

**SECTION IV**  
**MODELLING AND MECHANICS OF BUILDING STRUCTURES**

November 15, 2018

15:30-18.00

**Mathematical Modelling**

Submission #	Title of the report	Authors and <b>Speaker</b>
39	Convective-diffusion model of particle deposition in modeling of building structures	<b><u>Vadim Akhmetov</u></b> and Valentina Akhmetova
337	New computer technologies, analysis and interpretation of geodata	<b><u>Valery Taranchuk</u></b>
69	Mathematical modeling of emergency situations at objects of production and gas transportation	<b><u>Victor Orlov</u></b> , Elena Detina and Oleg Kovalchuk
107	Presence of Basic Oscillatory Properties in the Bagley-Torvik Model	Temirkhan Aleroev and <b><u>Ludmila Kirianova</u></b>
170	Probabilistic approach to the investigation of the causes of emergencies at the gas pipeline facilities	<b><u>Victor Orlov</u></b> and Elena Detina
34	The creation of a computational model of corrugated beams using the author's program "GO-PRO"	<b><u>Vadim Alpatov</u></b> , Alexey Lukin and Irina Laguta
74	Integration of second order linear differential equations in elementary functions, example from quantum-mechanics	<b><u>Alexander Chichurin</u></b> and Viktor Red'kov
157	Realization of reinforced concrete structures analysis with the account of physical and geometrical nonlinearity in computer program PRINS	<b><u>Vladimir Agapov</u></b>
159	Simulation of the Building Materials Production Process	<b><u>Olga Vasil'eva</u></b>
207	Numerical methods for calculation of compound rods	<b><u>Bulat Kuzhin</u></b>