Candidate application for Early-Career Researcher (ECR) member of the ISGS Board of Directors 2026-2028

Title:	Ph.D.	
Name:	Gabriel Toshiaki Tayama	
PhD degree date:	10/10/2023	
Current Affiliation (including address):	Research Associate – Centre for Optics, Photonics, and Lasers, Universite Laval (Pavillon d'optique photonique 2375 rue de la Terrasse, Université Laval, Québec, G1V 0A6, CANADA)	
Five representative publications, patents and other achievements:	1 **New approach to 3D-print methacrylic acid/polyethylene glycol diacrylate-based membranes based on polymerization induced phase separation** (10.1016/j.memsci.2025.125047)	
	2 **Optical homogeneity and anisotropy of 3D printed silicate-aluminum-phosphate hybrid sol-gel materials via laser scan vat-photopolymerization** (10.1007/s10971-025-06812-7)	
	3 **New active large liquid primary mirror for space applications** (10.1117/12.3028923)	
	4 **Understanding the Microstructure Connectivity in Photopolymerizable Aluminum-Phosphate-Silicate Sol–Gel Hybrid Materials for Additive Manufacturing** (10.1021/acs.jpcc.2c08027)	
	5 **Magnetorheological elastomer-based deformable mirror using polydimethylsiloxane (PDMS) membrane** (10.1364/OE.589832)	

Statement of motivation for becoming an ECR member of the ISGS Board (500 words max):	My relationship with the International Sol-Gel Society began in Lyon in 2022, though I had already been immersed in a research group with deep sol-gel chemistry expertise since 2018. In 2024, at the Berlin conference, I was awarded second place in the 2023 ISGS PhD Thesis Award, and I have continued working with sol-gel technology ever since, even as my research has shifted toward optical engineering. As an active ECR member, I have helped structure the ECR network and co-organized the 2026 ECR workshop. I would like to deepen this involvement: to help renew and sustain ISGS's activities, and to represent the ECR network on the Board of Directors. My academic path has been somewhat unconventional, and it pushed me to build a professional network and develop research independence early. Like many ECRs, I know what it means to take those first steps into an independent research career, and I want to help ensure early-career researchers have a real voice in shaping ISGS's future as I found it as one of the most important niches and networks in my career.

Please attach a copy of **your current CV (maximum three pages),** including relevant information on your education and professional background, current position, career history and affiliations, areas of expertise and interest, memberships of professional or learned societies, honours, awards, and any other information relevant to your application.