V International Seminar with elements of scientific school for young scientists (ISHM-V)

"Topical issues of heat and mass transfer at phase transitions and multiphase flows in modern chemical technology and energy equipment"

November 16-17, 2016

Novosibirsk, Russia

PROGRAM

Kutateladze Institute of Thermophysics SB RAS (IT SB RAS) Tianjin University (TJU) Russian Scientific Foundation (RSF)

Novosibirsk – 2016 Web: <u>http://www.itp.nsc.ru/conferences/ishm5/</u>

BRIEF DESCRIPTION:

International Seminar **ISHM-V** will be held in Novosibirsk at the Kutateladze Institute of Thermophysics SB RAS **16-17 November 2016**. At the seminar the invited topical reports and oral presentations on the key issues of heat and mass transfer at phase transitions and multiphase flows with application to the development and design of modern chemical technology apparatuses and energy equipment will be presented.

The International Seminar with elements of scientific school for young scientists will be held two times in one year at support of the **Russian Science Foundation** of the Project No. 14-49-00010 "Comprehensive investigation of relationship between self-organization of the flows and non-equilibrium interfacial heat and mass transfer under the conditions of multiscale interaction relating to development of high technologies in distillation and energy equipment". The first seminar (ISHM-I) held on December 1-2, 2014 in the Kutateladze Institute of Thermophysics.

Organizations:

- Kutateladze Institute of Thermophysics SB RAS (Novosibirsk, Russia)
- <u>Tianjin University (TJU, r. Tianjin, China)</u>
- Russian Science Foundation (Moscow, Russia)

Seminar dates: 16-17 November 2016

Location: Kutateladze Institute of Thermophysics, 630090, Russia, Novosibirsk, Acad. Lavrentiev ave. 1.

TOPICS

The scope of the Seminar covers the following areas:

- Multiscale transfer processes at multiphase flows
- Wave processes and heat and mass transfer at the liquid film flows
- Heat and mass transfer at distillation, including that of the structured packing
- Interface instability in multiphase flows
- Boiling and evaporation of single-component liquids and their mixtures. Heat and mass transfer enhancement methods
- Low-temperature thermophysics
- Contemporary techniques and methods of thermophysical and hydro-gas-dynamic experiment
- Ecological problems in power engineering and chemical technology

LANGUAGES

Working language of the Seminar - English. Presentation of the reports should be prepared in English in format of PowerPoint.

PROCEEDINGS

Abstracts of the ISHM-IV and ISHM-V will be published to the Fifth International Seminar ISHM-V.

REGISTRATION DESK

Registration fee for participants is not provided.

16 November (Wednesday)	9:00-15:00	Kutateladze Institute of
		Thermophysics, 3rd floor
17 November (Thursday)	9:00-12:00	Kutateladze Institute of
		Thermophysics, 3rd floor

COMMITTEES

Chairs

Academician of RAS Nakoryakov V.E. (IT SB RAS, Novosibirsk, Russia) Corr. Member of RAS A.N. Pavlenko (IT SB RAS, Novosibirsk, Russia)

Co-Chairs

Prof. V.V. Kuznetsov (IT SB RAS, Novosibirsk, Russia) Prof. X. Li (Tianjin University, Tianjin, China)

Scientific Secretary

Ph.D A.S. Surtaev (IT SB RAS, Novosibirsk, Russia)

Seminar Secretary

I.V. Gozhenko (IT SB RAS, Novosibirsk, Russia)

CONTACTS

630090, Novosibirsk, acad. Lavrentiev ave. 1 Kutateladze Institute of Thermophysics SB RAS tel. (383) 328-43-87 Seminar Chair – Corr. Member of RAS Pavlenko Aleksandr Nikolaevich tel. (383) 330-87-00 Scientific Secretary – Dr. Surtaev Anton Sergeevich tel. (383) 330-87-00 Seminar Secretary – Gozhenko Irina Vasilievna e-mail <u>ishm@itp.nsc.ru</u> web <u>http://www.itp.nsc.ru/conferences/ishm5/index.html</u>

LIST OF PARTICIPANTS

In total 44 Russian scientists, 27 foreign scientists and 67 young scientists, post-graduates, full-time students from different Scientific, Educational and Commercial Organizations of Russia and China will take part in the Seminar.

Russian scientists

- 1. V.E. Nakoryakov (Academician of RAS, Consultant, IT SB RAS);
- 2. A.N. Pavlenko (Corr. Member of RAS, Head of laboratory, IT SB RAS);
- 3. V.V. Kuznetsov (Professor, Doctor of sciences, Head of department, IT SB RAS);
- 4. O.V. Sharypov (Doctor of Sciences, Deputy Director of Institute, IT SB RAS);
- 5. I.I. Gogonin (Professor, Doctor of sciences, Leading researcher, IT SB RAS);
- 6. V.I. Terekhov (Professor, Doctor of sciences, Head of department, IT SB RAS);
- 7. O.A. Kabov (Professor, Doctor of sciences, Head of laboratory, IT SB RAS);
- 8. S.I. Lezhnin (Doctor of sciences, Leading researcher, IT SB RAS);
- 9. V.N. Yarigin (Professor, Doctor of sciences, Head of laboratory, IT SB RAS);
- 10. A.D. Nazarov (Doctor of sciences, Leading researcher, IT SB RAS);
- 11. M.I. Nizovtsev (Doctor of sciences, Head of laboratory, IT SB RAS);
- 12. N.N. Zubkov (Professor, Doctor of sciences, Bauman Moscow State Technical University, Moscow, Russia);
- 13. A.G. Laptev (Professor, Doctor of sciences, FGBOU VPO "Kazan State Power Engineering University, Kazan, Russia);
- 14. E.A. Lapteva (PhD, Associate professor, FGBOU VPO "Kazan State Power Engineering University, Kazan, Russia);
- 15. A.V. Morozov (Doctor of sciences, Associate Professor, Leading researcher, Institute for Physics and Power Engineering, Obninsk, Russia);
- 16. V. L. Sennitskii (Doctor of sciences, Leading researcher, Lavrentiev Institute of Hydrodynamics SB RAS, Professor of Novosibirsk State University, Novosibirsk, Russia);
- 17. E.A. Chinnov (Doctor of Sciences, Deputy Head of laboratory, IT SB RAS);
- 18. M.A. Pakhomov (Doctor of Sciences, Leading researcher, IT SB RAS);
- 19. E.Ya. Gatapova (PhD, Senior researcher, IT SB RAS);
- 20. N.I. Pecherkin (PhD, Senior researcher, IT SB RAS);
- 21. V.E. Zhukov (PhD, Senior researcher, IT SB RAS);
- 22. P.D. Lobanov (PhD, Senior researcher, IT SB RAS);
- 23. A.S. Kurdyumov (Researcher, IT SB RAS);
- 24. V.I. Zhukov (PhD, Associate professor, NSTU);
- 25. A.N. Sterlyagov (PhD, Senior researcher, IT SB RAS);
- 26. O.A. Volodin (PhD, Research fellow, IT SB RAS);
- 27. V.Yu. Borodulin (Leading engineer, IT SB RAS);
- 28. V.N. Letushko (Leading engineer, IT SB RAS);
- 29. B.V. Perepelitsa (PhD, Leading researcher, IT SB RAS);
- 30. A.N. Tsoi (PhD, Research fellow, IT SB RAS);
- 31. R. A. Dekhtyar (PhD, Senior researcher, IT SB RAS);
- 32. S.V. Dimov (PhD, Senior researcher, IT SB RAS);
- 33. A.I. Kataev (Leading engineer, IT SB RAS);
- 34. I.B. Mironova (Leading electronic, IT SB RAS);
- 35. T.M. Farakhov (PhD, researcher, FGBOU VPO "Kazan State Power Engineering University, Kazan, Russia);
- 36. E.P. Afanasiev (Engineer, JSC Surgut Condensate Stabilization Plant, Surgut, Russia);
- 37. N.I. Timoshenko (PhD, Senior researcher, IT SB RAS);
- 38. S. Taskaev (Budker Institute of Nuclear Physics, Novosibirsk, Russia);
- 39. V.G. Prikhodko (PhD, Senior researcher, IT SB RAS);
- 40. I.V. Yarygin (PhD, Senior researcher, IT SB RAS);
- 41. V.V. Ovchinnikov (PhD, Senior researcher, IT SB RAS);
- 42. M.V. Gorbachev (PhD, Associate Professor, Novosibirsk State Technical University, Novosibirsk);
- 43. V.I. Kalita (Doctor of sciences, Head of laboratory, Baikov Institute of Metallurgy and Materials Science);
- 44. D.I. Komlev (PhD, Deputy Head of laboratory, Baikov Institute of Metallurgy and Materials Science, Moscow).

Foreign scientists

- 1. X. Li (Professor, Tianjin University, School of Chemical Engineering and Technology, NERCDT Director, "National PeiYang Distillation Tech. Eng. Limited Company" Director, China);
- 2. B. Jiang (Professor, Tianjin University, School of Chemical Engineering and Technology, NERCDT Deputy Director, China);
- 3. M.Y. Liu (Professor, School of Chemical Engineering and Technology, Tianjin University, Tianjin, P. R. China);
- 4. V.S. Ajaev (Leading researcher, IT SB RAS, Professor, Department of Mathematics, Southern Methodist University, Dallas, USA);
- 5. H. Sui (Ph.D. in Chemical Engineering, Associate Professor in School of Chemical Engineering and Technology, Tianjin University, China);
- 6. L. Zhang (PhD in Chemical Engineering, Professor, School of Environmental Science and Engineering, Tianjin-Basic Chemical Experiments Dept., Tianjin University, China);
- 7. H. Li (Ph.D. in Chemical Engineering, Associate Professor, School of Chemical Engineering and Technology, Tianjin University, China);
- 8. X. Gao (Ph.D. in Chemical Engineering, Associate Professor, School of Chemical Engineering and Technology, Tianjin University, China);
- 9. Haifeng Cong (Ph.D. students, School of Chemical Engineering and Technology, Tianjin University, China);
- 10. Cong Shan (Ph.D. in Chemical Engineering, Associate Professor, School of Chemical Engineering and Technology, Tianjin University, China);
- 11. Tian Yu Feng (Senior engineer, Master, in Chemical Engineering, Associate Professor in School of Chemical Engineering and Technology, Tianjin University, China);
- 12. Xu Changchun (Ph.D. in Chemical Engineering, Associate Professor, School of Chemical Engineering and Technology, Tianjin University, China);
- 13. Ding Hui (Associate professor, Associate Professor, School of Chemical Engineering and Technology, Tianjin University, China);
- 14. Wang Tao (Associate Professor, School of Chemical Engineering and Technology, Tianjin University, China);
- 15. Shengrui Yan (Master in Chemical Engineering, School of Chemical Engineering and Technology, Tianjin University, China);
- 16. Xiaoming Xiao (Ph.D. in Chemical Engineering, Assistant Professor, School of Chemical Engineering and Technology, Tianjin University, China);
- 17. L. He (Postdoctor, School of Chemical Engineering and Technology, Tianjin University, China)
- Liu Ying (engineer, master student, School of Chemical Engineering and Technology, Tianjin University, China);
- 19. Peng Yan (Ph.D. students, School of Chemical Engineering and Technology, Tianjin University, China);
- 20. Y.W. Cai (Ph.D. in Chemical Engineering, School of Chemical Engineering and Technology, Tianjin University, China);
- 21. L.F. Hui (Master Degree, in Chemical Engineering, School of Chemical Engineering and Technology, Tianjin University, China);
- 22. Y. Lv (Ph.D. candidate in Chemical Engineering, School of Chemical Engineering and Technology, Tianjin University, China);
- 23. A.L. Ekaid (PhD, Associate Professor, Mechanical Engineering Dept., University of Technology, Baghdad, Iraq);
- 24. A. Zaboronok (Department of Neurosurgery, University of Tsukuba, Tsukuba, Japan);
- 25. L. Zaidi (University of Sciences and Technology Houari Boumediène, Algiers, Algeria);
- 26. K.F. Yassin (Novosibirsk State Technical University, Novosibirsk, Russia, Northern Technical University, Kirkuk, Iraq);
- 27. H.Q. Khafaji (Senior researcher, Mechanical Engineering Dept., University of Technology, Baghdad, Iraq).

Young scientists, post-graduates, students

- 1. A.V. Pityk (Post-graduate, Institute for Physics and Power Engineering, Obninsk, Russia);
- 2. Vorobyev M.A. (Post-graduate, Research engineer, IT SB RAS);

3. G.K. Shagieva (Post-graduate, FGBOU VPO "Kazan State Power Engineering University, Kazan, Russia);

- 4. A.A. Radyuk (Post-graduate, Baikov Institute of Metallurgy and Materials Science, Moscow);
- 5. A.Yu. Ivannikov (PhD, Researcher, Baikov Institute of Metallurgy and Materials Science, Moscow);
- 6. P.R. Votinov (Student, NSTU);
- 7. V.S. Naumkin (Post-graduate, Research engineer, IT SB RAS);
- 8. A.E. Gorelikova (Post-graduate, Research engineer, IT SB RAS);
- 9. A.A. Borisov (Post-graduate, IT SB RAS);
- 10. A.M. Shonina (student, NSU);
- 11. A. Safonov (PhD, Senior researcher, IT SB RAS);
- 12. V.V. Cheverda (PhD, Researcher, IT SB RAS);
- 13. D. Shvetsov (Student, NSTU);
- 14. D.G. Amanbaeva (Student, NSTU);
- 15. Y.L. Bityutskaya (Post-graduate, research engineer, IT SB RAS);
- 16. S.I. Radko (Post-graduate, Research engineer, IT SB RAS);
- 17. A.S. Strelnik (student, NSU);
- 18. A. V. Klimov (Post-graduate, research engineer, IT SB RAS);
- 19. I.A. Kozulin (PhD, Research fellow, IT SB RAS);
- 20. A.S. Surtaev (PhD, Senior Researcher, IT SB RAS);
- 21. M.V. Bartashevich (PhD, Research fellow, IT SB RAS);
- 22. M.S. Makarov (PhD, Research fellow, IT SB RAS);
- 23. M.V. Shestakov (Engineer, IT SB RAS);
- 24. A.Yu. Sakhnov (PhD, Research fellow, IT SB RAS);
- 25. M.V. Timoshevskiy (Post-graduate, Research engineer, IT SB RAS);
- 26. K.S. Pervunin (Research fellow, IT SB RAS);
- 27. A.N. Chernyavskiy (Research engineer, IT SB RAS);
- 28. V.S. Serdyukov (Post-graduate, Research engineer, IT SB RAS);
- 29. A.V. Meleshkin (PhD, Research engineer, IT SB RAS);
- 30. D.V. Kuznetsov (Post-graduate, Research engineer, IT SB RAS);
- 31. A.S. Nebuchinov (Post-graduate, IT SB RAS);
- 32. M.I. Moiseev (Post-graduate, Research engineer, IT SB RAS);
- 33. E.N. Shatskiy (Post-graduate, IT SB RAS);
- 34. A.A. Borisov (Post-graduate, IT SB RAS);
- 35. V.V. Guzanov (Engineer, IT SB RAS);
- 36. A.A. Pil'nik (Post-graduate, IT SB RAS);
- 37. K.I. Stepanov (Research fellow, IT SB RAS);
- 38. A.S. Agazhanov (Post-graduate, IT SB RAS);
- 39. O.A. Gobizov (Post-graduate, IT SB RAS);
- 40. S.V. Starinsky (Post-graduate, IT SB RAS);
- 41. M.A. Serebryakova (Post-graduate, IT SB RAS);
- 42. A.O. Zamchiy (PhD, Engineer, IT SB RAS);
- 43. E.M. Bochkareva (Post-graduate, IT SB RAS);
- 44. E.B. Butakov (Post-graduate, IT SB RAS);
- 45. E.Yu. Slesareva (Post-graduate, IT SB RAS);
- 46. M.V. Cherdantsev (Post-graduate, IT SB RAS);
- 47. A.A. Yagodnicina (Post-graduate, IT SB RAS);
- 48. V.S. Morozov (Post-graduate, IT SB RAS, Research engineer, IT SB RAS);
- 49. A.S. Mordovskikh (Student, NSU, Laboratory assistant, IT SB RAS);
- 50. G.V. Bartkus (Student, NSU, Laboratory assistant, IT SB RAS);
- 51. S. Arsentyev (Student, NSU, Laboratory assistant, IT SB RAS);
- 52. K, Borynyak (Student, NSU, Laboratory assistant, IT SB RAS);
- 53. S. Vostrikov (Student, NSU, Laboratory assistant, IT SB RAS);
- 54. D. Gluzdov (Student, NSU, Laboratory assistant, IT SB RAS);
- 55. I. Poletaev (Student, NSU, Laboratory assistant, IT SB RAS);
- 56. G. Sukhorukov (Student, NSU, Laboratory assistant, IT SB RAS);
- 57. M. Nichik (Student, NSU, Laboratory assistant, IT SB RAS);
- 58. E. Tkachenko (Student, NSU, Laboratory assistant, IT SB RAS);
- 59. A. Papulov (Student, NSU, Laboratory assistant, IT SB RAS);
- 60. V. Tumanov (Student, NSU, Laboratory assistant, IT SB RAS);
- 61. E. Isachenko (Student, NSU, Laboratory assistant, IT SB RAS);
- 62. V. Ivaschenko (Student, NSU, Laboratory assistant, IT SB RAS);
- 63. S.E. Spesivtsev (Student, NSU, laboratory assistant, IT SB RAS);
- 64. R.R. Yusupov (Student, NSU, laboratory assistant, IT SB RAS);

- 65. F.V. Ronshin (Post-graduate, research engineer, IT SB RAS);
 66. I.I. Zapryagaev (Post-graduate, research engineer, IT SB RAS);
 67. A.P. Vinokurov (Post-graduate, IT SB RAS).

16 NOVEMBER (WEDNESDAY) Conference Hall of IT SB RAS

9:00-15:00	REGISTRATION (Location: Kutateladze Institute of Thermophysics, 3rd floor)	
9:00-9:15	Welcome speech of the Chairman of Seminar ISHM-V Aleksandr N. Pavlenko	
INVITED PRESENTATIONS		
9:15-9:35	H. Cong, H. Li, <u>X. Gao</u> (School of Chemical Engineering and Technology,	
	National Engineering Research Center of Distillation Technology, Tianjin	
	University, Tianjin, China), X. Li (Collaborative Innovation Center of Chemical	
	Science and Engineering, Tianjin, China)	
	STRUCTURAL OPTIMIZATION OF THE PRACTICAL TUBE-TYPED	
	HEAT INTEGRATED DISTILLATION COLUMN (HIDiC)	
9:35-9:55	A.N. Pavlenko, <u>V.E. Zhukov</u> , N.I. Pecherkin, O.A. Volodin, A.D. Nazarov	
	(Kutateladze Institute of Thermophysics, Novosibirsk, Russia), X. Li, X. Gao, H.	
	Li, M.Y. Liu, L. Zhang and H. Sui (School of Chemical Engineering and	
	Technology, National Engineering Research Center of Distillation Technology,	
	Tianjin University, Tianjin, China)	
	EFFICIENCY OF MIXIURE SEPARATION AND TRANSFORMATION OF	
	STRUCTURE OF LARGE-SCALE TEMPERATURE FIELD NON-	
	UNIFORMITY IN A REGULAR PACKING AT DIFFERENT WAYS OF	
0.55 10.15	Cong Shan Tign Vy Eang Vy Changahun Ding Hui Wang Tao (School of	
9:55-10:15	<u>Cong Shun</u> , Tiun Tu Feng, Au Changenun, Ding Tiui, Wang Tuo (School of Chamical Engineering and Technology National Engineering Research Center	
	of Distillation Technology, Tianiin University Tianiin China) Li Yingang	
	(Collaborative Innovation Center of Chemical Science and Engineering Tianiin	
	(Controlonder of Chemical Science and Engineering, Hanjin, China)	
	COAL CHEMICAL INDUSTRIAL APPLICATION. METHANOL	
	DISTILLATION PROCESS ANALYSIS AND PROCESSING DESIGN	
10:15-10:35	I.I. Gogonin, A.I. Kataev, I.B. Mironova, V.I. Sosunov (Kutateladze Institute of	
	Thermophysics, Novosibirsk, Russia)	
	FLOODING REGIMES IN DISTILLATION COLUMN WITH STRUCTURED	
	PACKING	
10:35-10:55	COFFEE	
10:55-11:15	<u>V.V. Kuznetsov (Kutateladze Institute of Thermophysics, Novosibirsk, Russia)</u>	
	MULTISCALE GAS-LIQUID FLOW WITH PHASE CHANGE IN COMPLEX	
	MINICHANNEL SYSTEMS	
11:15-11:35	<u>L. Zhang</u> , B. Jiang, S. Yan, X. Xiao (School of Chemical Engineering and	
	Technology, Tianjin University, Tianjin, China)	
	NUMERICAL RESEARCH OF STREAM ANALYSIS ON HELICAL	
11 25 11 55	BAFFLES HEAT EXCHANGERS	
11:55-11:55	<u>B.V. Perepetiisa (Kutatetadze Institute of Thermophysics, Novosibirsk, Russia)</u>	
	TURBLE FOR ALL STUDI OF THE HEAT TRANSFER WITH THE	
11.55 12.15	T M Earakhow (IIC Engineering Promotional Center "Inshekhim" Kazan	
11:55-12:15	<u>1.M. Furuknov</u> (LLC Engineering-1 romotional Center Inzneknim, Kuzun, Russia) F.P. Afanasiav (ISC Surgut Condensate Stabilization Plant Surgut	
	Russia) A G Lantev (FGROU VPO "Kazan State Power Engineering	
	Liniversity Kazan Russia)	
	EXPERIMENTAL INVESTIGATION OF HEAT TRANSFER IN CHANNELS	
	WITH RANDOM PACKING	
12:15-12:35	A.N. Pavlenko. N.I. Pecherkin, O.A. Volodin (Kutateladze Institute of	
	Thermophysics. Novosibirsk. Russia)	

	FALLING DOWN THE CYLINDER WITH WIRE MESH COATING
12:35-14:00	LUNCH
14:00-14:20	J. Wang, L. He, <u>H. Sui</u> , G. Ma, Z. Zhang, X. Li (School of Chemical Engineering
	and Technology, National Engineering Research Center of Distillation
	Technology, Tianjin University, Collaborative Innovation Center of Chemical
	Science and Engineering, Tianjin, China)
	APPLICATION OF IONIC LIQUIDS IN RECOVERING HEAVY
	HYDROCARBONS FROM UNCONVENTIONAL OIL ORES
14:20-14:40	Cong Shan, <u>Xu Chang-chun</u> , Liu Ying, Li Xingang (School of Chemical
	Engineering and Technology, National Engineering Research Center of
	Distillation Technology, Tianjin University, Collaborative Innovation Center of
	Chemical Science and Engineering, Tianjin, China)
	STUDY ON THE STATIC CRYSTALLIZATION OF DURENE
14:40-15:00	<u>E.A. Lapteva</u> , G.K. Shagieva, A.G. Laptev (FGBOU VPO "Kazan State Power
	Engineering University, Kazan, Russia)
	INCREASING EFFICIENCY OF DEAERATION OF WATER
15:00-15:20	P. Yan, X. Li, <u>H. Li</u> , X., S. Cong (School of Chemical Engineering and
	Technology, National Engineering Research Center of Distillation Technology,
	Tianjin University, Collaborative Innovation Center of Chemical Science and
	Engineering, Tianjin, China)
	HYDRODYNAMICS AND MECHANISM STUDY OF FOAM COLUMN
	TRAYS WITH VARIOUS CONTACT ANGLES
15:20-15:40	COFFEE
15:40-16:00	<u>E.Ya. Gatapova</u> , A. Safonov, N.I. Timoshenko (Kutateladze Institute of
	Thermophysics, Novosibirsk, Russia), A.M. Shonina (Novosibirsk State
	University, Novosibirsk, Russia), V.S. Ajaev (Department of Mathematics,
	Southern Methodist University, Dallas, USA)
	THE BEHAVIOUR OF THE LIQUID-SOLID-GAS CONTACT LINE ON
1(.00 1(.20	SURFACES WITH FLUOROPOLYMER COATINGS
10:00-10:20	<i>I.W. Cal, <u>M.I. Liu</u>, L.F. Hul, I. LV (School of Chemical Engineering and Tashuslam, Tigniin University, Tigniin, Ching)</i>
	Foundary, Tunjin University, Tunjin, China)
	ROILING
16.20-16.40	V I Sennitskii (Lavrentiev Institute of Hydrodynamics SR RAS Novosibirsk
10.20-10.40	<u><i>Y</i>. E. Senniski</u> (Euvreniev Institute of Hydrodynamics 5D 1015, Novosibirsk State University Novosibirsk Russia)
	FFFECTS OF A DISSIPATIVE HYDRO-MECHANICAL SYSTEM
	EVOLUTION
16:40-17:00	S. Taskaev (Budker Institute of Nuclear Physics, Novosibirsk, Russia), S. Lezhnin
10010 1000	Kutateladze Institute of Thermophysics, Nuclear Safety Institute, Novosibirsk.
	Russia), A. Zaboronok (Department of Neurosurgery, University of Tsukuba,
	Tsukuba, Japan), L. Zaidi (University of Sciences and Technology Houari
	Boumediène, Algiers, Algeria)
	MODELING OF THE EPITHERMAL NEUTRONS TRANSPORT TO
	DEVELOP BORON NEUTRON CAPTURE THERAPY
17:00-17:20	A.V. Morozov, A.V. Pityk (Institute for Physics and Power Engineering. Obninsk
	Russia)
	ACCÚMULATION AND CRYSTALLIZATION OF BORIC ACID IN VVER
	CORE IN CASE OF ACCIDENT
CONFEREN	CE RECEPTION (wine-break)

17 NOVEMBER (THURSDAY) Conference Hall of IT SB RAS

9:00-12:00	REGISTRATION (Location: Kutateladze Institute of Thermophysics, 3rd floor)	
INVITED PRESENTATIONS		
9:00-9:20	V.N. Yarygin, V.G. Prikhodko, I.V. Yarygin (Kutateladze Institute of	
	Thermophysics, Novosibirsk, Russia)	
	LIQUID FILM FLOWS IN SPACE APPLICATIONS	
9:20-9:40	<u>O.V. Sharypov</u> (Kutateladze Institute of Thermophysics, Novosibirsk, Russia)	
	ON THE DESCRIPTION OF THE SELF-SUSTAINED EVAPORATION	
	FRONT IN METASTABLE LIQUID	
ORAL PRES	ENTATIONS	
9:40-9:55	<u>M.I. Moiseev</u> , V.E. Zhukov (Kutateladze Institute of Thermophysics, Novosibirsk,	
	Russia)	
	DYNAMICS OF EVAPORATION FRONT PROPAGATION IN MIXTURES	
	OF FREONS	
9:55-10:10	<u>I.A. Kozulin</u> , G.V. Bartkus, S.V. Dimov (Kutateladze Institute of Thermophysics,	
	Novosibirsk State University, Novosibirsk, Russia)	
	EXPERIMENTAL STUDY OF ADIABATIC WAVE PHASE EXPLOSION OF	
10 10 10 25	SUPERHEATED PENTANE	
10:10-10:25	<u>O.A. Volodin</u> , N.I. Pecherkin, A.N. Pavlenko (Kutateladze Institute of	
	Inermophysics, Novosibirsk, Russia), N.N. Zubkov, I.L. Bityutskaya (Bauman MSTU Mogoow, Puggig)	
	MSIU, $MOSCOW$, $KUSSIA$) HEAT TDANSFED AT EILM ELOW OF DINADV MIVTUDE OF EDEONS	
	ON SUBFACE WITH MICRORELIEF	
10.25 10.40	COFFEE	
10.23-10.40	VF Nakowakov MV Bartashavich (Kutateladze Institute of Thermonhysics	
10.40-10.55	Novosihirsk Russia)	
	NUMERICAL SOLUTION TO PROBLEM OF NONISOTHERMAL	
	ABSORPTION ON LIQUID FILM	
10:55-11:10	<u><i>R.A. Dekhtyar, E.Yu. Slesareva, and V.V. Ovchinnikov (Kutateladze Institute of</i></u>	
	Thermophysics, Novosibirsk, Russia)	
	THE REGIMES OF FILM FLOW AT SMALL SPACING BETWEEN THE	
	CYLINDER AND THE CURVED HOOP	
11:10-11:25	A.N. Pavlenko, A.S. Surtaev, A.N. Tsoi, <u>D.V. Kuznetsov</u> (Kutateladze Institute of	
	Thermophysics, Novosibirsk, Russia), V.I. Kalita, D.I. Komlev, A.A. Radyuk,	
	A.Yu. Ivannikov (Baikov Institute of Metallurgy and Materials Science, Moscow,	
	Russia)	
	HEAT TRANSFER AND REWETTING DYNAMICS OF THE	
	OVERHEATED SMOOTH AND CAPILLARY-POROUS SURFACES BY A	
11.25 11.40	FALLING FILM OF LIQUID NITROGEN	
11:25-11:40	<u>I.A. Kozulin</u> , V.V. Kuznelsov (Kulaleluaze Institute of Thermophysics, Novosibirsk State University Novosibirsk Russia)	
	APPLICATION OF TWO-BEAM LASER SCANNING FOR STUDY OF GAS-	
	LIOUID FLOW IN MINICHANNEL	
11:40-12:00	F.V. Ronshin, V.V. Cheverda, F.A. Chinnov, O.A. Kabov (Kutateladze Institute	
11110 12100	of Thermophysics, Novosibirsk. Russia)	
	TWO-PHASE FLOW REGIMES IN THE HORIZONTAL RECTANGULAR	
	MICROCHANNEL OF HEIGHT 0.15 MM	
12:00-12:15	Bartkus G. V., V.V. Kuznetsov (Kutateladze Institute of Thermophysics.	
	Novosibirsk State University, Novosibirsk, Russia)	
	FILM THICKNESS MEASUREMENT FOR ELONGATED BUBBLE FLOW	

	IN MICROCHANNEL USING LIF
12:15-14:00	LUNCH
14:00-14:15	P.D. Lobanov, <u>M.V. Timoshevsky</u> , K.S. Pervunin (Kutateladze Institute of
	Thermophysics, Novosibirsk, Russia)
	HIGH-SPEED VISUALIZATION AND PIV/PFBI/PTV MEASUREMENTS IN
	AN UPWARD BUBBLY FLOW IN AN ANNULUS
14:15-14:30	M.A. Pakhomov, P.D. Lobanov, A.S. Kurdyumov, <u>M.A. Vorobyev</u> (Kutateladze
	Institute of Thermophysics, Novosibirsk, Russia)
	TWO DHASE ELOW IN A DIDE WITH SUDDEN EVDANSION
14.30 14.45	A Yu Sakhnov (Kutataladza Instituta of Thermonhysics Novosibirsk Russia)
14.30-14.43	<u>FFFECT OF HIGH PRANDTL NUMBER ON VELOCITY OVERSHOOT IN</u>
	THE ACCELERATED BOUNDARY LAYER OVER HEATED WALL
14:45-15:00	VI Terekhov (Kutateladze Institute of Thermonhysics Novosibirsk Russia) A L
	<i>Ekaid (Mechanical Engineering Dept., University of Technology, Baghdad,</i>
	Iraq), <u>K.F. Yassin</u> (Novosibirsk State Technical University, Novosibirsk, Russia,
	Northern Technical University, Kirkuk, Iraq)
	LAMINAR FREE CONVECTION FLOW AND HEAT TRANSFER
	BETWEEN VERTICAL PLATES IN THE PRESENCE OF RIBS ON THE
	WALLS
15:00-15:15	V.I. Terekhov (Kutateladze Institute of Thermophysics, Novosibirsk, Russia),
	<u>H.Q. Khafaji</u> (University of Technology, Baghdad, Iraq), M.V. Gorbachev
	(Novosibirsk State Technical University, Novosibirsk, Russia)
	WETTED DIATE HEAT EXCHANCED
15.00 15.15	COFFEE
15.15_15.30	A N Sterlyagov M I Nizovtsev V Yu Borodulin V N Letushko (Kutateladze
13.13-13.30	Institute of Thermophysics Novosibirsk Russia) MV Shlupikov (Novosibirsk
	State Technical University. Novosibirsk. Russia)
	THE EVAPORATION OF THE DROPLETS OF WATER -ALCOHOL
	SOLUTION ON THE SURFACE OF POROUS MATERIALS
15:30-15:45	E.M. Bochkareva, V.V. Terekhov, A.D. Nazarov, A.A. Borisov (Kutateladze
	Institute of Thermophysics, Novosibirsk, Russia)
	STUDY OF EVAPORATION DYNAMICS OF SUSPENDED DROPLETS
15:45-16:00	<u>D. Shvetsov</u> , V.I. Zhukov (Novosibirsk State Technical University, Novosibirsk,
	Russia), A.N. Pavlenko (Kutateladze Institute of Thermophysics, Novosibirsk,
	Russia
	STUDY OF HEAT TRANSFER AND CRITICAL HEAT FLUXES DURING
	BOILING AND EVAPORATION OF THE LIQUID IN A THIN LAYER
16.00_16.15	DG Amanhaeva VI Thikov Novosihirsk State Technical University
10.00-10.13	D.O. Amundueva, V.I. Zhukov (Novosidirsk Sidie Technical Oniversity, Novosibirsk Russia) A N Paylenko (Kutateladze Institute of Thermonhysics
	Novosibirsk. Russia)
	CALCULATION AND RESEARCH OF MODEL OF "CRATER" DURING
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	BOILING THE THIN HORIZONTAL LAYER OF LIQUID