ICP Plasma Technology for Alternative Medicine and New Materials fight against Pathogenic Infection.

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Abstract

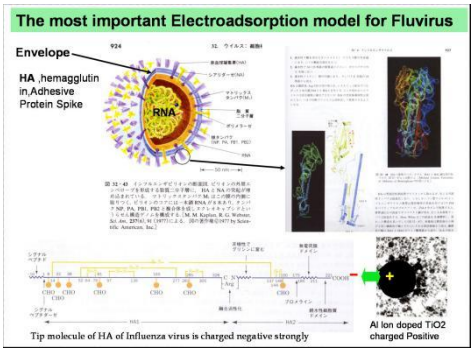
We developed brand new alternative medical technology due to ICP Plasma(RFP) Technology fight against various pathogenic infections which are caused by virus,resistant bacteria and protozoa. ICP Plasma synthesized Particles have been testing as Electroadsorptive particle against various proteins and inflammatory materials. We have obtained basic Bio Assay Result as for electroadsorption of typical proteins and chemical mediators. Depend upon these result, we detected very simple interaction rule. Further, we challenged to adsorb viruses and LPS of gram negative bacteria.

Envelope type H1N1Flu virus and Non enveloped Capsid type virus has been adsorbed by RFP particle but conventional particle does not adsorbed them. LPS has already adsorbed by RFP.

Therefore, almost pathogenic protein such as viral protein and LPS layer of Drug Resistant Bacteria will be adsorbed by RFP technology no matter what kinds of mutation occurs on pathogens. RFP particle dispersed emulsion will avoid pandemic and RFP particle's aqueous dispersion will ameliorate the serious infection and Mortal Kidney Failure.

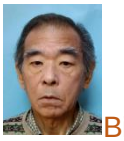
On the other hand,RFP damages bacteria's LPS layer due to high plasma energy. So we can design the comprehensive Pandemic-Prevention System for global Airport no matter which kinds of infection risks.

Image



Recent Publications

1. Kogoma M, Takeda A (20011) Generation and Application of Atmospheric Pressure Plasma. Nova Science Pub Inc. ISBN-10:1612097170
2. Takeda A, (2017) Medical Evidence for Biochemical Plasma Particle against Pathogenic Infection and Infection caused Inflammation's Reducing Human Experiment. 18th Workshop of Fine Particle Plasmas, textbook
3. Mio M,Takeda A,et al A research for Inflammation reducing due to the adsorptive material against inflammatory materials. New Technology Presentation Meetings, 29thJan.2010, Japan Science and Technology Agency.textbook 11-16
4. Takeda A, Thin Solid Films (2003) Structure of metal doped TiO2 particles produced by RF plasma,435: 211-214.
5. Sanpei A,Hayashi Y,(2018) IEEE TRANSACTIONS ON PLASMA SCIENCE, Levitation of Microorganisms in the Sheath of an RF Plasma,VOL.46, NO.4 .



Biography (150 word limit)

President Takeda Born in Shizuoka pref.Japan in 1948.Graduated after Geochemistry, Institute of Mining Geology ,Akita Univ.Japan. After engaged in materials science for 10 years, special collaboration for establishing new biomedical particles by using ICP Thermal Plasmas had carried out in Japan. This result have been applied against dermatitis troubles such as atopic diseases and so many incurable skin diseases and Behchet disease. Since 2008, New collaboration with pharmacology and medical science has been examined against Protein adsorption for removing viral or Resistant Bacteria Infection.

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Akio Sanpeiwas born in Sendai, Japan, in 1974. He received the B.Sc., master's, and Ph.D. degrees from Kyoto University, Kyoto, Japan, in 1999, 2001, and 2004, respectively. Since 2004, he has been with the Department of Electronics, Kyoto Institute of Technology, Kyoto, where he was an Assistant Professor and became a Lecturer in 2014. His current research interests include plasma science, dusty plasmas, fusionplasma, and nonneutral plasma.

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