SCIENTIFIC PROGRAM of the Third RIKEN-KFU WORKSHOP:
From International Joint Chemistry Laboratory to New Stage of Interdisciplinary Research
(September 23, 2016)

$9^{30} – 9^{50}$	I. Welcome address and introduction (Prof. Dmitrii Tayurskii, Prof. Igor Antipin)
$9^{50} – 10^{00}$	II. Overall projects (Dr. Katsunori Tanaka)
	III. **New chemistry and biology associated with oxidative stress**
$10^{00} – 10^{10}$	1. Cycloadditions of imines (Dr. Ambara Pradipta)
$10^{10} – 10^{20}$	2. Synthetic application (Dilyara Chulakova, Ivan Smirnov)
$10^{20} – 10^{30}$	3. Application to metal ligand (Dr. Katsumasa Fujiki)
$10^{30} – 10^{40}$	4. Involvement in oxidative stress and amyloid fibrillization (Dr. Ayumi Tsutsui)
$10^{40} – 10^{50}$	5. Polyamide and AGEs (Dr. Ayumi Tsutsui)
	IV. **Bioconjugation and sensors**
$10^{50} – 11^{00}$	6. Stroke sensor and clinical trials (Masayuki Takamatsu)
$11^{00} – 11^{10}$	7. Acrolein sensor and *in vivo* transformation to theranostic molecules (Dr. Ambara Pradipta)
$11^{10} – 11^{20}$	8. RIKEN click labeling for theranostics and possible future collaboration for MRI studies (Dr. Katsumasa Fujiki)
$11^{20} – 11^{30}$	9. Post translational mimicry of arginine to therapeutic molecules (Dr. Katsunori Tanaka (in behalf of Dr. Takayuki Iwata))
	V. **Glycochemical biology**
$11^{30} – 11^{40}$	10. Homogeneous glycoconjugates (Dr. Katsunori Tanaka (in behalf of Dr. Akihiro Ogura))
$11^{40} – 11^{50}$	11. Heterogeneous glycoconjugates (Regina Sibgatullina)
$11^{50} – 12^{00}$	12. Tumor targeting cell and animal experiments (Sayaka Urano)
$12^{00} – 12^{10}$	13. Cell surface synthesis of targeting molecules (Dr. Katsunori Tanaka (introduction for Dr. Taichi's research), Dr. Shogo Nomura)
$12^{10} – 12^{20}$	14. Investigation of glycans structure by high resolution NMR spectroscopy (Dr. Konstantin Usachev)
	VI. ***In vivo* synthetic chemistry**
$14^{00} – 14^{10}$	15. Propargyl ester reactivity and application to peptide ligation (Dr. Kenward Vong)
$14^{10} – 14^{20}$	16. Polyamide and other proposed synthetic therapy strategy (Dr. Kenward Vong)
$14^{20} – 14^{30}$	17. *In vivo* metal-catalyzed reaction and new prodrug strategy (Kazuki Tsubokura)
$14^{30} – 14^{40}$	18. *In vivo* sugar supplying method (Yixuan Lin)
	VII. **Furanone chemistry and biology**
$14^{40} – 15^{00}$	19. General introduction. Halogenated 2(5*H*)-furanones: useful synthons for the preparation of a variety of *O*-, *N*- and *S*-heterocycles and oxathiamacrocycles (Dr. Almira Kurbangalieva)
$15^{00} – 15^{10}$	20. Polymorphism of a series of thioethers on the basis of 3-pyrrolin-2-one: Do "enantiophilic" and "enantiophobic" molecules exist? (Dr. Olga Lodochnikova)
$15^{10} – 15^{20}$	21. 2(5*H*)-Furanone based azides and cell drug delivery system (Dr. Liliya Latypova)
$15^{20} – 15^{30}$	22. New chiral 2(5*H*)-furanone derivatives possessing L-menthol and *S*-naproxen moieties (Alsu Khabibrakhmanova)
$15^{30} – 15^{40}$	23. The inhibition of bacterial biofilm formation by 2(5*H*)-furanone derivatives (Dr Airat Kayumov)

VIII. Conclusion remarks (Dr. Almira Kurbangalieva)