold

17:30–17:50

The effect of magnetic field on waves in a centrifuged conducting viscous layer inside a rotating cylindrical container

Speaker
I Soldatov

18:10

Tuesday 21 September

10:00

Applied magnetohydrodynamics: Session 10 - Applied magnetohydrodynamics

Session | **Location:** Perm, Russia Federation, Academician Korolev Street, 1

10:00–10:20

Influence of MHD-channel geometry on pressure drop

Speaker

Vinialin Dolgikh

10:20–10:40

Electromagnetic forces acting in a representative volume of liquid metal with inclusions of various shapes

Speaker

Владимир Озерных

10:40–11:00

Modelling of liquid magnesium convection in a titanium reduction apparatus

Speaker

Тимофей Карасёв

11:00–11:20

Impact the inhomogeneity of electric conductivity on MHD processes

Speaker

R Okatev

11:20

Wednesday 22 September

10:00

Applied magnetohydrodynamics: Session 17 - Applied magnetohydrodynamics

Session | **Location:** Perm, Russia Federation, Academician Korolev Street, 1

10:00–10:20

Interaction of buoyancy and EM forced convection during horizontal directional solidification

Speaker

E Shvydkiy

10:20–10:40

Travelling magnetic field pumps for liquid metals: numerical and experimental studies

Speaker

Ruslan Khalilov

10:40–11:00

Numerical simulation of melting and stirring in induction furnace with graphite crucible

Speaker

D Brazhnik

11:00–11:20

Liquid metal flow generation in cylindrical cell by smart inductor

Speaker

Ilya Kolesnichenko

11:20

14:30

Applied magnetohydrodynamics: Session 21 - Applied magnetohydrodynamics

Session | **Location:** Perm, Russia Federation, Academician Korolev Street, 1

14:30–14:50

Inductive system for magnesium level detection in a titanium reduction reactor

Speaker

N Krauter

14:50–15:10

Electromagnetic measurements of non-ferrous metals conductivity

Speaker

Геннадий Лосев

15:10–15:30

Study of keeping a permanent magnet suspended in a pulsed magnetic field

Speaker

I Yachikov

15:30–15:50

Numerical simulation of heat and mass transfer in a metal melt and deformations in a dielectric film during induction melting

15:50

Speaker

I Nikulin