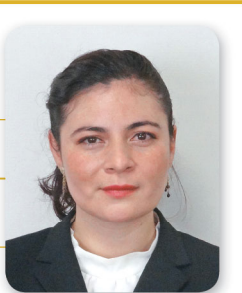
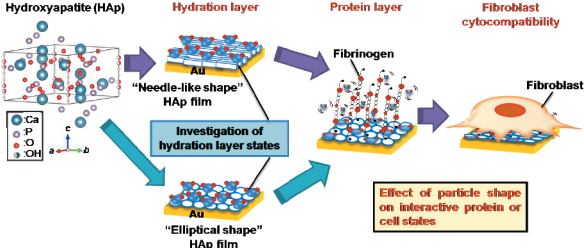


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分野等	Materials Science	職名	特命助教	
学位	博士（工学）	e-mail/URL	taniap@nagaoka-ct.ac.jp	
キーワード	Biocompatibility, Nanobiomaterials, Hydroxyapatite, Problem-solving methods, Thinking skills, Communication skills.			
研究分野	<p>Study on Preparation of Hydroxyapatite Nanoparticle Films and their Cytocompatibility Evaluation for Biomedical Applications</p> <p>In a biological environment, the adequate cell response to biomaterials such as hydroxyapatite nanoparticles (HAp NPs) are determined by the hydration layer and the adsorbed proteins on the surface. In order to improve the biocompatibility of these HAp NPs for biomedical applications, it is necessary to understand the hydration layer–protein–cell interfacial structures.</p>  <p>Figure 1. Preparation of HAp NP films and their protein mediation ability for cell adhesion.</p> <ul style="list-style-type: none"> • Peñaflo Galindo, T. G., & Tagaya, M. (2019). Interfacial Effect of Hydration Structures of Hydroxyapatite Nanoparticle Films on Protein Adsorption and Cell Adhesion States. <i>ACS Applied Bio Materials</i>, 2(12), 5559-5567. • Peñaflo Galindo, T. G., Yamada, I., Yamada, S., & Tagaya, M. (2019). Studies on preparation of surfactant-assisted elliptical hydroxyapatite nanoparticles and their protein-interactive ability. <i>Materials Chemistry and Physics</i>, 221, 367-376. • Peñaflo Galindo, T. G., Shiba, K., & Tagaya, M. (2018). Particulate Titania Coating on Poly (Dimethylsiloxane) Films for Improving Osteoconductive Ability. <i>In Key Engineering Materials</i> (Vol. 782, pp. 151-157). 			
	<p>Education Duty</p> <p>Improving students' thinking and communication skills while developing various projects related to Sustainable Development Goals (SDGs) applying innovative problem-solving techniques while learning and practicing English.</p>			
技術PR・企業に向けて	<p>We are living in a globalized world. To be part of globalization is necessary to nurture a new generation of global engineers with the ability to communicate effectively in English with a developed logical and critical thinking which will allow them to solve problems innovatively and creatively leading to improvements in sustainable technologies and general wellbeing of society.</p> <p>Problem-solving is the core essence of engineering. Let's learn and practice innovative methods for problem-solving in an interactive and fun class! The projects that are developed in class will allow students to understand the problems related to the SDGs and find solutions while perfecting the English language! The development of thinking skills will allow the students to organize their ideas in a more structured way which will be very useful when writing reports, posters, and thesis. Furthermore, developing communication skills will improve considerably the level of presentations and expositions. I'm certainly sure you will enjoy this class as much as I do!</p>			