LED Society

STEERING COMMITTEE ELECTION

Candidate application form

Title: Senior researcher

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Select the position you are applying for:

⊠ President

☐ Young researcher (PhD degree awarded on Click or tap to enter a date.)

☒ Ordinary member

Biography:

My first experience with ESR dating was on fossil corals from marine terraces of Ryukyu Islands for my MSc in physical geography at Tohoku University, Japan. For these ESR measurements I visited the laboratory of Motoji Ikeya. This work led me to pursue my PhD in physics at Osaka University in his group, on the ESR of carbonates and sulphates. After doing a few short-term postdocs, including working at a biophysics laboratory measuring ESR of spinach for photosynthesis research, I obtained a permanent assistant professor position at Tokyo Metropolitan University in the Department of Geography. Since Quaternary environmental change was the main research theme of our group, I sought for setting up a luminescence dating laboratory, and managed to get the first Risø reader in Japan with a beta source in 2003 (previously everyone thought it was too difficult to have a source within the reader due to legal restrictions). However, in those days the know-how in luminescence dating in Japan was seriously lacking, so I felt academically isolated. Fortunately, between 2003 and 2005 I had several opportunities to visit the luminescence laboratory at Risø, Denmark to work on red TL

Sumiko Tsukamoto

of quartz and pulsed IRSL of feldspar. In 2006 I made a big move – quitted the job in Tokyo and took up a 2-year postdoc position at Aberystwyth University to work with Geoff Duller. In 2008, I moved to the Leibniz Institute for Applied Geophysics (LIAG), Hannover, Germany as a postdoc on a large project to extend age range of luminescence dating led by Manfred Frechen and to supervise the 4 PhD students employed under the same project. I started an ESR laboratory at LIAG in 2012 and obtained a permanent scientist position in 2013. Since 2017, I am one of the invited members of the steering committee for the International LED Conferences. I am a DLED representative for the LED Society working group and Chair for the international LED working group since 2019. In 2018 I received an academic prize from the Japanese Quaternary Association for my contribution to the luminescence and ESR dating techniques.

Motivation: (Please describe your vision for the LED Society, the contribution you would like to make, etc.)

For the last 3 years, I have been acting as the chair of a working group that was set up to create the framework for a new professional society to represent the LED community worldwide, replacing an informal committee that has organised the triannual international conference over the last 40 years. Together with other members of the working group, we have worked intensively to fulfil all necessary steps that will allow this society to be accepted internationally. I thus feel that I am well placed to become President of this new society.

If elected President, I would devote my time and energy to finalise the establishment of a thriving and dynamic professional society, and raising awareness and reliability of the dating techniques. My experience over 25 years of applying both luminescence and ESR dating in different parts of the world, and carrying out fundamental research into the mechanisms giving rise to the signals in a range of minerals, provides me with the appropriate background for promotion of these techniques.

My supervision of students and postdoctoral workers has provided me with the experience and insight to ensure that these members of the new society will benefit greatly from, and contribute to, the new society.