



# RMHD-2021

## Monday, 20 September 2021

### Applied magnetohydrodynamics: Session 1 - Applied magnetohydrodynamics (10:00 - 11:20)

time	[id] title	presenter
10:00	[2] Injection of nanoparticles of boron nitride in liquid aluminum during its MHD-stirring	KHRIPCHENKO, Stanislav
10:20	[3] Development of electromagnetic pump for the second loop of the MBIR reactor	OBUKHOV, D
10:40	[4] Liquid metal level measurement	KHALILOV, Ruslan
11:00	[5] Electromagnetic stirring in continuous casting of steel	GRUZD, S

### Applied magnetohydrodynamics (11:30 - 13:10)

time	[id] title	presenter
11:30	[15] Magnetic flowmeter for fast sodium reactors	VELT, I
11:50	[16] Electromagnetic flowmeter for liquid metals: calculation, design and calibration	PAVLINOV, Alexander
12:10	[17] Electromagnetic field in the flowmeter channel for liquid metals	МИХАЙЛОВА, Yu
12:30	[18] Temperature correlation method application to the problem of measuring the flow rate of liquid sodium	МАМЫКИН, Андрей
12:50	[19] Elimination of magnetic flowmeters nonlinearity caused by the MHD-effect	SUDARIKOV, V

### Applied magnetohydrodynamics: Session 7 - Applied magnetohydrodynamics (16:30 - 18:10)

time	[id] title	presenter
16:30	[30] Vertical heat transfer in a cylindrical vessel with liquid metal under alternating exposure to traveling and rotating magnetic fields	KHRIPCHENKO, Stanislav
16:50	[31] Impurity distribution in a rectangular cell under travelling magnetic field	SOKOLOV, I
17:10	[32] Nonstationary instability of axisymmetric flow of a liquid in a rotating magnetic field	ZIBOLD, A
17:30	[33] The effect of magnetic field on waves in a centrifuged conducting viscous layer inside a rotating cylindrical container	SOLDATOV, I

# Tuesday, 21 September 2021

## Applied magnetohydrodynamics: Session 10 - Applied magnetohydrodynamics (10:00 - 11:20)

time	[id] title	presenter
10:00	[54] Influence of MHD-channel geometry on pressure drop	DOLGIKH, Vinalin
10:20	[55] Electromagnetic forces acting in a representative volume of liquid metal with inclusions of various shapes	ОЗЕРНЫХ, Владимир
10:40	[52] Modelling of liquid magnesium convection in a titanium reduction apparatus	КАРАСЁВ, Тимофей
11:00	[53] Impact the inhomogeneity of electric conductivity on MHD processes	ОКАТЕВ, R

# Wednesday, 22 September 2021

## Applied magnetohydrodynamics: Session 17 - Applied magnetohydrodynamics (10:00 - 11:20)

time	[id] title	presenter
10:00	[77] Interaction of buoyancy and EM forced convection during horizontal directional solidification	SHVYDKIY, E
10:20	[78] Travelling magnetic field pumps for liquid metals: numerical and experimental studies	KHALILOV, Ruslan
10:40	[79] Numerical simulation of melting and stirring in induction furnace with graphite crucible	BRAZHNIK, D
11:00	[80] Liquid metal flow generation in cylindrical cell by smart inductor	KOLESNICHENKO, Ilya

## Applied magnetohydrodynamics: Session 21 - Applied magnetohydrodynamics (14:30 - 15:50)

time	[id] title	presenter
14:30	[96] Inductive system for magnesium level detection in a titanium reduction reactor	KRAUTER, N
14:50	[97] Electromagnetic measurements of non-ferrous metals conductivity	ЛОСЕВ, Геннадий
15:10	[98] Study of keeping a permanent magnet suspended in a pulsed magnetic field	YACHIKOV, I
15:30	[99] Numerical simulation of heat and mass transfer in a metal melt and deformations in a dielectric film during induction melting	NIKULIN, I