

[ThB4] Plasma-cell and Plasma-tissue Interactions – Biological and Biochemical Reactions**Date / Time** August 5 (Thu.), 2021 / 14:35-16:15**Channel** Channel B**Session Chair** Prof. Hans-Robert Metelmann (Greifswald Univ. Medicine, Germany)**ThB4-1****14:35-15:00****[Invited]****The Surface Marker and Gene Expression Signature Linked to Plasma-induced Toxicity in Cancer Cells – a Comprehensive Screening**Sander Bekeschus¹, Jonas Menz^{1,2}, Eric Freund^{1,2}, Kristian Wende¹, Thomas von Woedtke¹, and Anke Schmidt¹¹INP Greifswald, Germany, ²Greifswald Univ., Germany**ThB4-2****15:00-15:15****Enhancement of Impact of Atmospheric Plasma Jet on Cancer Cells with External Electrode**Irina Schweigert^{1,2}, Dmitry Zakrevsky^{3,4}, Pavel Gugin³, Elena Milakhina⁴, Ekaterina Golubitskaya⁵, Olga Troitskaya⁵, and Olga Koval^{5,6}¹Khristianovich Inst. of Theoretical and Applied Mechanics, Russia, ²George Washington Univ., USA, ³A.V. Rzhanov Inst. of Semiconductor Physics, Russia, ⁴Novosibirsk State Technical Univ., Russia, ⁵Inst. of Chemical Biology and Fundamental Medicine, Russia, ⁶Novosibirsk State Univ., Russia**ThB4-3****15:15-15:30****Investigating the Interactions of Plasma with DNA: Towards Safer Plasma Jet Treatments**Nishtha Gaur^{1,3}, Endre Szili^{2,3}, Hirofumi Kurita⁴, Saki Miyachika⁴, Jun-Seok Oh⁵, Masafumi Ito⁶, Akira Mizuno⁴, Bhagirath Ghimire¹, Sarah Allinson¹, Allison Cowin^{2,3}, and Robert Short¹¹Lancaster Univ., UK, ²Univ. of South Australia, Australia, ³Wound Management Innovation Cooperative Research Centre, Australia, ⁴Toyohashi Univ. of Tech., Japan, ⁵Osaka City Univ., Japan, ⁶Meijo Univ., Japan**ThB4-4****15:30-15:45****Gas Plasma-conditioned Liquids: Tumor-toxicity and Immunogenicity from *in vitro* to *in vivo* Studies**Eric Freund^{1,2}, Lea Miebach^{1,2}, Ramona Clemen¹, Eun Ha Choi³, Klaus-Dieter Weltmann¹, Claus Dieter Heidecke², and Sander Bekeschus¹¹Leibniz Inst. for Plasma Science and Tech. (INP), Germany, ²Greifswald Univ. Medical Center, Germany, ³Kwangwoon Univ., Korea**ThB4-5****15:45-16:00****Targeting Platelet Lipids with Physical Plasma – Is There a Link to Blood Coagulation?**

Johanna Striesow, Thomas von Woedtke, and Kristian Wende

INP Greifswald, Germany

ThB4-6**16:00-16:15****The Influence of the Chemistry of Plasma-treated Solutions on Its Selective Anti-cancer Nature**K. Sklias¹, P.M. Girard^{1,2}, and J. Santos Sousa¹¹Université Paris-Saclay, France, ²PSL Research Univ., France